Inquiries for additional information should be forwarded to the following offices:

Office of Admission (717) 358-3951
Office of Alumni Relations & Development (717) 358-3955
Office of Communications (717) 358-3981
Office of the Dean of the College (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 Academic Affairs (717) 358-3989

General information:

Franklin & Marshall College
P.O. Box 3003
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 2015–2016. 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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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 and 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, 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.
**FALL SEMESTER, 2015**

August, 25–27, Tuesday–Thursday  
**International Student Orientation**

August 27, Thursday  
**College Houses open for First Year Students, 1 p.m.**

August 27–September 1, Thursday–Tuesday  
**New Student Orientation**

August 31, Monday  
**College Houses & Theme Houses open for Upper Class Students, 8:30 a.m.**

September 1, Tuesday  
**Convocation**

September 2, Wednesday  
**Fall semester classes begin, 8 a.m.**

September 7, Monday  
**Labor Day (classes in session; administrative offices closed for federal holiday)**

October 2–4, Friday–Sunday  
**Homecoming Weekend and Family Weekend**

October 9, Friday  
**Fall break begins, 4:30 p.m.**

October 14, Wednesday  
**Fall break ends, 8 a.m.**

November 24, Tuesday  
**Thanksgiving recess begins, 6:05 p.m.**

November 30, Monday  
**Thanksgiving recess ends, 8 a.m.**

December 11, Friday  
**Fall semester classes end, 4:30 p.m.**

December 12–15, Saturday–Tuesday  
**Reading days**

December 16, Wednesday  
**Final examinations begin**

December 20, Sunday  
**Final examinations end**

December 20, Sunday  
**Winter recess begins**

December 21, Monday  
**College Houses & Theme Houses close; 11 a.m.**

The College notes that a number of holidays occur during the semester. Please consult the College web-based calendar for these dates.
Franklin & Marshall College
Academic Calendar 2015–2016

**SPRING SEMESTER, 2016**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 8, Friday</td>
<td>Spring Option orientation</td>
</tr>
<tr>
<td>January 10, Sunday</td>
<td>College Houses &amp; Theme Houses open, 8:30 a.m.</td>
</tr>
<tr>
<td>January 12, Tuesday</td>
<td>Spring semester classes begin, 8 a.m.</td>
</tr>
<tr>
<td>January 18, Monday</td>
<td>Martin Luther King Day</td>
</tr>
<tr>
<td>March 11, Friday</td>
<td>Spring recess begins, 4:30 p.m.</td>
</tr>
<tr>
<td>March 21, Monday</td>
<td>Spring recess ends, 8 a.m.</td>
</tr>
<tr>
<td>April 21, Thursday</td>
<td>Spring semester classes end, 4:35 p.m.</td>
</tr>
<tr>
<td>April 22–25, Friday–Monday</td>
<td>Reading days</td>
</tr>
<tr>
<td>April 26, Tuesday</td>
<td>Final examinations begin</td>
</tr>
<tr>
<td>April 30, Saturday</td>
<td>Final examinations end</td>
</tr>
<tr>
<td>May 1, Sunday</td>
<td>College Houses &amp; Theme Houses close, 11 a.m.</td>
</tr>
<tr>
<td>May 7, Saturday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

The College notes that a number of holidays occur during the semester. Please consult the College web-based calendar for these dates.
Franklin & Marshall College
Academic Calendar 2016–2017

FALL SEMESTER, 2016

August 23–25, Tuesday–Thursday
International Student Orientation

August 25, Thursday
College Houses open for First Year Students, 1 p.m.

August 25–30, Thursday–Tuesday
New Student Orientation

August 29, Monday
College Houses & Theme Houses open for Upper
Class Students, 8:30 a.m.

August 30, Tuesday
Convocation

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 14–16, Friday–Sunday
Homecoming Weekend and Family Weekend
(home football vs. McDaniel)

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 14, Wednesday
Final examinations begin

December 18, Sunday
Final examinations end

December 18, Sunday
Winter recess begins

December 19, Monday
College Houses & Theme Houses close; 11 a.m.
Franklin & Marshall College
Academic Calendar 2016–2017

SPRING SEMESTER, 2017

January 13, Friday
Spring Admit orientation

January 15, Sunday
College Houses & Theme Houses open, 8:30 a.m.

January 16, Monday
Martin Luther King Day

January 17, Tuesday
Spring semester classes begin, 8 a.m.

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, 4:35 p.m.

April 28–May 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
## 2016 Summer Session I

*(5 WEEKS, JUNE 1—JUNE 30, 2016)*

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, May 16, 2016</td>
<td>Registration Deadline</td>
</tr>
<tr>
<td>Tuesday, May 31, 2016</td>
<td>Housing opens for Session I, noon</td>
</tr>
<tr>
<td>Wednesday, June 1, 2016</td>
<td>Session I classes begin</td>
</tr>
<tr>
<td>Thursday, June 2, 2016</td>
<td>Session I deadline for course changes or withdrawing without record by 4:30 p.m.</td>
</tr>
<tr>
<td>Friday, June 10, 2016</td>
<td>Session I grading option (P/NP) deadline</td>
</tr>
<tr>
<td>Tuesday, June 28, 2016</td>
<td>Session I Deadline to withdraw with record</td>
</tr>
<tr>
<td>Thursday, June 30, 2016</td>
<td>Session I classes end</td>
</tr>
<tr>
<td>Friday, July 1, 2016</td>
<td>Students in residence must vacate their rooms by noon</td>
</tr>
</tbody>
</table>

## 2016 Summer Session II

*(5 WEEKS, JULY 6—AUGUST 4, 2016)*

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, June 20, 2016</td>
<td>Registration Deadline</td>
</tr>
<tr>
<td>Tuesday, July 5, 2016</td>
<td>Housing opens for Session II, noon</td>
</tr>
<tr>
<td>Wednesday, July 6, 2016</td>
<td>Session II classes begin</td>
</tr>
<tr>
<td>Thursday, July 7, 2016</td>
<td>Session II deadline for course changes or withdrawing without record by 4:30 p.m.</td>
</tr>
<tr>
<td>Friday, July 15, 2016</td>
<td>Session II grading option (P/NP) deadline</td>
</tr>
<tr>
<td>Tuesday, August 2, 2016</td>
<td>Session II deadline to withdraw with record</td>
</tr>
<tr>
<td>Thursday, August 4, 2016</td>
<td>Session II classes end</td>
</tr>
<tr>
<td>Friday, August 5, 2016</td>
<td>Students in residence must vacate their rooms by noon</td>
</tr>
</tbody>
</table>
The Franklin & Marshall Curriculum

For students entering the college in the fall of 2014 and following years.

SEE GRADUATION REQUIREMENTS PAGES 242–243.

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 small, intensive seminars, Connections 1 and Connections 2, which are unified by a concern for the aims and standards of intellectual discourse and the communities that sustain it. These courses also sequence instruction in writing, research, and oral presentation. In Connections courses 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 Seminars, 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 seminars are small classes limited to 16 students and share three important characteristics: they invite first-year students into an intellectual community and a life of the mind; they sequence the building of skills in close reading, writing, research, and oral presentation; and (in Connections 1) they integrate classroom work with residential life.

CONNECTIONS 1 SEMINAR

Connections 1 courses spark curiosity and teach students to value and practice our shared commitments to reasoned and respectful discourse. In them, students develop a comfort with debate and ambiguity and become active participants in a culture of evidence. Connections 1 courses 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. In Connections 1 courses, 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 1 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 1 Seminar in their first semester. A list of current Connections 1 Seminars appears on page 18.

CONNECTIONS 2 SEMINAR

Connections 2 courses build on the practices of intellectual discourse established in Connections 1, improving students’ ability to read closely, understand, reason, and debate. While in Connections 1 courses, students concern themselves primarily with making and comprehending arguments and ideas, in Connections 2 courses students progress to refining their judgment regarding effective and ineffective arguments. In addition, students apply these skills to the scholarly analysis of a complex problem examined from multiple perspectives. Thus, these seminars teach students to compare, contrast, and connect insights gained from different sources and perspectives, and guide them in connecting an argument or idea to its larger consequences, be they social, political, moral, or natural.

Students must complete a Connections 2 Seminar within their first two years. A list of Connections 2 seminar offerings will be published online prior to the start of the Spring 2015 advisement period on November 3.
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 (each for a regular grade) 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.

**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

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 the Dean of the College to begin this process. Courses that satisfy the Language Study requirement are designated (LS).
Non-Western Cultures

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 and Minors” section of the Catalog, pages 255–257.

**The Minor**

Students may choose to complete a minor. 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; Astronomy; Chemistry; Classics; Comparative Literary Studies; Computer Science; Dance; Economics; English; Environmental Studies; Film and Media Studies; French; Italian; Geosciences; German; Greek; History; International Studies (includes Area Studies); Judaic Studies; Latin; Mathematics; Music; Philosophy; Physics; Psychology; Religious Studies; Russian; Science, Technology and Society; Sociology; Spanish; Theatre; and Women’s and Gender 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 and Minors” section of the Catalog, pages 255–257.

**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.
**The Franklin & Marshall Curriculum**

*For students entering the College in the fall of 2013 and preceding years.*

**SEE GRADUATION REQUIREMENTS PAGES 241–242.**

The Franklin & Marshall curriculum combines a spirit of innovation with a strong sense of tradition. It encompasses elements that prepare students for the cross-disciplinary nature of knowledge in the twenty-first century while preserving the depth offered by disciplinary majors and the breadth associated with distributional requirements. The graduation requirements provide sufficient structure to ensure that students receive a general education in the liberal arts while offering enough choice to allow the construction of an individualized educational experience.

Students construct their education by selecting courses in each of the three parts that compose the Franklin & Marshall curriculum: General Education, the Major and Electives.

General Education composes one part of the curriculum and includes Foundations, a Distribution requirement and a Writing requirement. In Foundations courses, students examine broad questions and encounter ideas that transcend traditional disciplinary boundaries. While completing their Distribution requirement, students become familiar with the traditional areas of the liberal arts; in addition, they develop competence in a foreign language through the Language Studies requirement and complete a course on a Non-Western Culture. Both Foundations courses and the Distribution requirement prepare students to deepen their intellectual experiences through their Majors.

The Major constitutes an integral element of the College curriculum. During the second semester of the sophomore year, a student decides upon a concentration in an area of strong intellectual interest. Through the Major, the student gains a deep understanding of issues and methods of inquiry characteristic of one specific field.

All courses used to satisfy any requirement must be taken for a regular grade.

A significant part of the curriculum consists of Electives, through which students can investigate subjects of interest or disciplines that complement the major. Students are encouraged to elect a First-Year Seminar at the beginning of their education to develop skills in critical reading, critical writing, oral presentation and use of learning resources. During the final two years, students may choose to complete a number of special educational opportunities including off-campus and international study, internships for academic credit and independent study projects.

The College employs and is committed to a systematic assessment program for its curriculum. This program, under the auspices of the Office of Institutional Research, focuses on early determination of strengths and weaknesses and on planning to create strategies for improvement.

**GENERAL EDUCATION**

General Education consists of Foundations, Distribution requirements (a Natural Sciences requirement and one course each in the Arts, Humanities, Social Sciences and Non-Western Cultures), a Language Studies requirement and the First-Year Writing requirement.
FIRST-YEAR SEMINAR
The primary goal of the First-Year Seminar is to develop skills in critical writing, critical reading, oral presentation and the use of learning resources. First-Year Seminars satisfy the First-Year Writing Requirement.

The First-Year Seminar is designed to provide students with an experience that effectively integrates academic and residential life. Students who enroll in First-Year Seminars live together in one of the College Houses. Residents have the opportunity to share an important first semester academic experience. The program promotes an integration of the residence hall and the classroom that enhances both the academic success and personal growth of the residents.

The First-Year Seminar can be a special educational experience for its participants. Each class is limited to 16 students. The courses allow students to explore in depth a major theme or concept. Committed to a discussion format, the seminars are writing-intensive courses that emphasize the development of critical thinking, reading and analysis. Additional support and guidance are provided by a Preceptor, an upperclass student who assists the seminar professor in teaching the course, as well as the staff of the associated College House.

FOUNDATIONS
Free inquiry provides the foundation for a liberal arts education. Foundations courses seek to foster free inquiry in fundamental areas such as the individual, society and the natural world. These courses focus on questions and ideas that are central to human thought, perception, expression and discovery. In a collaborative process, students and faculty question assumptions and discover new insights in light of enduring intellectual standards.

In Foundations courses, professors and students pursue topics through a series of perspectives emerging out of several academic disciplines. These courses incorporate a variety of strategies, such as the presentation of conflicting and complementary viewpoints, cross-cultural investigation, laboratory experimentation, problem-solving and artistic performance. Through Foundations courses, students learn about different approaches taught at Franklin & Marshall College in a variety of departments.

The skills learned in Foundations courses help students to sort through the barrage of claims and competing ideas in a free society. These skills include integrating and synthesizing information from different sources and using analytical reasoning to evaluate competing ideas and arrive at a reasoned position. By their nature, Foundations courses teach students how to gather, evaluate and integrate knowledge in order to confront complex issues. In this way, Foundations courses help students prepare to contribute to their occupations, communities and the world.

All students, during their first two years, must complete two regularly graded Foundations (FND) courses.

DISTRIBUTION REQUIREMENT
Traditional Areas of the Liberal Arts
The primary goal of requiring that students distribute their courses among the traditional divisions of intellectual inquiry in the liberal arts is to ensure that they are familiar, at least at an introductory level, with the types of content studied in and methods used by those modes of
inquiry. This requirement also helps students explore the natural, social and cultural worlds in which they live.

All students must satisfactorily complete a Natural Sciences requirement. In addition, they must pass at least one course credit in the Arts, Humanities, Social Sciences and Non-Western Cultures. They must also satisfy the Language Studies requirement and the First-Year Writing requirement. Courses that satisfy the Distribution requirement are designated as A (Arts), H (Humanities), S (Social Sciences) or NW (Non-Western Cultures). Courses that may be used toward the Natural Sciences requirement are designated N (Natural Sciences with a laboratory) or NSP (Natural Science in Perspective). All courses meeting the Distribution Requirement must be taken for a regular grade.

**Natural Sciences Requirement**

The goal of this requirement is to ensure that all students have at least minimal exposure to the natural sciences as part of their academic program. This requirement may be satisfied in either of two ways:

1. Passing two regularly graded Natural Sciences with lab (N) courses; or
2. Passing one regularly graded Natural Sciences with lab (N) course plus an additional course carrying the Natural Science in Perspective (NSP) designation.

NSP courses include all three of the following elements:

1. NSP courses should help students to understand the role played by theory in the Natural Sciences.
2. NSP courses should help students to understand the role of evidence in developing and testing scientific theories and what constitutes acceptable evidence in the Natural Sciences. The courses should also help students understand how Natural Science deals with uncertainty and increase their ability to reason quantitatively.
3. NSP courses should help students to understand the goals of Natural Science and the role Natural Science plays in today’s society, including questions Natural Science attempts to answer and questions that are outside the domain of the Natural Sciences. The courses also ask students to grapple with real-world situations in which policy decisions need to be made without complete understanding or complete certainty. The courses should also address ethical conduct and uses of Natural Science.

Note that a laboratory course may meet the criteria in this three-part definition.

**Non-Western Cultures Requirement**

The goal of the Non-Western Cultures requirement is to encourage students to develop an understanding of their membership in the world community. Students expand their critical perspectives of their own identities by gaining exposure to the ideas, arts, sciences and social and political institutions of peoples outside European and European-settler societies.

All students must pass, with a regular grade, one course in this area. Foundations courses and courses satisfying other requirements may also satisfy the Non-Western Cultures requirement. Students seeking to satisfy this requirement through an experience other than a Franklin & Marshall course may present a written proposal to the Associate Dean of the Faculty for approval.
Students admitted to Franklin & Marshall as international students from a Non-Western country or culture may request a waiver for this requirement from the Committee on Academic Status. Courses that satisfy the Non-Western Cultures requirement are designated (NW) in the course listings for departments or programs.

**Language Studies Requirement**

The Language Studies requirement strives to ensure that students achieve a meaningful level of proficiency in a foreign language and develop an understanding of another culture. Competency in a foreign language helps students to develop an informed and thoughtful awareness of language as a system and facilitates their exploration of other cultural worlds.

We encourage students to begin language study in their first year and complete the sequence of classes promptly; lengthy gaps between levels may disadvantage students in the next level course. Students are encouraged to complete the language studies requirement by the end of their junior year (Please note that most departments only offer the 101 introductory level course in the fall semester.)

**Placement Exams**

On-campus placement tests are available throughout the year and will determine the student’s appropriate level. However, placement results will not be considered valid after 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.

**Fulfilling the Requirement**

Students must pass, with a regular grade, the third course in a foreign language sequence or demonstrate equivalent proficiency through testing. They may satisfy their requirement in any of the following ways:

1. Passing, with a regular grade, 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.

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 the Dean of the College to begin this process. Note that a student who tests out of this requirement for a particular language and 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 (third semester) level.

Courses that satisfy the Language Studies requirement are designated (LS).
Writing Requirement

The goal of the Writing requirement is that graduates of Franklin & Marshall College should be capable and confident writers. To that end, instruction in writing progresses across the curriculum and throughout a student’s career.

1. First-year students must, by the end of their second semester, pass a course in which writing skills are stressed. Passing one of the following courses with a regular grade satisfies the First-Year Writing requirement.
   - English 105, College Rhetoric
   - A First-Year Seminar
   - A course designated in the “Master Schedule of Classes” as fulfilling the Writing requirement.

The First-Year Writing requirement may also be satisfied with a score of 4 or 5 on the AP English Language and Composition test.

Transfer students who enter with sophomore status or higher are exempted from this part of the Writing requirement.

2. Students continue their development as writers through completion of Foundations courses.

3. Students complete the final phase of the Writing requirement through a course or courses specified by their major department. (See departmental or program listings for more information.)

4. The First-Year Writing Requirement cannot be satisfied with a directed reading or tutorial. Courses designated as (W) in the “Department and Program Offerings” section of the Catalog fulfill the First-Year Writing requirement.

THE MAJOR

The goal of the major is that students acquire skills and investigate intellectual questions, methods and issues in considerable breadth and increasing depth in a specific field or area.

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.

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.

1. SPECIAL STUDIES MAJOR PROGRAM

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.
2. 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 and Minors” section of the Catalog, pages 255–257.

THE MINOR

Students may choose to complete a minor. Minors, either disciplinary or cross-disciplinary, consist of six course credits. A student may officially declare one minor. Departments and programs which offer minors are: Africana Studies; Anthropology; Art; Astronomy; Chemistry; Classics; Comparative Literary Studies; Computer Science; Dance; Economics; English; Environmental Studies; Film and Media Studies; French; Italian; Geosciences; German; Greek; History; International Studies (includes Area Studies); Judaic Studies; Latin; Mathematics; Music; Philosophy; Physics; Psychology; Religious Studies; Russian; Science, Technology and Society; Sociology; Spanish; Theatre; and Women’s and Gender 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 and Minors” section of the Catalog, pages 255–257.

ELECTIVES

Electives enable a student to pursue interests outside the major, to gain additional depth of knowledge in the major or a related field and to explore unfamiliar areas of learning. During the final two years, students may choose to complete a number of special educational opportunities including collaborations, off-campus study, internships for academic credit and independent study projects.

COLLABORATIONS

A goal of the Curriculum is to promote special educational opportunities for student involvement in fruitful collaborative efforts with some specific time commitment and outcome. These opportunities, which are encouraged but not required, help prepare students for a professional and civic environment that increasingly demands an ability to explore one’s own contributions in relationship to other ideas, criticisms and concerns. Furthermore, they often serve to link students’ intellectual interests to opportunities and challenges that exist outside of conventional coursework. See Additional Educational Opportunities, pages 232–233.
STATEMENT OF PHILOSOPHY
(Adopted by the Off-Campus Study Committee of the Faculty in April 2004)

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 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 INTERNATIONAL STUDY AND OFF CAMPUS STUDY

Franklin & Marshall College currently pre-approves more than 200 different off-campus study programs in 60 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 offcampus.fandm.edu.

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 international study and research. Please see the section on Summer Travel, Project, and Internship Awards for a list of these awards.
FRANKLIN & MARSHALL PROGRAMS AND PARTNERSHIPS

Franklin & Marshall offers more than 200 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.

FRANKLIN & MARSHALL FACULTY-LED PROGRAMS

Each summer, F&M faculty lead a number of off-campus academic programs. These programs offer unique opportunities to travel with and learn closely from an F&M faculty member. New programs are regularly developed and in the past have taken place in Italy, China, Denmark, Russia, and South Africa, among other locations. All students accepted to a faculty-led program are automatically considered for funding from F&M. Students should contact the Office of International Programs to learn more about new faculty-led programs.

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 and creative writing during the fall and spring semester as well as a summer session. During the summer session, an F&M faculty member typically leads one of the course offerings in Bath. 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, Rochester and Spelman.

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 2.0 cumulative GPA,
• 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

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 for 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. Franklin & Marshall College does provide an airfare allowance credit to students studying during the semester or academic year to help off-set the transportation costs of international study. 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. Students participating in faculty-led programs are automatically considered for need-based aid. For more information about this policy or exceptions, please visit offcampus.fandm.edu.

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 merit scholarships and need-based 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 additional scholarship opportunities, please visit offcampus.fandm.edu.

**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.

**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.

**Pennsylvania Historical and Museum Commission**
The College generally sponsors two summer interns in paid local historical and museum work. Information is available from Career Advisement Services.

**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 and Gender Studies**
This award offers up to $2,000 to support a summer project furthering knowledge about and understanding of the roles of women and gender in society. Recipients must show quality of character, personal and intellectual promise and an enthusiasm for learning from the experience. It is offered bi-annually.

**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.

**Elana Stein ’16 Memorial Fellowship**
In memory of their beloved daughter, Elana Stein, Class of 2016, Linda Katz and Donald Stein established the Elana Stein ’16 Memorial Fund to provide Fellowship grants to selected Franklin & Marshall students to enhance their education by embarking on summertime adventures in experiential learning. Areas of focus may include academic/intellectual pursuit, artistic creativity, and professional and leadership development. The Fellowship grant of $3,000 will be awarded annually.

**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 course work 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.
## Course Offerings

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<td>CNX 130</td>
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<td>The Self in Life &amp; Literature</td>
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<td>Imagining War &amp; Peace</td>
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<td>CNX 139</td>
<td>Self in Life and Literature</td>
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CNX 140  World War I in Global History
CNX 141  Democracy and Disagreement
CNX 142  Border Crossings
CNX 143  Community & Connectedness
CNX 144  Catastrophe & Modern Imagination
CNX 145  Rights & Representations
CNX 146  Great Mysteries of the Past
CNX 148  The Story of Troy
CNX 149  Terror and Tears
CNX 150  Quarks to Quasars
CNX 151  Comparative Planetology
CNX 152  Lost In Space
CNX 153  Belonging
CNX 154  (De)constructing Selves
CNX 155  Girls Gone Wild
CNX 156  What is Art?
CNX 157  Hooking Up
CNX 158  Social Activism: Effective Dialogue
CNX 159  Sex, Markets and Power
CNX 161  Past, Present, Future of Food
CNX 162  Brain, Mind and Education
CNX 163  Mind, Brain, and Education

CONNECTIONS 2 SEMINARS
CNX 201  Progress and Its Critics
CNX 202  Learning from Past
CNX 203  Propaganda and Genocide
CNX 204  International Security Dilemmas
CNX 205  Bringing Up Bodies
CNX 206  Understanding Terrorism
CNX 207  Politics, Poverty and Gender
CNX 208  Infinity
CNX 209  Nature of Hope
CNX 210  False Realities
CNX 211  The Future of Public Education
CNX 212  Movement and Meaning
CNX 213  Virtually Real
CNX 214  Collage
CNX 215  Geographic Boundaries
CNX 216  Reasons in Action
CNX 217  Language and World
CNX 218  Story & History Ancient Israel
CNX 219  Food
CNX 220  Childbirth & Midwifery
CNX 221  Revolutions
CNX 221  Rights and Revolutions
CNX 222  Better Worlds
CNX 223  Masculinity
CNX 224  American Health Care System
CNX 225  Banned Books & Jailed Writers
CNX 226  Things-Social Life of Objects
CNX 227  Chocolate: The Dark Side
CNX 228  Geometry of Art and Illusion
CNX 229  Revolutions of Thought
CNX 230  Mars & Venus on The Pill
CNX 231  Judging Truths
CNX 232  Modernist Revolution
CNX 233  In and Out of Africa
CNX 241  Why do we conserve nature?
CNX 242  Unconventional Petroleum
CNX 243  Radical Chicanas
CNX 244  Youth and Moral Panics
CNX 295  Coral Reefs in Time & Space
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
(W) Writing 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 Maria D. Mitchell, Chair

MEMBERS OF THE AFRICANA STUDIES PROGRAM COMMITTEE

Lisa Gasbarrone  Professor of French
Maria D. Mitchell  Professor of History
Patrick Bernard  Associate Professor of English
Nadra Hebouche  Assistant Professor of Francophone Studies and French
Laura Shelton  Assistant Professor of History (on leave Fall 2015)

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


A major in Africana Studies consists of nine courses: AFS/AMS 150 or AFS/HIS 249 or AFS/HIS 241 or 242; AFS/HIS 333 or AFS/HIS 331 or 332; AFS 490; and five electives, at least one of which must be numbered 300 or higher. At least one elective 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 minor in Africana Studies consists of six of the following courses: AFS/AMS 150 or AFS/HIS 249; AFS/HIS 241 or 242, AFS/HIS 333 or 331 or 332, and three electives, 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, IES and SIT in South Africa; CET and SIT in Tunisia; and CET and SIT in Morocco. 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.

**CORE COURSES**

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

241. History of North and West Africa. (NW) (S)
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 241.* Anthony

242. History of East and Southern Africa. (NW) (S)
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 242.* Anthony

249. Africa and the Black World: Concepts and Context. (NW) (S)
Explores the emergency 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

490. Independent Study.
Independent research directed by the Africana Studies staff. Required of all majors; ordinarily to be undertaken in the Fall semester of the senior year. *Staff*

**ELECTIVE COURSES**

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 MUS 106.* Butterfield

169. Caribbean Literature. (H)
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.*

**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/TDF/WGS 213.*

**250. Witchcraft and Sorcery in a Global Context. (S)**

In this course we will consider how the categories of “witchcraft” and “sorcery” have been used in Anthropology, both to describe mystical acts (particularly mystical attacks) and as an ethnographic metaphor to discuss the pressures of communal life for individuals. Course content will consist of, but not be limited to, witchcraft and sorcery as a “social strain gauge,” witchcraft and sorcery as expressions of symbolic power, the gendered name of witchcraft and sorcery, as well as witchcraft and sorcery under conditions of Western-style modernity. *Same as ANT/RST/WGS 250.*

**256. African American Literature I. (H)**

Significant writers from the colonial period through the 19th century are studied to establish the Black literary tradition in the developing nation. *Same as AFS/AMS/ENG 256.*

**257. African American Literature II. (H)**

Selected writers from the Harlem Renaissance through the Black Aesthetics movement compose the modern study of the Black literary tradition in America. *Same as AFS/AMS/ENG 257.*

**267. Peoples and Cultures of Africa. (NW) (S)**

Social and historical practices of various African culture, 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 ANT 267.*

**281. Political Economy of Africa. (S) (NW)**

A broad idea of 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 economic and political problems such as food production, external debt and the role of the state. Reflection on the question of economic development. Prerequisites: ECO 100 and 103, or permission of instructor. *Same as ECO 281.*

**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.*

**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, with an investigation into foreign aid, corruption, and NEPAD. Prerequisite: GOV 224 or permission of the instructor. *Same as GOV 326.*
333. 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. Replaces AFS/HIS332. Same as HIS 333.  

Gosse

349. Modern South Africa. (NW) (S)
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. Discussion is an important component of course grade. Same as HIS 349.

Anthony

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

430. Selected Studies in African History. (NW) (S)
Readings and research in selected topics of the political, social and cultural history of Africa. See relevant departmental offerings for prerequisites. Recent topics include “Slavery in Africa.” Same as HIS 430.

Anthony

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 STUDIES

Professor Dennis Deslippe, Chair

David Schuyler  Arthur and Katherine Shadek Professor of Humanities and American Studies (on leave 2015–2016)
M. Alison Kibler  Professor of American Studies and Women’s, Gender and Sexuality Studies
Louise L. Stevenson  Professor of History and American Studies (on leave Fall 2015)
Dennis Deslippe  Associate Professor of American Studies and Women’s, Gender and Sexuality Studies
Carla Willard  Associate Professor of American Studies
Daniel Frick  Director of the Writing Center, Senior Adjunct Associate Professor of American Studies, and Senior Adjunct Assistant Professor of English
Joseph Clark  Visiting Assistant Professor of American Studies
Eric M. Usner  Adjunct Assistant Professor of American Studies

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, media and public relations.

For the class of 2016, a major in American Studies consists of 11 courses: AMS 100; three courses chosen from AMS 150, 203, 300, 320 and 330; AMS 350; AMS 489; five AMS courses or other courses from the approved list. Of these five courses, one must be in American arts and literature.

For the class of 2017 and thereafter, a major in American Studies consists of 11 courses: AMS 100, AMS 350 and AMS 489; one class in global AMS — either AMS 236 or AMS 305; 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
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; Internships in Francophone Europe; Macquarie University, Sydney, Australia; SIT Human Rights: Foundations, Challenges, and Advocacy; and SU Abroad Strasbourg, France. 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.

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 early 20th centuries.

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 AFS 150.

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.

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.

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/TDF/WGS 213.
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.”

236. 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 236.

238. Dance on the American Musical Stage. (A)
A lecture-survey, supplemented by studio experiences, of musical stage dancing in America from the colonial period to the present. Dance styles covered include acrobatic, ballet, ballroom, melodrama, exotic, folk, jazz, modern and tap. Same as TDF 238.

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.

245. Baseball in American Literature and Culture. (H)
How do the history of baseball, writings about baseball and the playing of the “national pastime” reflect and shape American values, social conflicts and identity? An exploration through readings in baseball literature and history. Topics include: American idealism and the American Dream; democracy and free enterprise; race and class conflicts; hero worship; patriotism; ethics (including corruption and disillusionment); and masculine identity. Same as ENG 245.

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/TDF 251.

256. African American Literature I. (H)
Significant writers from the colonial period through the 19th century are studied to establish the Black literary tradition in the developing nation. Same as AFS/ENG/WGS 256.

257. African American Literature II. (H)
Selected writers from the Harlem Renaissance through the Black Aesthetics movement comprise the modern Black literary tradition in America. Same as AFS/ENG/WGS 257.

261. North American Indians of the Eastern Woodlands. (NW) (S)
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.
280. American Landscape. (S)
An interdisciplinary approach to the study of the American landscape as it has evolved over centuries of human habitation, this course pays particular attention to three themes: the domesticated and designed landscape of the mid-19th century; the crusade to preserve nature and the establishment of national and state parks in the late 19th and early 20th centuries; and the sprawling, seemingly formless automobile-dominated landscape of the late 20th century. Same as ENV 280. Schuyler

300. Urban America. (S)
An interdisciplinary approach to the evolution of American metropolitan areas as physical spaces and social-cultural environments. Topics include the economy of cities, urban politics and cultural conflict, immigration, city planning, suburbanization and the modern metropolis. Schuyler

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

317. U.S.-Mexico Borderlands. (NW) (S)
This upper-division 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 HIS 317. Shelton

320. Women in American Society and Politics Since 1890. (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. Stevenson

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

325. 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 WGS 325. Deslippe

327. Cinema and the American Jewish Experience. (S)
Course explores representations of American Jewish life, culture and religion in cinema. Using an historical perspective, it analyzes the different ways in which Jewish identity and culture have been represented in American film. Looks at history of Jews in the United States, Jewish involvement in the film industry and
anti-Semitism. Films viewed weekly, including feature films and several documentaries, in class and in an extra viewing session. Same as HIS/JST/RST 327.

330. Ethnic America. (S)
This course explores the meaning and significance of ethnicity in America. It does so by examining the historical and contemporary experiences of immigrants and their children. The heart of the course is class discussion of the readings, films and primary documents. We will augment these with group work, lectures and short documentary and feature film clips. In addition to completing weekly short reading response papers and submitting a take-home final examination, students will submit a “film fest” essay on three feature films that address ethnicity and a “lecture proposal” project in which they will propose a new topic to be included in a future offering of “Ethnic America.” Same as HIS 330.

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.

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.

390. Independent Study.

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

410. Girl Culture. (H)
This class explores the popular culture of American girls. We consider the representation of girls in American popular culture and the cultural constructions of “girlhood” itself. We follow girls as consumers, spectators, readers and producers of popular culture in contemporary and historical contexts. We are particularly interested in the role that popular culture plays in several contemporary problems associated with American girls: self-esteem, early sexualization, eating disorders and violence. Our main case studies are dolls, children’s television, the quinceanera and girl zines. Prerequisites: WGS 210 or AMS 100 or permission. Same as WGS 410.

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.

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

490. Independent Study.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
Multi-Media Autobiography.
American Advertising.
“Seeing America”: Visual Culture in America.
Politics of Race in American Music.
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, 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 271. Lancaster: Bricks and Mortar.
ENG 162. America from Outside.
ENG 206. American Tradition I.
ENG 207. American Tradition II.
ENG 208. American Tradition III.
ENG 259 Contemporary American Short Story.
ENG 461–489. Author seminars, where appropriate.
MUS 105. Jazz.
MUS 106. History of the Blues.
PHI 317. 20th-Century American Philosophy.
TDF 238. Dance on the American Musical Stage.

SOCIAL SCIENCES

AMS—Other elective American Studies courses, if appropriate.
BOS 332. Law, Ethics and Society.
ECO 310. Labor Economics.
GOV 203. American Political Tradition.
GOV 211. Urban Government.
GOV 219. City and State Gov.
GOV 230. Foreign Policy Analysis.
GOV 310 Campaigns and Elections.
GOV 312. The Congress.
GOV 313. The Bureaucracy.
GOV 314. American Constitution.
GOV 315. Civil Rights and Civil Liberties.
GOV 320. Environmental Law.
GOV 370, 470. Topics in American Politics.
HIS 331, 332. African American History.
HIS 334. American South.
HIS 345. America Since 1945.
HIS 409, 411. Selected Studies/Social and Political History.
PBH 303. Problem-Solving Courts/Drug Court
PBH 388. Public Health Research.
SOC 330. Sociology of Medicine.
SOC 372, Sociology of the Family.
SOC 350. Sociology of Gender.
SOC 360. Race and Ethnic Relations.
SOC 384. Urban Education.
SOC 420. Sociology of Education.

ANTHROPOLOGY

Professor Michael Billig, Chair
Misty L. Bastian  Lewis Audenreid Professor of History and Archaeology and Professor of Anthropology (on leave 2015–2016)
Michael S. Billig  Professor of Anthropology
Mary Ann Levine  Associate Professor of Anthropology
Bridget Guarasci  Assistant Professor of Anthropology
Tate A. LeFevre  Assistant Professor of Anthropology
Scott C. Smith  Assistant Professor of Anthropology
Emily Lynch  Visiting Assistant Professor of Anthropology
Monica Cable  Director of Post-Graduate Fellowships and Adjunct Assistant 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; one culture-area course; one 300-level course; and two electives.

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. 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; (W) Writing requirement.

100. Social Anthropology. (S)
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.  

Billig, Guarasci, LeFevre, Lynch

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
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. Billig

215. Women in Society. (S)
How gender roles affect women’s participation in political, ritual, economic and other social relations. The course materials will include detailed ethnographic work on specific societies and will maintain a theoretical perspective informed by contemporary gender studies. Prerequisite: ANT 100. Same as WGS 215. Staff

250. Witchcraft and Sorcery in a Global Context. (S)
In this course we will consider how the categories of “witchcraft” and “sorcery” have been used in Anthropology, both to describe mystical acts (particularly mystical attacks) and as an ethnographic metaphor to discuss the pressures of communal life for individuals. Course content will consist of, but not be limited to, witchcraft and sorcery as a “social strain gauge,” witchcraft and sorcery as expressions of symbolic power, the gendered name of witchcraft and sorcery, as well as witchcraft and sorcery under conditions of Western-style modernity. Same as AFS/RST/WGS 250. Bastian

257. People and Cultures of the Andes. (NW) (S) (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) (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

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: ANTI00, ANTI02 or permission of the instructor. M. A. Levine

261. North American Indians of the Eastern Woodlands. (NW) (S) (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. M. A. 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.

Bastian

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

290. Independent Study.
This course takes account of various aspects of religious and ritual practice, using material from both contemporary and classic ethnographies. Topics of special interest for the course will include, but not be limited to: cosmological constructions; initiation; possession; commensality; magic; witchcraft and sorcery; ritual aesthetics; and performance. Prerequisite: ANT 200. Same as RST 330.

Bastian

330. Anthropological Studies of Religion. (S)
Anthropological approaches to the relationship between economy and society, including intensive readings of theoretical and empirical literature. Topics include: the nature of rationality; Marxist and non-Marxist political economy; the nature and role of production and exchange; class-conflict; colonialism; and the making of the Third World. Prerequisite: ANT 200 or permission of the instructor. Billig

340. Anthropology of Wealth and Poverty. (S)
Anthropological approaches to the relationship between economy and society, including intensive readings of theoretical and empirical literature. Topics include: the nature of rationality; Marxist and non-Marxist political economy; the nature and role of production and exchange; class-conflict; colonialism; and the making of the Third World. Prerequisite: ANT 200 or permission of the instructor. Billig

342. Class and Culture. (S)
Is it better to like opera than NASCAR? Are such choices purely a matter of individual taste? This course examines the way tastes, habits and manners are formed within the context of class and status and also the way class and status are reproduced by such distinctions. Readings consist of theoretical literature, ethnographies and fiction focusing mainly on the U.S. Prerequisite: ANT 200 or permission of the instructor. Billig

350. Anthropology of Tourism. (S)
This course analyzes tourism as a cultural phenomenon through issues such as the origin of tourism, authenticity and the commodification of culture, the exotic “other,” gender, and sustainable or responsible tourism. Through films, lectures, readings, and discussions, we will explore the impact of tourism on both the hosts and the guests as we look at what has become the world’s largest industry. Prerequisite: ANT 200. Billig

355. The Body. (S)
Examines contemporary theoretical and ethnographic discussions relating to the human body. Topics covered will include social constructions of gender, reproduction and reproductive technologies, cultural ideologies of sexuality, social inscriptions on the body, “the body in extremis,” cultural depositions of the corpse and what some might call hybrid, cyborg or even virtual bodies. Prerequisite: ANT 200 or permission of the instructor. Same as WGS 355. Bastian

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.

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.

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
rebellion. 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.

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.

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.

470–479. Topics in Anthropology. (S)
Lecture courses or seminars on theoretical or ethnographic subjects of current interest. Prerequisite: one
course from the 200-level.

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

Professor Christine N. Kalleeny, Director

Professor Carmen Tisnado, Provost Office Designee for Arabic

Kaley T. Keener Arabic Language Teaching Fellow

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 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.

An Area Studies minor in Middle Eastern Studies may be arranged in consultation with Professor Christine Kalleeny, Director, Arabic Language Program, or Professor Carmen Tisnado, Provost Designee for Arabic, and with the permission of Professor Doug Anthony, Director of International Studies. Students interested in a joint major with another program should contact Professor Kalleeny.

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.

101. Beginning Arabic I. (NW, for students entering in Fall 2013 and earlier)
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. Offered every Fall. Kalleeny, Keener

102. Beginning Arabic II. (NW, for students entering in Fall 2013 and earlier)
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 (formerly ARB171) or placement by director of Arabic Program instructor. Offered every Spring. Kalleeny, Keener

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 (formerly ARB 172) or placement by director of Arabic Program or instructor. Offered every Fall. Keener
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. Offered every Spring.  

Keener

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. Offered every fall.  

Kalleeny

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 Middle East 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.  

Kalleeny

ART AND ART HISTORY

Professor Konstantinos Kourelis, Chair

Richard K. Kent  Professor of Art History  
Jun-Cheng Liu  Professor of Art  
Amelia Rauzer  Professor of Art History (on leave 2015–2016)  
Linda S. Aleci  Associate Professor of Art History  
Michael Clapper  Associate Professor of Art History (on leave 2015-2016)  
Konstantinos Kourelis  Associate Professor of Art History  
Virginia Maksymowicz  Associate Professor of Art  
James C. Peterson  Associate Professor of Art  
John Holmgren  Assistant Professor of Art  
Magnolia Laurie  Assistant Professor of Art  
Alexandra Weiss  Visiting Assistant Professor of Art  
William Hutson  Jennie Brown Cook and Betsy Hess Cook  
Kevin Brady  Senior Adjunct Assistant Professor of Art  
Carol Hickey  Senior Adjunct Instructor of Architecture  

The Department of Art and Art History educates students in the practice and processes of making art and in the historical analysis of art. We see this endeavor as an essential visual complement to the training in verbal and numerical analysis and production offered in other areas of the College curriculum.
The department’s program in studio art concentrates on the planning and production of visual works that use formal and expressive elements such as composition, shape, form, line, tone, texture and color. Beyond the design and execution of these works, we guide students through the processes of applying critical analysis and anticipating the works’ ultimate intellectual and emotional communication.

Our art history program examines aesthetically considered objects with the goal of comprehending both the objects themselves and the social concerns that they embody. We strive to develop students’ ability to appreciate the technical accomplishment, artistic decision-making and expressive effect of works of art. Yet art is not created only for aesthetic purposes; it is a compelling visualization of values and priorities important in a particular time and place. We therefore also teach students to understand the ways that art encapsulates and promotes shared beliefs.

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:

Eight core courses are required:

- One introductory course in drawing, ART 114;
- One introductory course in sculpture, either ART 116 or ART 132;
- One course in photography or computer art;
- One introductory course in painting, ART 222;
- One course in Asian art, either ART 105 or ART 224;
- One course in art history, ART 103;
- One intermediate or advanced course in drawing, sculpture, photography, or painting;

The advanced seminar in studio art practices, ART 462.

In addition, students will choose three 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. 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: 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 or 211;
- 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.

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; Sacci Academic Semester Abroad 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 requirement; (W) Writing requirement.

### A. STUDIO COURSES

**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.  
*Staff*

**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. Prerequisite: Students will be charged a fee for materials in this course.  
*Maksymowicz*

**162. Motion Picture Production I. (A)**
This course teaches video production basics through a series of short creative exercises in videography, location lighting, sound recording, non-linear editing, and video effects. The course is designed as an entrée into our full-semester video production workshops (e.g., 362, 364) and may be taken concurrently with one of those courses. Enrollment is by permission; students enrolled concurrently in a full-semester video workshop have first priority. *Same as TDF 162.*  
*Moss*

**214. Figure Drawing. (A)**
An intermediate-level investigation of the human figure in a wide range of media, including graphite, charcoal, pastel, ink, acrylic and oil paint. Dual emphasis is placed on the formal and expressive aspects of the subject and students will work both from life and from conceptual and imaginative bases. Prerequisite: ART 114.  
*Peterson*

**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. Prerequisite: Students will be charged a fee for materials in this course.  
*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. Prerequisite: ART 114 or permission of the instructor.  
*Liu*

**224. Chinese Brush and Ink Painting. (A) (NW)**
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. Students will be charged a fee for materials in this course.

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 TDF 228. Whiting

230. Papermaking and Casting. (A)
Designed to introduce students to both the history and the processes involved in hand papermaking. Basic techniques for pulling sheets of paper, designing books, building plaster molds, casting pulp positives and freehand building will be explored. The work of visual artists working in the medium will be examined and discussed. Students design their own final projects that have the potential for interfacing with a variety of other academic disciplines. Prerequisite: ART 114 or ART 116 or ART 132, or permission of instructor; students will be charged a fee for materials in this course. Maksymowicz

232. Casting: From the Body to Bronze. (A)
This intermediate-level sculpture course will consider different methods of moldmaking and how multiple forms can be used to construct meaning in art. Both the history and various techniques of casting will be studied and materials such as plaster, clay, wax and bronze will be explored. The work of sculptors who have used this method of making images will be addressed. Students will be required to complete a series of assigned projects as well as to create a sculpture of their own design. Prerequisite: ART 116 or ART 132; students will be charged a fee for materials in this course. Maksymowicz

242. 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. Holmgren

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

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 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. Maksymowicz

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. Prerequisite: ART 114, ART 116, or ART 132. Not open to first-year students.

362. Narrative Video Workshop. (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. Pre- or corequisite: ART/TDF 162. Same as TDF 362.

Maksymowicz

363. Film Theory Seminar. (A)
Advanced seminar devoted to applying classical and contemporary film theory to particular problems and movies. Topic varies from term to term. Same as TDF 363.

Eitzen

364. Documentary Video Workshop. (A)
An intensive video production workshop, focusing on documentary as a means of community building and grass-roots activism. Students work in small groups to produce short documentaries, frequently with a community partner. The topic or focus of the course varies from term to term. Students may take this course twice. Pre- or corequisite: TDF 162. Same as TDF 364.

Moss

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. Prerequisite: permission of instructor. Offered every Spring.

Staff

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.

STUDIO TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016

Alternative Processes.
Color and Design.

B. COURSES IN ART HISTORY

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

103. Introduction to Western Art. (A)
An introduction to major monuments, institutions and methodologies of art in the west, from the classical period to the present. While the course spans more than 2000 years, we will focus on approximately 25 artworks as in-depth case studies for our exploration, carefully reconstructing not only their conditions of creation and patronage, but also their social, political and cultural contexts. The course also introduces important art-historical methods and lays a foundation for future study in art history.

Aleci

105. Introduction to Asian Art. (A) (NW)
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. Steiner

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)
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)
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

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. Art and Architecture of the Italian Renaissance. (A)
An examination of the changes in artistic production in Italy from ca. 1300 to the Sack of Rome in 1527. Special consideration is given to the interplay of cultural, economic and political forces created by urbanization and the emergence of city-states alongside feudal territories on the Italian peninsula.

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

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.

Clapper, 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.

251. 20th-Century Art. (A)
A chronological survey of painting, sculpture and architecture in Europe and the United States from the late 19th century to the end of the 20th century 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.

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

267. Film History. (A)
An introduction to doing history with movies. Treats movies from the 1890s to the 1960s. Provides an overview of the evolution of popular movies and of influential artistic and rhetorical counter-currents, including national film movements, experimental cinema and documentary. Same as TDF 267. Moss

281. Sages and Mountains: History of Classical Chinese Painting. (A) (NW)
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

335. Reformation/Counter-Reformation. (A)
An examination of the political and doctrinal conflicts between the Roman Catholic Church and the “reformed” religions of northern Europe and their impact on art and architecture of Germany and the Netherlands during the 16th and 17th centuries. The following topics are emphasized: iconoclasm (the destruction of images), new forms of iconography and church architecture and the transformation of visual culture in emerging Protestant states. Prerequisite: Prior course in art history recommended. Same as 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.

Clapper, Rauser
383. Landscape in Chinese Poetry, Painting and Gardens. (A) (NW)
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.

461. Methods in Art History. (A)
An advanced course intended primarily for junior and senior art history majors, structured around a single artist, genre or theme to gain an in-depth understanding of the various methods art historians use in their research and writing. Prerequisite: Permission of the instructor. Offered every Fall.

Special art history offerings, varying in subject. May be taken more than once for different subjects. Permission of instructor required.

491. 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 2015–2016
House Archaeology.
Modern Art Post-1945.

ASTRONOMY
(See Physics and Astronomy)

BIOCHEMISTRY
(See Biology)

BIOINFORMATICS
(See Biology and Computer Science)
BIOLOGICAL FOUNDATIONS OF BEHAVIOR

Professor Joseph Thompson, Chair

MEMBERS OF THE BIOLOGICAL FOUNDATIONS OF BEHAVIOR COMMITTEE

D. Alfred Owens Charles A. Dana Professor of Psychology
Robert N. Jinks Professor of Biology
Michael L. Anderson Associate Professor of Psychology (on leave Spring 2016)
Daniel R. Ardia Associate Professor of Biology
Meredith J. Bashaw Associate Professor of Psychology
Joseph T. Thompson Associate Professor of Biology
Christina Weaver Associate Professor of Mathematics
Elizabeth V. Lonsdorf Assistant Professor of Psychology (on leave 2015–2016)
Timothy C. Roth II Assistant Professor of Psychology (on leave 2015–2016)
Christopher Shelley Visiting Assistant Professor of Biology
Sarah S. Dawson Director, Wohlsen Center for Sustainable Environment

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 requires the completion of 15 courses:

**Biology Core** (two courses)
- 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)
- BFB 240. Neuroscience.

**Research Methods and Statistics** (one course)
  or

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

**Area 1: Neural and Physiological Mechanisms**
- BFB 301. Sensation and Perception.
- BFB 330. Advanced Neurobiology. (BWR)
- BFB 341. Neurochemistry. (BWR)
- BFB 343. Functional Human Neuroanatomy. (BWR)
- BIO 327. Vertebrate Anatomy.
- BFB 328. Physical Biology.
- BFB 313. Cognitive Neuroscience.
- BFB 487. Collaborative Research in Biological Psychology.
  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**
- BFB 306. Evolution of Mind and Intelligence.
PSY 304. Developmental Psychology.
PSY 305. Cognitive Psychology.
BFB 37x Brain Evolution.
BFB 37x Animal Social Learning.
BFB 313. Cognitive Neuroscience.
BFB 480. Collaborative Research in Comparative Cognition and Behavior.
PSY 481. Collaborative Research in Developmental Psychology.
PSY 483. Collaborative Research in Human Cognition.
PSY 485. Collaborative Research in Human Perception and Action.
Topics courses in behavior or psychology may serve as Area 2 courses upon approval of the BFB Chair.

**Area 3: Cellular and Molecular Approaches**
BFB 341. Neurochemistry. (BWR)
BIO 305. Genetics.
BIO 306. Developmental Biology. (BWR)
BIO 335. Advanced Molecular Biology Seminar.
BIO 371. Topics in Cell Biology.
Topics courses in cell and molecular biology/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 “Collaborative Research” course, including PSY 360.
An area studies course may not be double-counted as an advanced research course and vice versa.

**A major in Animal Behavior** requires the completion of 15 courses:

**Biology Core** (two courses)
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 150, 210, 260.
ECO 410.
PSY 360.
Research Methods and Statistics (one course)
or

Fundamentals of Behavior (four courses)
BFB 250. Animal Behavior. (required)
One of: BFB 306. Evolution of Mind and Intelligence.
       BFB 37x. Brain Evolution.
One of: BFB 240. Neuroscience.
       BFB 302. Biopsychology.
One of: BFB 301. Sensation and Perception.
       BFB 310. Conditioning and Learning.
       PSY 312. Embodied Cognition.

Area Studies Electives (Required of all students. Four 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.
BFB 240. Neuroscience.
BFB 302. Biopsychology.
BFB 330. Advanced Neurobiology. (BWR)
BFB 341. Neurochemistry. (BWR)
BFB 313. Cognitive Neuroscience.
BFB 375. Collaborative Research in Neuroscience.
BFB 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.
BFB 301. Sensation and Perception.
BFB 306. Evolution of Mind and Intelligence.
BFB 310. Conditioning and Learning.
BFB 328. Physical Biology.
BFB 343. Functional Human Neuroanatomy.
BFB 37x. Brain Evolution.
BFB 37x. Animal Social Learning.
BFB 480. Collaborative Research in Comparative Cognition and Behavior.
BIO 326. Comparative Physiology.
BIO 327. Vertebrate Anatomy.
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)
- PSY 312. Embodied Cognition.

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.

- BIO 305. Genetics.
- BIO 322. Microbiology.
- PSY 304. Developmental Psychology.
- PSY 305. Cognitive Psychology.
- PSY 307. Personality Psychology.
- PSY 308. Psychopathology.
- PSY 309. Social Psychology.

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 and Computer Science).

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

- BFB 490. Independent Research in BFB.
- or, approved Biology course with investigative/collaborative research required (BIO 323 – 342).
- or, approved “Collaborative Research” course in Psychology (PSY 360, 480 – 488).

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: University of Melbourne, Australia; School for Field Studies (various countries); Danish International Study (DIS), Copenhagen; Institute for Study Abroad at Butler University programs (various countries); La Suerte Biological Field Station, Costa Rica. 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.

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 BIO/PSY/SPM 240. Jinks

250. Animal Behavior. (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 foraging and predation, communication, social organization and reproductive strategies. Observational and experimental research required. Prerequisites: BIO 110 and permission of the instructor. Corequisite: either BIO 210 or PSY 230. Offered every Fall. Same as BIO/PSY 250. Lonsdorf, Morton

301. Sensation and Perception. (N)
Review of phenomena and research on sensory processes and their role in perception. Readings and discussion will examine evidence from behavioral, psychophysical and physiological research and consider implications for explanations arising from the mechanistic, cognitive, computational and naturalistic theoretical perspectives. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Spring. Same as PSY/SPM 301. Owens

302. Biopsychology. (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 BIO 110 or permission. Corequisite: PSY 230 or BIO 210. Offered every Fall. Same as PSY/SPM 302. Hawley, Lacey, Roth

306. 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 coursework. Prerequisite: One of: PSY 100, PSY 301, PSY 302, PSY 303, PSY 304, PSY 305, BIO 240, BIO 250 or PHI 338, or permission. Corequisite: PSY 230 or BIO 210. Same as PSY/SPM 306. Meagher, Troy
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. Offered every Fall. Same as PSY 310. Lacy

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: PHY 111. Same as BIO 328. J. Thompson

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. Same as BIO 330. Jinks

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. Same as BIO 337. Ardia

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. Same as BIO 341. Jinks

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/BFB 240 or BFB/PSY 302 and permission of the instructor. Same as BIO 343. Jinks

390. Directed Research in Animal Behavior or Neuroscience.

480. Collaborative Research in Comparative Cognition and Behavior. (N)
Comparative perspectives and approaches to the study of selected topics drawn from cognitive and
developmental psychology, cognitive ethology, cognitive and behavioral neuroscience, cognitive science and behavioral primatology. Research required. Prerequisites: PSY 230 or BIO 210, one of PSY 250, 301, 302, 303, 304, 305, 306; or one of BIO 250, 330, 379; or one of BFB 250, 301, 302, 306, 330, 379; or permission of the instructor. Offered every Spring. Same as PSY/SPM 480.

487. Collaborative Research in Biological Psychology. (N)
The neurophysiological and structural basis of behavior with emphasis on motivation and learning, including the use of psychopharmacological methods. The role of endocrine and metabolic processes in the regulation of behavior is integrated with considerations of structure. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY 302 or BIO/BFB 240 or permission. Offered every Spring. Same as PSY 487.

490. Senior Independent Research.
Independent research under the direction of either biology or psychology faculty. Permission of the BFB program chairperson and supervisory faculty member.

**BIOLOGY**

*Professor Clara Moore, Chair*

*Kirk Miller*  
B.F. Fackenthal Jr. Professor of Biology

*Peter A. Fields*  
The Dr. F. Paul & Frances H. Reiff Professor of Biology  
(on leave 2015–2016)

*Janet M. Fischer*  
Professor of Biology

*Robert N. Jinks*  
Professor of Biology

*Mark H. Olson*  
Professor of Biology

*Daniel R. Ardia*  
Associate Professor of Biology

*Jaime E. Blair*  
Associate Professor of Biology (on leave 2015–2016)

*Clara S. Moore*  
Associate Professor of Biology

*Timothy W. Sipe*  
Associate Professor of Biology

*Joseph T. Thompson*  
Associate Professor of Biology

*Beckley K. Davis*  
Assistant Professor of Biology

*Sybil G. Gotsch*  
Assistant Professor of Biology (on leave 2015–2016)

*Pablo D. Jenik*  
Assistant Professor of Biology

*David M. Roberts*  
Assistant Professor of Biology

*Aaron Howard*  
Visiting Assistant Professor of Biology

*Jorge Mena-Ali*  
Visiting Assistant Professor of Biology

*Christopher Shelley*  
Visiting Assistant Professor of Biology

*Stephanie Stoehr*  
Visiting Assistant Professor of Biology (Fall only)

*Janine Everett*  
Director of the Public Health Program

*Debra Frielle*  
Biosafety Officer and Senior Adjunct Assistant 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 consists of 15 courses. Nine are core and elective courses in Biology: BIO 110, 220, 230, 305; and five electives. 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 111; MAT 109; and one additional course from the following: CHM 211, PHY 112, MAT 110, GEO 110, GEO/ENV 114, or CPS 111. Also required is BIO 210 (with permission, PSY 230 or both MAT 216 and 316 may be substituted for BIO 210).

A major in Biochemistry and Molecular Biology includes five biology courses (BIO 110, 220, 230, 305 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, 322, 326, 332, 341, some topics courses from 370–379, 390 and 490; or CHM 221, 222, 322, 384, 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 two tracks: one in government/policy 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 110, 220 and sometimes 230 are prerequisites to most higher-numbered courses. Most courses above BIO 230 require permission of the instructor.

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, 323, 325, 326, 328, 330, 337, 340, 341, 342, 343, 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, Organization for Tropical Studies (Costa Rica), 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.

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; (W) Writing requirement.


An introduction to Mendelian genetics, micro- and macro-evolutionary processes, the origin and diversification of life on earth and ecological patterns and processes at organismal, population, community and ecosystem levels. Offered every Spring.  

*Ardia, Fischer, Howard, Mena-Ali, Olson, Sipe*
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. Miller, Olson

220. Principles of Physiology and Development. (N)
An integrated study of cells, whole organisms and the interactions between organisms and their environments. The physiological and anatomical solutions to the physical and chemical challenges faced by plants and animals. Mechanisms by which a single cell develops into a complex, multicellular organism in which groups of cells perform specialized tasks. Lecture topics integrated with a laboratory that emphasizes independent research projects. Prerequisite: BIO 220. Offered every Fall. Moore, Shelley, Stoehr, Thompson

230. Cell Biology. (N)
A study of life at the cellular level through investigation of the ultrastructure, molecular interactions and function of cell components, focusing primarily on eukaryotic cells. Topics will include: the physical and chemical principles governing biomolecules and their assembly, organelle function and maintenance, cellular communication, and the role of the cytoskeleton. Prerequisite: BIO 220. Co-requisite: CHM 112. Offered every Spring. Davis, Roberts

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/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, ENV 114 or ENV 117 and permission of the instructor. Same as ENV 245. Sipe

250. Animal Behavior. (N) (BWR)
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 foraging and predation, communication, social organization and reproductive strategies. Observational and experimental research required. Prerequisites: BIO 110 and permission of the instructor. Corequisite: either BIO 210 or PSY 230 and permission of the instructor. Offered every Fall. Same as BFB/PSY 250. Lonsdorf, Morton

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: ENV/GEO 114, GEO 110, or BIO 110. Same as ENV/GEO 257. Harnik

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.

305. Genetics. (N)
The study of the transmission, dynamics, and regulation of the 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 every Fall.  

Bechtel

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 and permission of the instructor.  

Jenik, Mena-Ali

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. Prerequisites: BIO 210, 220 and permission of the instructor.  

Moore

313. Introduction to Genome Analysis. (N)
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. Prerequisites: BIO 305 and permission of the instructor.  

Blair

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: BIO 230 and permission of the instructor.  

Frielle

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. Prerequisites: BIO 220 and permission of the instructor. Offered every Fall.  

Fischer, Olson

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 220 and permission of the instructor.

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 220 and permission of the instructor.

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. Prerequisites: BIO 220 and permission of the instructor. Corequisite: PHY111. Same as BFB 328.

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 or BIO 230 and permission of the instructor. Same as BFB 330.

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 and permission of the instructor. Offered every Spring.

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 and permission of the instructor.

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 and permission of instructor. Same as BFB 337.

338. Plain People and Modern Medicine.
This seminar will examine the effects of genetic diseases upon the health of Amish and Mennonite (Plain)
children and the effects of modern health care on the natural history of these diseases. Lectures will highlight the importance of Plain communities to medical genetics and provide an overview of our current understanding of the genetic causes of disease. Case studies will be used to examine the relationships between gene mutations and environmental conditions that determine pathophysiology. Prerequisites: BIO 305 and permission of the instructor. Offered every Spring. 

Morton, Puffenberger, Strauss

340. Plant Ecology. (N) (BWR)
An exploration of plant ecology, organized by four applied themes: global atmospheric change, air pollution and acid deposition, deer-forest interactions, and invasive species. Classes will involve lectures, primary literature discussions, field trip discussions, and seminars by invited speakers. The laboratory will include research projects and field trips. Prerequisites: BIO 110, BIO 220, and permission of the instructor. Same as ENV 340.

Sipe

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. Prerequisites: BIO/BFB 240 or BIO 230 or BFB 302 and permission of the instructor. Same as BFB 341.

Jinks

342. Forest Ecosystems. (N) (BWR)
A course in basic and applied forest ecology, with particular emphasis on forest communities, ecosystems and landscapes. Topics include forest environments, tree physiology and growth, ecosystem productivity, biogeochemistry, disturbance regimes, regeneration processes and the history of eastern North American forests. The laboratory includes local field trips and two half-semester research projects. Prerequisites: BIO 110, BIO 220 and permission of the instructor. Same as ENV 342.

Sipe

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 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/BFB 240 or BFB/PSY 302 and permission of the instructor. 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 and permission of the instructor.

Roberts

351. Epidemiology.
The study of epidemics and their prevention, using tools that are mathematical, statistical, graphical, and logical. Students will learn to draw inferences from observations and apply them to public health. Students will learn how to evaluate the efficacy of measures intended to improve health. Prerequisite: PBH 251. Same as PBH 351.

Everett
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 and permission of the instructor.

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 infections 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 and permission of the instructor. Corequisite: BIO 305 and permission of the instructor.

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 2015–2016
Pharmacology.

BUSINESS, ORGANIZATIONS AND SOCIETY
Professor Bryan Stinchfield, Chair

Alan S. Glazer  Henry P. and Mary B. Stager Professor of Business
Jeffrey Nesteruk  Professor of Legal Studies
Susan Andrzejewski  Associate Professor of Marketing (on leave 2015-2016)
Seth Kopchak  Associate Professor of Finance
Jeffrey S. Podoshen  Associate Professor of Business, Organizations and Society
Bryan Stinchfield  Associate Professor of Organization Studies
Cynthia L. Krom  Assistant Professor of Accounting and Organizations
Nancy Kurland  Assistant Professor of Organization Studies
Amanda Merryman  Assistant Professor of Organizational Behavior
Jorida Papakroni  Assistant Professor of Finance
William Schneper  Assistant Professor of Organization Studies and Management
( on leave 2015–2016)
Conrad Kasperson  Senior Adjunct Emeritus Professor of Management
A maximum of eighty-five (85) 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 “capstone” course.

**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.

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 or Macquarie University through the Institute for Study Abroad, Butler University; the Danish Institute for Study Abroad and IES Abroad programs in locations around the world; and internship programs through Boston University.

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.
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.

Kaspersion, Kurland, Podoshen, Stinchfield, Merryman, 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 RUS 216.

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. Corequisite: BOS 200.

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 ECO 210.

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.

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.

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.

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.

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.

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 ENV 335.  

Churchville, Nesteruk

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.

Kurland

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)
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.

Staff

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 and ECO 100.

Kopchak

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

Papakroni, Kopchak

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.

Kopchak

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 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 are changed from year to year. Permission of instructor usually required.

Staff
480. Issues Facing Organizations in the 21st Century. (S)
This course is the “capstone” experience 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.

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

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
Gender and Equality in the Law.

CHEMISTRY

Professor Kenneth Hess, Chair

Phyllis A. Leber  Dr. E. Paul and Frances H. Reiff Professor of Chemistry
Claude H. Yoder  Charles A. Dana Professor of Chemistry
Kenneth R. Hess  Professor of Chemistry
Richard S. Moog  Professor of Chemistry (on leave 2015–2016)
Marcus W. Thomsen  Professor of Chemistry
Scott H. Brewer  Associate Professor of Chemistry
Edward E. Fenlon  Associate Professor of Chemistry (on leave 2015–2016)
Jennifer L. Morford  Associate Professor of Chemistry (on leave Spring 2016)
Katherine E. Plass  Associate Professor of Chemistry (on leave 2015–2016)
Scott A. Van Arman  Associate Professor of Chemistry
Gabriel S. Brandt  Assistant Professor of Chemistry
Amy E. Hofmann  Assistant Professor of Chemistry
Christine M. Phillips-Piro  Assistant Professor of Chemistry (on leave 2015–2016)
Alec Brown  Visiting Assistant Professor of Chemistry
Maria Carroll  Visiting Assistant Professor of Chemistry
Alexander Davis  Visiting Assistant Professor of Chemistry
Jeffrey M. Pruet  Visiting 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; ENV 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 may take Introductory Biochemistry (CHM 351) and Advanced Biochemistry (CHM 451) as part of the major.

If a student is interested in completing an American Chemical Society certified major in Chemistry, the student must complete CHM 111, 112, 211, 212, 221, 222, 321, 351, plus three additional chemistry course credits at the 300-level or 400-level only one of which may be CHM 390 or CHM 490 and the four cognate courses (MAT 109, 110 and PHY 111, 112). The required 400 hours of laboratory experience after CHM 112 are achieved by successful completion of the Chemistry major including research (CHM 390, 490 or summer research).

**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 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.

111. General Chemistry I: The Structure and Composition of Matter. (N)
Designed both as a background for further courses in chemistry and as a terminal course for interested non-science students. Atomic structure, chemical bonding, molecular structure, intermolecular forces and the structure of matter in bulk. Relationship between properties and structure stressed throughout. Laboratory work deals with the separation and identification of substances. Offered every Fall.

_Brewer, Brown, Carroll, Hess, Hofmann, Van Arman_

112. General Chemistry II: Chemical Reactions. (N)
The principles underlying chemical transformations: stoichiometry; rates of reaction; equilibrium, metathetical, acid-base and oxidation-reduction reactions. Laboratory work dealing with the separation and identification of substances. Prerequisite: CHM 111. Offered every Spring.

_Brandt, Brown, Carroll, Davis, Hess, Hofmann_

211. Organic Chemistry I: Structure, Rates and Mechanisms. (N)
Structure and bonding principles associated with carbon compounds, fundamental reaction types with emphasis upon mechanisms. Structure determination based on theory and application of infrared spectroscopy, proton and carbon-13 nuclear magnetic resonance spectroscopy and mass spectrometry. Laboratory work includes separation, identification and synthesis of compounds, and spectroscopic analyses. Prerequisite: CHM 112. Offered every Fall.

_Leber, Pruet, Thomsen_

212. Organic Chemistry II: Reactions of Carbon Compounds. (N)
Reactions of carbon compounds as a function of their molecular structures with emphasis on mechanisms and the use of these reactions in synthesis of carbon compounds. Laboratory work includes analysis and synthesis of various compounds, and spectroscopic analyses, Prerequisite: CHM 211. Offered every Spring.

_Leber, Pruet, Van Arman_

221. Chemical Analysis. (N)
Fundamental principles of chemical analysis including solution equilibria, acid-base theory, complexation reactions and electrochemistry. Sampling and experimental design; interpretation and analysis of experimental results. Laboratory work includes introduction to common instrumental methods with applications drawn from fields such as biochemistry, environmental chemistry, forensic chemistry and pharmaceutical analysis. Prerequisite: CHM 112. Offered Fall 2015 and thereafter every Spring.

_Morford_

222. Inorganic Chemistry: Structure and Stability. (N)
Periodic relationships and acid-base concepts. Structure, bonding, reactions, and stability of main group and transition metal compounds, including use of group theory. Laboratory work involving the synthesis
and characterization of inorganic compounds. Prerequisites for Spring 2016: CHM 112. Prerequisites for Fall 2016: CHM211 or with permission of instructor. Offered Spring 2016 and thereafter every Fall.

321. Thermodynamics and Kinetics. (N)
Kinetic molecular theory of gases. Properties of real and ideal gases. Kinetics and mechanisms of reactions; theories of reaction rate. The laws of thermodynamics, spontaneity and equilibrium, systems of variable composition, phase equilibria, phase diagrams. Ideal solutions and colligative properties. Laboratory work required. Prerequisites: CHM 112, MAT 110, PHY 111 (or PHY111 may be a corequisite with permission of instructor). Offered every Fall.

Hofmann

322. Structure and Bonding. (N)
An introduction to quantum chemistry and spectroscopy of atoms and molecules, including bonding theories. Applications of molecular modeling and group theory to atomic and molecular structure and spectroscopy. Laboratory work required. Prerequisites for Spring 2016: CHM 211 or CHM 222; MAT 110, PHY 112 (or PHY112 may be a corequisite with permission of instructor). Prerequisites for Spring 2017: CHM 222, MAT 110, PHY 112 (or PHY112 may be a corequisite with permission of instructor). Offered every Spring.

Davis

351. Introductory Biochemistry. (N)
Chemical principles apply to life-sustaining processes in a variety of biological systems. Protein and nucleic acid structure, how these molecules are synthesized by the cell, and the reactions they perform or undergo. The chemical transformations afforded by organic and inorganic small molecule cofactors utilized by biological molecules in the cell. Required laboratory work will cover a variety of biomechanical techniques including protein expression, purification, kinetics, and structure analysis. Prerequisite: CHM 212. Offered every Fall.

Brewer

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

Staff

390. Directed Studies of Chemical Problems.
Directed study of a one-semester project. Permission of instructor and chairperson required. A student may not use this course to satisfy a major requirement in addition to CHM 490.

Staff

Mechanisms of organic reactions with emphases on thermochemical and kinetic analyses, linear free energy relationships, isotope effects, acid-base theory, bonding, molecular orbital theory and photochemistry. Use of the chemical literature to investigate reactions mechanisms and major topics in organic chemistry. Open only to senior chemistry majors. Prerequisites: CHM 212, CHM 321. Pre- or corequisites: CHM 222, CHM 322. Offered Spring 2016.

Thomsen

How do interactions among atoms result in a living organism? How does molecular organization lead to biological organization? This course will focus on the molecular-level detail of biological interactions. Use of the primary scientific literature, culminating in a research proposal addressing a contemporary research question. The folding and three-dimensional structure of biological macromolecules, molecular recognition, affinity and selectivity of binding, catalysis by enzymes and biomimetic design. The capabilities and limitations of modern experimental tools will be a theme throughout. Prerequisites: CHM 321, CHM 212 and either CHM 351 or BIO 334. Open to senior chemistry majors and senior BMB majors. Offered every Spring.

Brandt
490. Independent Study.
Independent study extending over two semesters. Course credit earned each semester. Permission of instructor and chairperson required. A student may not use this course to satisfy a major requirement in addition to CHM 390.

Staff

CHINESE LANGUAGE
Hongchang Yao, Director

Professor Carmen Tisnado, Provost Office Designee for Chinese
Shuai Shao  Chinese Language Teaching Fellow
Baohong Tai Chinese Language Teaching Fellow (Fall only)

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 the beautiful and unique Chinese 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.

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.

101. Elementary Chinese I. (NW, for those entering Fall 2013 and earlier)
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.  Yao

102. Elementary Chinese II. (NW, for those entering Fall 2013 and earlier)
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.  Yao

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.  Shao

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.  

Shao  

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.  

Shao  

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.  

Yao  

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016  
Advanced Chinese I.  

CLASSICS  
Professor Gretchen Meyers, Chair  

Ann Steiner  
Shirley Watkins Steinman Professor of Classics  

Shawn O’Bryhim  
Professor of Classics (on leave 2015–2016)  

Zachary P. Biles  
Associate Professor of Classics  

Alexis Q. Castor  
Associate Professor of Classics  

Gretchen E. Meyers  
Associate Professor of Classics  

J. Samuel Houser  
Chief of Staff and Vice President for Strategic Initiatives of the College, Adjunct Assistant Professor of Classics  

Ryan Fowler  
Visiting Assistant 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. All students complete the major with a senior capstone seminar that draws on the range of interests and learning among our student majors toward the investigation of a topic that spans Greek and Roman cultures and the variety of disciplinary approaches applied to their study.


COURSEWORK REQUIRED FOR A MAJOR IN CLASSICS

Classical Languages and Literatures: 12 courses distributed as follows:

- 9 courses in Greek and Latin (at least 3 courses must be taken in each language, i.e. to 201 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);
- 1 senior capstone seminar (CLS 4XX)

Classical Society: 12 courses distributed as follows:

- 1 introductory history course (CLS 113 or 114)
- 1 introductory archaeology course (CLS 115 or 117)
- 3 courses in Greek or Latin, i.e. either language to the 201 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
- 1 400-level senior capstone seminar (CLS 4XX)

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; Poggio Colla Archaeological Field School, Tuscany, Italy; 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.

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. 

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.
There is a required field trip. Same as ART 115.

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 ART 117.

210. History of Ancient Philosophy. (H)
The origin and development of the major themes of Greek philosophy from the Milesians through Aristotle. Same as PHI 210.

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.

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.

253. Summer Fieldwork in Classical Archaeology. (S)
Hands-on training in archaeological field methods, including excavation technique and preparation of a field notebook. Students work for six weeks at the Etruscan site of Poggio Colla, part of the Mugello Valley Archaeological Project, co-sponsored by Franklin & Marshall, Southern Methodist University and the University Museum of the University of Pennsylvania. Prerequisites: CLS 114 or 115 or 117 or ANT 102 and permission of the instructor. Offered only in the Summer.

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.
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. Steiner

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. Castor

421. Alexander the Great. (H)
At age 20, a young prince inherited the rich and powerful kingdom of Macedon upon the assassination of his father. Thirteen years later, he had conquered territory from Greece to India and was worshipped as a god. Such unimaginable accomplishments can be matched only by Alexander’s own extreme personality. What qualities or talents did Alexander have that allowed him to achieve such success? This question has intrigued historians, philosophers, and biographers since his own time. We will consult a variety of ancient sources—texts, images, archaeological remains—in order to study the historical and cultural circumstances of the era, the personality of the man, and the history of his legend. Prerequisite: CLS113 and permission of the instructor. Castor

GREEK

101. Elementary Ancient Greek I.
Introduction to the grammar and syntax of Classical Greek. Offered every Fall. Biles

102. Elementary Ancient Greek II.
Continues the study of the basic grammar and syntax of Classical Greek. Prerequisite: GRK 101 or placement. Offered Every Spring. 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. Offered every Fall. 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. Offered every Spring. Biles, Steiner

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

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

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

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

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

*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.  

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.  

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.  

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.  

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 Fall.  

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

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

*Repeatable by permission of department.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015 – 2016
Ancient Medicine (Fowler).
Ancient Law and Order (Castor).

COMPARATIVE LITERARY STUDIES
Professor Zachary P. Biles, Chair

MEMBERS OF THE COMPARATIVE LITERARY STUDIES PROGRAM COMMITTEE
L. Scott Lerner    Arthur and Katherine Shadek Professor of Humanities
                   and French and Italian
Richard Kent      Professor of Art History
Zachary P. Biles  Associate Professor of Classics
Karen J. Campbell Associate Professor of German
Emily Huber       Assistant Professor of English
Peter Jaros       Assistant Professor of English
Konstantinos Kourelis Assistant Professor of Art History
Carrie Landfried  Assistant Professor of French
Jon Stone         Assistant Professor of Russian and Russian Studies

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 201 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.

201. 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. 

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.

315. Introduction to Literary Theory. (H)
As Jonathan Culler states, “Theory offers not a set of solutions but the prospect of further thought. It calls for commitment to the work of reading, of challenging presuppositions, of questioning the assumptions on which you proceed.” Students in this course will be introduced to theoretical schools and concepts that shape the study of literature and the practice of literary analysis. Students enrolling in this course should have taken at least one college-level literature course. Recommended for students considering graduate studies in English. Same as ENG 315.

Lerner

Staff

Mueller
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 Zachary Biles, chairperson of Comparative Literary Studies. Students should be aware that some of these courses have prerequisites.

JPN 220. Introduction to Modern Japanese Literature.
LIT 182. Tolkein’s Mythology.
LIT 233. Religion in 20th Century Jewish Literature.
LIT 315. Latin Comedy.
LAT 316. Latin Tragedy.
LAT 318. Latin Satire: Horace
RST 112. Judaism
RUS/LIT 214. Russian Novel from Pushkin to Tolstoy (19th Century).
RUS 217. Russia: The 20th Century in Print and Film.
TDF 110. Foundations of World Theatre.

COMPUTER SCIENCE

Professor Wendell Ressler, Chair

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Jing Hu</td>
<td>Associate Professor of Computer Science</td>
</tr>
<tr>
<td>Erik Talvitie</td>
<td>Assistant Professor of Computer Science</td>
</tr>
<tr>
<td>Anthony J. Weaver Jr.</td>
<td>Visiting Instructor of Computer Science</td>
</tr>
<tr>
<td>Amy E. Antonucci</td>
<td>Adjunct Instructor of Computer Science (Spring only)</td>
</tr>
<tr>
<td>Michael Melusky</td>
<td>Adjunct Instructor of Computer Science</td>
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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 is a cultural and social concern.

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, Computer Organization, 261 and 337, as well as four electives at the 200-level or above. Three electives must be chosen from Artificial Intelligence, 363, Machine Learning,
Networking, and Operating Systems, and at most one 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.

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 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. Offered every Fall.

_Talvitie_  

**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 (formerly CPS 170 or 150) or permission of the instructor. Offered every Spring.

_Staff_

**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.

_Talvitie_

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

_Feldman, Staff_

**261. Algorithms.**
Trees, graphs and networks; further analysis of algorithms and their efficiency. Prerequisite: CPS 112 (formerly CPS 270 or 260), CPS/MAT 237.

_Staff_

**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, CPS/MAT 237.

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 MAT 338.

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: Advanced Data Structures or CPS 222 or CPS 261.

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 2015–2016
Machine Learning.
Computer Organization.
EARTH AND ENVIRONMENT

Professor Dorothy J. Merritts, Chair

Professor Zeshan Ismat, Associate Chair

Carol B. de Wet  Dr. E. Paul & Frances H. Reiff Professor of Geosciences
Dorothy J. Merritts  Harry W. & Mary B. Huffnagle Professor of Geosciences
Stanley A. Mertzman  Earl D. Stage and Mary E. Stage Professor of Geosciences
Roger D. K. Thomas  John Williamson Nevin Professor of Geosciences
Robert S. Sternberg  Professor of Geosciences
James E. Strick  Professor of Science, Technology and Society
Andrew P. de Wet  Associate Professor of Geosciences
Zeshan Ismat  Associate Professor of Geosciences
Robert C. Walter  Associate Professor of Geosciences
Christopher J. Williams  Associate Professor of Environmental Science
Paul Harnik  Assistant Professor of Environmental Science
Elizabeth DeSanto  Assistant Professor of Environmental Studies
Michael Kulik  Director of Public Policy
Sarah Dawson  Director of Wohlsen Center for Sustainability
Joanna L. Dyl  Visiting Assistant Professor of Environmental Studies
Timothy D. Bechtel  Visiting Assistant Professor of Earth and Environment
Suzanna Richter  Adjunct Assistant Professor of Earth and Environment

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 (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: GEO 110 or 114, followed by GEO 221, 226, 231, 321, 324, 353, and 480. GEO 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 GEO 480.

**A minor in Geosciences** consists of six courses, including one course selected from GEO 110 or 114, followed by GEO 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 16 courses: nine core science courses (three from Biology, three from Chemistry and three from Geosciences), two science electives (from Biology, Chemistry or Geosciences, which may include an independent study course), 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 ENV 454.

The specific requirements for the Environmental Science major are: BIO 110, 220, 323; GEO 114, 226, 344; CHM 111, 112 and a third chemistry course selected from CHM 211, 221 or 222; ENV 117; and ENV 454. The two electives to complete the major may include: BIO 309, 340, 342; GEO 221 or 350; ENV 235; CHM 211, 212, 222; a 490 course associated with either Biology, Geosciences, Environment or Chemistry; or other approved courses. Two courses from the following group of quantitative or field skills courses are required: GEO 250, BIO 210, GEO 353 or another approved statistics or field course. In addition, one course is required from the environment and society group including ENV 216, AMS 280 and 401, ENG/ENV 260, BOS/ENV 335, ECO/ENV 240 or another approved course.

**There is no minor in Environmental Science.**

Faculty affiliated with the Environmental Science curriculum include: Professors Hess, Plass, and Morford (Chemistry); Professors Sipe, Fischer, 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: ENV 117, 216 and 454. The required Natural Environment core courses are: BIO 110 and ENV 114, plus one course from the following group: ENV/GEO 226, 344, 350; GEO/BIO 257, 275; 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, ANT 272, BOS 335, ART 366, ECO 240, ENV 312 or 318, and ENV 314. The research/quantitative methods course may be selected from BIO 210, BOS 250, ECO 210, ENV 250, MAT 116 or MAT 216, and PSY 230. Three electives may be selected from AMS 300, 420; BIO 245, 360; BOS 480; ENV 250, 313, 315, 352, 361, 375; GEO 270, 271; GOV 305 and ENV 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 ENV 454.

A minor in Environmental Studies consists of six courses, including ENV/STS 117; two courses in environmental policy/human environment (selected from ENV 216, ECO/ENV 240, AMS/ENV 280 or 401, STS/ENV 312, ENV 314 and topics courses approved by the Environmental Studies Committee); two laboratory courses (BIO 110 or GEO /ENV 114 and one of the following: BIO 323, 325, 340; GEO/BIO 275/275; GEO/ENV 226, 250, 350; and approved topics courses); and either ENV 454 or ENV 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: Professor Mueller (English); Professor Stinchfield (Business, Organizations, and Society ); Professor Kurland (Business, Organizations, and Society); Professors Merritts, Strick, De Santo, and Dyl (Earth and Environment); Professor 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.

Earth and Environment majors have studied abroad in several programs in recent years, including: School for Field Studies: Costa Rica, Australia, Kenya; University of Copenhagen, Denmark; School for International Training, Tanzania; Semester in Environmental Science, Woods Hole, Mass.; Sea Education Association, Sea Semester, Wood 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.
GEOSCIENCES
110. The Dynamic Earth. (N)
Composition and distribution of earth materials; examination of internal earth processes and their relationship to mountain-building and plate tectonics; surficial processes and environmental problems. Field trips.  Staff

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. Same as ENV 114. Staff

118. Introduction to Oceanography. (N)

205. Archaeometry: Natural Sciences as Applied to Archaeology. (N)
Application of methods from the natural sciences to study of archaeological environments and artifacts. Scientific principles underlying techniques; application to archaeological problems. Major topics include: dating methods; analysis and characterization of artifacts; location of sites and features within sites; paleoenvironment and paleoecology. Prerequisite: one archaeology course and one lab science course, or permission of the instructor. Same as ANT 205. Sternberg

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: GEO 110 or 114 or 118.

Mertzman, Thomas

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: GEO 110 or 114 or 118. Offered every Fall. Same as ENV 226.

Merritts

231. Structural Geology. (N)
Folding, flowage and faulting of the rocks of the Earth’s crust. Related causes and mechanics of mountain building. Mapping and interpretation of these features in the field. Prerequisite: GEO 110 or 114 or 118.

Ismat

237. Physics of the Earth. (N)
Principles of physics as applied to understanding features and properties of the solid earth. Gravity, seismology, geomagnetism and paleomagnetism, heat flow; geophysical surveys. Laboratory. Prerequisite: GEO 110 or 114 and PHY 111, or permission. Same as PHY 237. Sternberg

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. \textit{Same as ENV 250.} \quad \textit{A. de Wet}

\textbf{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: ENV/GEO 114, GEO 110, or BIO 110. \textit{Same as BIO/ENV 257.} \quad \textit{Harnik}

\textbf{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. \quad \textit{Mertzman}

\textbf{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: GEO 321. \quad \textit{Mertzman}

\textbf{324. Sedimentology and Stratigraphy. (N)}

Geologic framework, environment of deposition and dynamics of sediments and sedimentary features; petrology and petrography of sedimentary rocks; interpretations derived from examination of sedimentary features and rock sequences in the field. Prerequisite: GEO 221 \quad \textit{C. de Wet}

\textbf{344. Global Change/Natural Resources. (N)}

Exploration of variables involved in global change, ranging from natural drivers of change to humanity’s direct effects on geochemical cycles and biological communities. A portion of the course deals with climate change. The global impact of humans on the Earth’s natural resources is surveyed in a scientific framework. Possible ways in which humans might mitigate these impacts are addressed. Prerequisites: ENV/GEO 114 or BIO 110 or permission of the instructor. Offered every Fall. \textit{Same as ENV 344.} \quad \textit{Williams}

\textbf{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. \textit{Same as ENV 350.} \quad \textit{Walter}

\textbf{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. \quad \textit{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. Thomas

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: GEO 221 or permission of instructor. Thomas

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: GEO 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. Staff

490. Independent Study.
Independent study directed by the Geosciences staff. 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. Same as GEO 114. Staff

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. DeSanto

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. Offered every Fall. DeSanto

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: GEO 110 or 114 or 118. Offered every Fall. Same as GEO 226.

234. Population. (S) (NSP)
Introduction to population studies focusing on the demography of modern societies. Topics include causes and effects of rapid population growth, changing mortality and fertility, urban growth, age/sex composition and spatial distribution. While basic demographic analysis will be covered, emphasis will be on the sociocultural context of population processes. Prerequisites: ANT 100 or SOC 100 or ECO 100 or ENV 114 or ENV 117 or permission of the instructor. Same as ANT/STS 234.

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.

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, ENV 114 or ENV 117 and permission of the instructor. Same as BIO 245.

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. Same as GEO 250.

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: ENV/GEO 114, GEO 110, or BIO 110. Same as BIO/GEO 257.

258. Science Writing: Fact & Fiction. (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.

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.*

**280. American Landscape. (S)**
An interdisciplinary study of the American landscape as it has evolved over centuries of human habitation. Examines three main themes: the domesticated and designed landscape of the mid-19th century; the crusade to preserve nature and the establishment of national and state parks in the late 19th and early 20th centuries; and the sprawling, seemingly formless automobile-dominated landscape of the late 20th century. *Same as AMS 280.*

**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.*

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.*

**314. Global Environmental Politics. (S)**
This course examines principles and instruments of Global Environmental Politics (GEP), beginning with the nature and sources of international environmental law 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. Principles and objectives underpinning GEP to be examined include sustainable development, the precautionary principle, the polluter pays principle, and the principle of common but differentiated responsibilities. Environmental regimes and conventions 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: ENV 216 or GOV 100. *Same as GOV 374.*

**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.*

**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 also address how historian has approached the study of the environment. *Same as HIS 318.*

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.*

340. **Plant Ecology.** (N)
An exploration of plant ecology, organized by four applied themes: global atmospheric change, air pollution and acid deposition, deer-forest interactions, and invasive species. Classes will involve lectures, primary literature discussions, field trip discussions, and seminars by invited speakers. The laboratory will include local and overnight field trips. Prerequisites: BIO 110, BIO 220, and permission of the instructor. *Same as BIO 340.*

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, GEO 226, GEO 326, BIO 220, BIO 323. *Same as CHM 341.*

342. **Forest Ecosystems.** (N)
A course in basic and applied forest ecology, with particular emphasis on forest communities, ecosystems and landscapes. Topics include forest environments, tree physiology and growth, ecosystem productivity, biogeochemistry, disturbance regimes, regeneration processes and the history of eastern North American forests. The laboratory includes local field trips, multi-week projects and a voluntary trip to New England over fall break. Prerequisites: BIO 110, BIO 220 and permission of the instructor. *Same as BIO 342.*

344. **Global Change/Natural Resources.** (N)
Exploration of variables involved in global change, ranging from natural drivers of change to humanity’s direct effects on geochemical cycles and biological communities. A portion of the course deals with climate change. The global impact of humans on the Earth’s natural resources is surveyed in a scientific framework. Possible ways in which humans might mitigate these impacts are addressed. Prerequisites: ENV/GEO 114 or BIO 110 or permission of the instructor. Offered every Fall. *Same as GEO 344.*

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. *Same as GEO 350.*

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.

**361. This is Garbage. (N)**
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.

**454. Environmental Problems. (N)**
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.

**490. Independent Study.**
Independent study directed by the Earth and Environment staff. (Permission of chairperson)

**TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016**
Conservation Paleobiology with Lab.
Engineering the Earth.
Sustainable Design.
Energy Wise.

**ECONOMICS**

*Professor Sean Flaherty, Chair (Fall 2015)*
*Professor Eiman Zein-Elabdin, Chair (Spring 2016)*

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<tr>
<th>Antonio G. Callari</th>
<th>Sigmund M. and Mary B. Hyman Professor of Economics</th>
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<tr>
<td>Alan S. Caniglia</td>
<td>Professor of Economics</td>
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<td>Sean Flaherty</td>
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<td>Eiman Zein-Elabdin</td>
<td>Professor of Economics (on leave Fall 2015)</td>
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<td>David M. Brennan</td>
<td>Associate Professor of Economics</td>
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<td>Yeva Nersisyan</td>
<td>Assistant Professor of Economics (on leave 2015–2016)</td>
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<td>Stephen Nicar</td>
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<td>Leanne M. Roncolato</td>
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<td>Patrick Fleming</td>
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<td>Tony R. Maynard</td>
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<td>Michael E. Martell</td>
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<td>Alexander D. Binder</td>
<td>Visiting Instructor of Economics</td>
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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 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-prepared 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 orthodox and heterodox abstract and applied theoretical work. Electives offer students the opportunity to explore both topical and theoretical special areas of 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, macroeconomic fluctuations, economic growth, international economic relations, the roles of class, culture, gender and race, and the ecological nature and impact of economic activity. Moreover, a good liberal arts economics education will involve students in interdisciplinary explorations. Economics majors are, therefore, encouraged to enrol in courses in other departments and interdisciplinary programs such as history, anthropology, government, women and gender studies, and earth and environment. Economics majors and minors are also encouraged to pursue opportunities to study abroad, where they are likely to cement their understanding of the cultural context and nature of economic life. Majors in the Department of Economics have studied abroad in the following countries: Australia, China, Denmark, Ecuador, England, France, Germany, Ireland, Italy, Japan, South Africa, south Korea, and Sweden. 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 10 courses, at least 8 of which must be taken at Franklin & Marshall College. Required are:

- ECO 100 and 103;
- ECO 200, 201, 203;
- ECO 210, or BOS 250 or MAT 216 (students cannot get college credit for both ECO 210 and BOS 250);
- at least two courses with a designation of 300 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
their Junior year. In addition, prospective majors are strongly encouraged to complete ECO 200 before enrolling in ECO201 and ECO203.

Normally, at least eight of the credits for the major must be earned at Franklin & Marshall College.

The writing requirement in Economics is met by completion of the normal courses required to complete the 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:

  - have carried out independent research during the Senior year resulting in a high caliber thesis deemed to be deserving of “honors” by an appropriately composed Honors Committee;
  - have an Economics GPA of 3.5 and a College GPA of 3.0 at the beginning of the honors project and at the time of graduation;
  - have completed all the required Economics courses (ECO 100, 103, 201, 203, 205, and 210 or MAT 216) by the end of their Junior year; the department may waive this requirement in special cases.

A minor in Economics consists of six courses: ECO 100 and 103, plus four other approved by the department, at least, three of which will normally be at the 200 (or higher) level. 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.

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.  
*Binder, Flaherty Fleming, Martell, Maynard, Nicar, Roomets*

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; wealth and poverty; and the environment.  
*Binder, Brennan, Maynard, Nersisyan, Zein-Elabdin*

130. **Marxian Political Economy.** (S)  
Marx’s analysis of capitalism as an economic, social and historical system. Areas covered are: market economies and alienation; exploitation and class conflicts; the working “class”; competitive and
monopolistic tendencies of capitalism; capitalist accumulation and economic crises; the role of the state; colonialism, imperialism and globalization. Particular attention will be paid to the contemporary relevance of Marx’s theory. Students are also introduced to the problems and methods of critical inquiry.

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.

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. Prerequisites: ECO 100 and 103.

203. Value and Distribution. (S)
The analytical foundations of heterodox economic theories. Theoretical critiques of and alternatives to orthodox theories of: “factor” pricing and the distribution of income; macroeconomic dynamics of growth and stability; the neutrality and exogeneity of money; gendered (and non-market) economic relations. Prerequisites: ECO 100 and 103.

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.

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. Prerequisite: ECO 100 and 103.

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.

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. Prerequisite: ECO 100 and 103, or permission of the instructor. Same as ENV 240.

244. Women in the Economy. (S)
An analysis of the roles women and men have historically played and continue 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 and
labor market discrimination. Economic and interdisciplinary approaches are used. Prerequisite: ECO 100 and 103, or permission of the instructor. Same as WGS 244.

248. History of Economic Thought. (S)
A survey of ways of thinking about “economic” issues from antiquity to contemporary times, with each way placed in the context of the intellectual and social climate of its times. Special attention is paid to key analytical and methodological issues. Key figures studied include: Aristotle, St. Thomas Aquinas, John Locke, Thomas Munn, David Hume, Adam Smith, Thomas Malthus, David Ricardo, Jeremy Bentham, Karl Marx, Thorstein Veblen, Alfred Marshall, John M. Keynes, Fredrick Hayek, Paul Samuelson, Milton Friedman, Piero Sraffa, Paul Sweezy, Robert Lucas, Alan Greenspan and Paul Krugman. Prerequisites: ECO 100 or ECO 103.

255. Political Economy of Health Care. (S)
A seminar format approach to issues in health and health care reform from an economics-based perspective but also including multi-disciplinary considerations. Topics include the following: the unique qualities of the market for health care; controlling costs/improving outcomes in health care delivery; the economic status of health care providers; economic and ethical issues of pharmaceutical development and distribution; health—and health care—disparities by income, race, ethnicity, and gender; the looming fiscal crisis of Medicare and Medicaid; the political economy of systemic health care reform; comparative health care systems. Prerequisites: ECO 100 or ECO 103.

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. Prerequisite: ECO 100.

281. Political Economy of Africa. (S) (NW)
A broad idea of 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 economic and political problems such as food production, external debt 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.

282. Women, Culture and Development. (NW) (S)
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 WGS 282.

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.

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 MAT 216.

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 100, 103 and ECO 210 or MAT 216.

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 and ECO 264.

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 and ECO 264.

335. Economic Development. (S) (NW)
Theories of economic growth and development. Historical and political context of the emergence of the “less developed” world and the project of international development. Structure and performance of “less developed” economies. Current major policy issues including agriculture, industry, technology, foreign investment and international trade and debt. Prerequisite: ECO 200, or permission of the instructor.

350. Game Theory. (S)
Game Theory provides a framework for analyzing strategic situations. Where to put your first serve in tennis, why some professors will never accept late submissions and why do Circuit City and BestBuy offer price matching guarantees are examples of strategic situations. Here each participant’s action can affect the outcome for others. The course teaches how to build models of strategic situations and introduces techniques to solve them. The solutions provide benchmark predictions of behavior observed in our lives. Prerequisite ECO 200.

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.
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 at the 300-level: ENG226; 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: ENG226; 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.

**A minor in English** consists of the following six courses: ENG226; one Pre-1800 literature course (ENG 201, 202, 203, 206, 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); two electives; and two 400-level seminars.
designated as Post-1800); one course designated either Pre- or Post-1800 literature; one elective; one 400-level literature seminar.

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 requirement; (W) Writing 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.  

*Huber,*

*Mongia*

**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 occasionally offers 200- and 300-level courses designated “Pre-1800.”

*Staff*

**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 occasionally offers occasional 200- and 300-level courses designated “Post-1800.”

*Staff*

**ELECTIVES**

160. Modern Drama. (H) (W)
This course explores 20th-century drama and performance from around the world. We will read works written in English from Nigeria, South Africa, Ireland, English, and America. We’ll also watch several
performances as videos. Along the way, we will persistently pose the questions of how performance can address important social issues and how it can offer insight for change. 

Abravanel

163. Myth and Fairytale. (H) 
This course compares a number of myths and fairy tales with versions from other times and cultures; we also examine critics whose perspectives range from historical to psychological, philological to feminist. We also examine artistic interpretations—films, poetry, fiction—and discuss ways in which the meaning and even utility of myth and fairy tale shift over time. Student perspectives are explored in various papers and through class presentations. Throughout the semester we examine the relevance of these stories, and how knowledge of them adds dimension to our lives. 

Hall

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

212. Shakespearean Literature. (H) 
This course provides a general introduction to Shakespeare’s language and dramatic literature: we will read comedies, tragedies, and histories; discuss text; analyze film adaptations; consider Shakespeare’s relationship to modern culture; and attend a live performance. Meets Contemporary requirement for Creative Writing majors. (Fulfills Pre-1800 requirement.) 

Goeglein

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

245. Baseball in American Literature and Culture. (H) 
How do the history of baseball, writings about baseball and the playing of the “national pastime” reflect and shape American values, social conflicts and identity? An exploration through readings in baseball literature and history. Topics include: American idealism and the American Dream; democracy and free enterprise; race and class conflicts; hero worship; patriotism; ethics (including corruption and disillusionment); and masculine identity. 

Same as AMS 245. O’Hara

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.

258. Science Writing: Fact & Fiction. (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 ENV/STS 258.

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 ENV 260.

263. 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.

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.

284. Writing 4 New Media. (H)
A course for good writers interested particularly in the practices of electronic publication. Emphasis on writing and editing, with some attention to the sites and software that enable online content creation. Class members often work in small teams or departments in producing original publications of their own.

315. Introduction to Literary Theory. (H)
As Jonathan Culler states, “Theory offers not a set of solutions but the prospect of further thought. It calls for commitment to the work of reading, of challenging presuppositions, of questioning the assumptions on which you proceed.” Students in this course will be introduced to theoretical schools and concepts that shape the study of literature and the practice of literary analysis. Students enrolling in this course should have taken at least one college-level literature course. Recommended for students considering graduate studies in English.
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 nonfiction with an emphasis on writing exercises and revision. Students will be introduced to the workshop method of critiquing student writing. 

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.

382. Writing Poetry. (A)
A workshop focused on generating and criticizing student poetry. Weekly poetry assignments will be according to subject matter (the elegy, the political poem, the love poem, etc.), lyricism and experiments in form. A rich selection of weekly readings of American and world poetry will be our guide as we work towards further mastery of poetic craft. The semester will culminate in a portfolio of student work. Students of all majors are encouraged to take the course. Permission of the instructor required.

384. Writing Nonfiction. (A)
For confident writers ready to find their voices in a genre that claims to tell the truth without making it up. Assignments center on pieces suited for today’s magazines, newspapers and online publications: opinion pieces, memoir, restaurant and movie reviews, editorials, travel sketches, investigative reports. Readings from contemporary nonfiction writers, some chosen by the class. Emphasis on reading and responding to each other’s work. Good writers, including non-majors, welcome. Permission of instructor required.

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. Each student must write an introduction to his or her thesis. Permission of the instructor required.

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.

461. Swift, Blake and Satire. (H)
A seminar on the work of Jonathan Swift (1667-1745) and William Blake (1757-1827), satirists who stand at opposite ends of the eighteenth century. Blake—radical revolutionary and visionary—addresses some of the same questions that so concern the far more conservative Swift. Though each man would likely have
found the other intolerable (given vast political, social, religious, artistic and personal differences), both effectively translate into art a profound rage about what Edward Said calls “schemes for projecting power on nature, on human beings, and on history.” Among our chief objectives in our study of Swift will be to understand and enjoy the radical play of irony that characterizes his satire. We will examine both Blake’s visual art and his poetry, though with emphasis on the latter. Students will participate in “springboard” groups whose task it will be to initiate weekly discussions; they will also write short papers and a final 10-15 page research paper. Permission of the instructor is required.

470. Contemporary Indian Literature. (H)
This course explores contemporary Indian fiction in English. Beginning with the writers called “Anglo-Indian,” the course will offer a chronological survey of Indian fiction in English as it has developed over the last 50 years. The bulk of our attention will be devoted to writers of the last 20 years—the “postcolonial” writers such as Salman Rushdie, Amitav Ghosh, and Arundhati Roy. Throughout we will pay attention to the categories whereby Indian literature in English is marketed and sold; therefore we will also scrutinize the category “Indian literature in English.” Permission of the instructor required.

490. Independent Study.
Independent study directed by the English staff. See chairperson for guidelines and permission.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
271. Contemporary Memoir.
276. Contemporary Queer Poetry.
379. Madonnas, Mothers, and Virgins.
479. Dickens and the City.

ENVIRONMENTAL SCIENCE
(See Earth and Environment)

ENVIRONMENTAL STUDIES
(See Earth and Environment)
FRENCH AND FRANCOPHONE STUDIES

Professor Lisa Gasbarrone, Chair

L. Scott Lerner  Arthur and Katherine Shadek Professor of Humanities and French and Italian
Lisa Gasbarrone  Professor of French
Cindy Yetter-Vassot  Associate Professor of French
Nadra Hebouche  Assistant Professor of Francophone Studies and French
Carrie Landfried  Assistant Professor of French
Marie-Line Brunet  Visiting Assistant Professor of French
Julie Saragosa  Adjunct Instructor of French
Lise Walczak  French Teaching Assistant

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.

The French major provides a cohesive, integrated experience which gives students a solid background in language, literature and culture. Introductions, the three core courses required for the major, serve as a gateway to the major and a bridge from the intermediate to advanced levels of our program. These courses provide students with the tools to describe, debate, analyze and critique French literary and cultural texts, films, documents and other cultural phenomena, both orally and in writing. In the Développement stage of the French major, students choose from advanced courses in the following categories: Racines (historical, literary, or cultural ideas, movements and icons across time); Hors Hexagone (literature, ideas, and concepts from several regions of the French speaking world); Monde Contemporain (literature, ideas, or figures associated with France during the last one hundred years); and Perfectionnement et Pratique (development of written and/or oral skills at an advanced level). In the final year of the major, students will take one Approfondissement course, an advanced level seminar which is an in-depth study of an author, genre, era, or phenomenon.

A major in French consists of a minimum of 10 courses. Majors normally complete the three Introductions courses: FRN 241, FRN 242, FRN 261; 6 Développement courses (300-level) in three of four categories, Racines, Monde Contemporain, Hors Hexagone, Perfectionnement; and one Approfondissement course (400-level). All majors, in consultation with their adviser, will also
create and present a portfolio of their work in French. This presentation will take place during the student’s final semester, before a group of department members and other French majors.

All French majors work closely with a departmental adviser to ensure the coherence and integrity of their major course of study.

In consultation with their advisors, French majors may take one cognate course outside of the department for credit in the major. These courses are subject to departmental approval. The following courses have been approved as cognates, others are subject to departmental review: LIN101, Introduction to Linguistics; LIN 120 Introduction to Sociolinguistics; INT200 Introduction to International Studies; GOV130 International Politics; BOS350 International Business; and HIS241 History of North and West Africa.

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.

Majors and minors in the Department of French and Francophone Studies have studied abroad in the following programs in recent years: Internships in Francophone Europe (IFE); Institute for American Universities in Aix-en-Provence (IAU); American University Center of Provence (AUCP); IES Center and University of Nantes. See the International Programs section of the Catalog for further information.

Students majoring in French who enroll in French courses abroad may transfer up to two courses for credit (per semester).

The writing requirement in the French major is met by completion of FRN 242.

A minor in French consists of six courses numbered 201 or above. French minors must complete at least one 300-level Développement course or the equivalent.

Students minoring in French may transfer a total of two French courses taken abroad for credit towards the French 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 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 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.

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.

241. Parler, entendre, comprendre. (H)
This course is designed to improve skills in oral expression and aural comprehension. Emphasis is on
informed conversation and vocabulary acquisition. Coursework includes individual and group work leading
to the production of audio and/or video documents in French, as well as intensive pronunciation practice,
impromptu speech, and informal writing skills. Extensive use of authentic French documents found on the
internet. Prerequisite: FRN 202 or placement.

242. Ecrire, décrire, s’exprimer. (H)
This course will focus on both the process and the product of writing in French. Analysis of model texts,
targeted grammar review, and advanced stylistic practice will help students develop the skills necessary to
accomplish a variety of writing tasks (description, letter, portrait, narration, summary, essay). Peer and self-
editing techniques will help students learn to revise their own work. In addition, a common theme (different
each semester) will provide material for discussion and inspiration for written assignments. Prerequisite:
FRN 202 or placement or permission of instructor.

261. Lire, Analyser, Critiquer. (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, FRN 242 or the equivalent.

353. Environment in/and Literature. (H)
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
placement. Same as ENV 353.

360. France in the Age of Tradition: Introduction to French Studies until 1789. (H)
A broad overview of French civilization from the Middle Ages to the 18th century, through representative
literary works and other cultural materials (painting, architecture, music, film). Prerequisite: FRN 261 or
placement.

A broad overview of French civilization from the Revolution to the Fifth Republic, through representative
literary works and other cultural materials (painting, architecture, music, film). Prerequisite: FRN 261 or placement.

363. Marginal Sexualities in the Maghreb. (H) (NW)
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 placement. Same as AFS/WGS 363.

364. Francophone Literatures and Cultures (NW)
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

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

367. French Women, Art & Literature. (H)
This course will examine the work of women writers and artists in France from the 18th century through the present. We will read works of literature, essays, art criticism, and personal correspondence in order to better understand these artistic women and society’s perception of and reaction to women as “artists” in the past and the present. We will compare how women and men are portrayed in works written by male and female authors of the same time period in order to determine how myth and reality intersect in works of literature. Included will be works by Laclos, Elizabeth Vigée LeBrun, Baudelaire, Colette, Rykiel, and Simone de Beauvoir. Prerequisite: FRN 261 or placement.

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 placement.

369. Francophone Theatre. (H) (NW)
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, Hean Genet, Eugène Ionesco, and Simone Schwarz-Bart, will constitute the backdrop of our investigation. Prerequisite: FRN 261 or placement.
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. Recent courses include La Littérature de Guerre; Victor Hugo; L’Etranger. Topic for Fall 2015: L’étranger. Open to juniors who petition the department to enroll.

Landfried

391. Directed Readings in French. (H)
Tutorial for students who have completed FRN 241, 242 and 261. 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. Recent courses include La Littérature de Guerre; Victor Hugo; L’Etranger. Topic for Fall 2015: L’étranger. For seniors only.

Landfried

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

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
La France occupée: 1940-1044/Occupied France: 1940-1944.

GEOSCIENCES
(See Earth and Environment)

GERMAN AND GERMAN STUDIES

Professor Curtis C. Bentzel, Chair

Curtis C. Bentzel  Associate Professor of German
Karen J. Campbell  Associate Professor of German
Jennifer Redmann  Associate Professor of German (on leave 2015–2016)
Edward Muston  Visiting Assistant Professor of German
Helena Stech  German Teaching Assistant

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 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. A German First Year Seminar may be counted toward the German Studies major or minor. Approved Franklin & Marshall German Studies courses include ART 335, HIS 355, 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: Pennsylvania Colleges in Cologne; 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 (per semester) 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 requirement, (W) Writing 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.

Bentzel, K. Campbell

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.

Muston

202. Intermediate German II. Stories of Twentieth Century Germany. (H)
Students explore twentieth-century German history and culture through youth novels and films set before and after the Second World War. The course places special emphasis on developing students’ reading skills, oral and written communication skills, and cultural literacy. Continued practice of linguistic structures and systematic vocabulary building are also central to the course. Prerequisite: GER 201 or placement. Offered every Spring.

Staff

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. Offered every Fall.

Bentzel

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. Offered every Spring.

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.

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.

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.

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.

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.

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.

K. Campbell

SENIOR CAPSTONE COURSE IN ENGLISH TRANSLATION

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 on this work at the end of the semester. Prerequisite: Senior standing, or LIT 201. Offered every Fall.

K. Campbell

470–479 G/E. Topics Seminar in German Literature and Thought.
A special comparative problem that spans the centuries, genres or cultures. Offered upon demand.

490. Independent Study.
Independent study directed by the German staff. Permission of the chairperson.

OFF-CAMPUS STUDY COURSES OFFERED THROUGH THE PENNSYLVANIA COLLEGES IN COLOGNE PROGRAM, GERMANY

PCIC (Pennsylvania Colleges in Cologne) has been operating a study abroad program for American university students every fall semester since 1988. Students from three renowned colleges in Pennsylvania (Franklin & Marshall, Allegheny, and Washington & Jefferson Colleges) take part in a unique learning experience. In addition to the intensive academic program with a core component of German language study, students benefit from first-hand experience with Germans and German life. In the PCIC program, Cologne is the classroom and learning happens everywhere: on excursions, at cultural events, and above all by living together with a host family.

GST 251. The Political System in Germany. (S)
This course is an introduction to the political system of the Federal Republic of Germany. It focuses on current politics and polity in Germany, taking into account the role of history and the political developments of the Federal Republic since its foundation in 1949. The course addresses the functions and processes of German government institutions, German parties and elections, the cultural foundations of German politics, and the latest trends in major policy fields. A recurring theme is a comparison of actors, structures, processes, and policies in Germany with those in the United States.

GST 252. Modern Germany. (S)
This course examines Germany’s tumultuous history from the 19th century through the end of the end of the Cold War. During this time, Germany evolved from a unified authoritarian monarchy into a fragile democracy and then into a murderous dictatorship. After the Second World War, West Germany succeeded in establishing a stable and economically prosperous democracy, while East Germany experienced Soviet-style socialism. Today, Germany is reunited and widely considered both a strong proponent of the European political and economic union and a strong ally to the United States. By the end of this course, students will gain an understanding of how a century that began with such optimism about Germany’s place in the world could end with a reunified nation still struggling to come to terms with its past.
GOVERNMENT

Professor Jennifer D. Kibbe, Chair

Dean C. Hammer
John W. Wetzel Professor of Classics and Professor of Government
Joseph J. Karlesky
The Hon. and Mrs. John C. Kunkel Professor of Government
Stephen K. Medvic
The Hon. and Mrs. John C. Kunkel Professor of Government
D. Grier Stephenson Jr.
Charles A. Dana Professor of Government
Kerry H. Whiteside
Clair R. McCollough Professor of Government
Susan Dicklitch
Professor of Government (on leave 2015–2016)
Matthew M. Schousen
Professor of Government
Robert J. Friedrich
Associate Professor of Government
Jennifer D. Kibbe
Associate Professor of Government
Stephanie L. McNulty
Associate Professor of Government
David Ciuk
Assistant Professor of Government
Linda Hasunuma
Assistant Professor of Government
Nina A. Kollars
Assistant Professor of Government
Herschel S. Nachlis
Assistant Professor of Government (on leave 2015–2016)
Charles A. Phillips
Visiting Assistant Professor of Government and Philosophy
Benjamin Melusky
Visiting Instructor of Government
Lawrence F. Stengel
Senior Adjunct Assistant Professor of Government
James G. Shultz
Senior Adjunct Instructor of Government
Berwood A. Yost
Adjunct Instructor of Government

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 service learning.

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.

A major in Government consists of ten courses in Government and a three course Cognate. 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 (taken at Franklin & Marshall).
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 be 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, MAT 116, MAT 216, 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.

100. American Government. (S)
Political power within the framework of American national government. Current governmental and political problems are explored. *Ciuk, Friedrich, Medvic, Stephenson*

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.

Hasunuma, McNulty

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. Kibble, Kollars

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. Melusky

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

211. Citizen Politics. (S)
How and why ordinary citizens participate, individually and collectively, in American politics and
what difference it makes. Topics include elections and voting, political parties and interest groups,
unconventional participation, the institutional and legal context for participation and the impact of
participation on public policy. Special attention to contemporary political issues and controversies, such as
the decline of civic culture and racially based redistricting. 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.
Friedrich

226. Gender and Politics from a Global Perspective. (S)
This course explores how gender impacts politics and how the political system impacts women’s equality
in the United States and around the world. The first part of the course evaluates theories and evidence from
the political science scholarship about the “gender gap” in women’s political participation, preferences,
leadership, and policy influence. The second part of the course focuses on women’s access to health
care, education, employment, and legal/political rights in the developing world. We also consider how
globalization, migration, religion, and conflict/wars impact the status of women around the world. Same as
WGS 226. Shultz

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. Hasunuma

Hammer
242. Modern Political Theory. (H)
Examines the political theories of Hobbes, Locke, Rousseau, Marx and one contemporary thinker, with emphasis on alternative views of the social contract, liberalism and radicalism.  
White side

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 first semester of junior year. Prerequisite: GOV 100, 120, or 130.  
Ciuk, Friedrich, Medvic, Yost

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.  
Melusky

309. The 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. 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.  
Stephenson

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.  
Stephenson

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.  
Stengel

318. Media and Public Opinion. (S)
Examines the interrelationship between the mass media (including print, broadcast and new media), public opinion and American politics, giving particular attention to ways in which the media and public opinion both help influence and are influenced by the political process. Prerequisite: GOV 100. Same as TDF 318.  
Medvic

320. Environmental Law.
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 ENV 320.  
Staff
324. Asian Politics. (NW) (S)
This course introduces students to the domestic and international politics of China, Japan, and the two Koreas. 

Hasunuma

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, with an investigation into foreign aid, corruption, and NEPAD. Prerequisite: GOV 224 or permission of the instructor. Same as AFS 326. Dicklitch

327. Latin American Politics. (NW) (S)
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

330. 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. Prerequisite: GOV 130. Kibbe

334. 21st Century Security. (S)
The transition from the 20th to the 21st century was accompanied by a dramatic shift in strategic priorities and perceived threats to nations. Beginning at the end of the Cold War the world’s unipolar military power stood prepared to reap the benefits of a hegemonic peace. Instead, a series of violent events, technological innovations, emergent environmental crises, and political upheavals put global leaders on their heels. In the process, analysts became increasingly aware that the 20th century definitions of state security (a healthy military force that can protect a country from invasion) appeared insufficient for dealing with drones, cyberspace, terrorism, wikileaks, and global climate change. This course asks students to begin developing that new definition through discussion, writing, and exploration of resources. Prerequisite: GOV 130. Kollars

374. Global Environmental Politics. (S)
This course examines principles and instruments of Global Environmental Politics (GEP), beginning with the nature and sources of international environmental law 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. Principles and objectives underpinning GEP to be examined include sustainable development, the precautionary principle, the polluter pays principle, and the principle of common but differentiated responsibilities. Environmental regimes and conventions 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: ENV 216 or GOV 100. Same as ENV 314. De Santo

388. Public Health Research: Pregnancy Outcomes in American Women. (S)
This interdisciplinary seminar will explore women’s health and pregnancy outcomes through the lenses
of both science and social analysis. In addition to reading and discussion on influences on pregnancy outcomes, students will examine results of surveys of Amish women in Lancaster County, African American and Hispanic women in Lancaster City and women of child-bearing age in central Pa. This course is supported by funds from the PA Dept. of Health. Prerequisite: any course that includes methods of data analysis or permission. Same as PUB/STS/WGS 388.

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.

410. Health Policy. (S)
This seminar focuses on the health care system in the United States with attention to political structures shaping public policy on health and to substantive areas of health policy debate. The seminar explores the role of the presidency and the executive branch, Congress, and the states in the evolution of health policy. Biotechnology, health care disparities, and political struggles over providing health care are among the substantive areas the seminar examines from the perspectives of cost, access, and quality. Permission of the instructor required. Prerequisite: GOV 100.

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. Prerequisite: GOV 100.

412. Political Parties. (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, various models of parties and party systems, and the history of parties in the United States. The majority of the semester will be spent examining three aspects of parties that scholars have generally used to describe what political parties are and what they do—the party-as-organization, the party-in-the-electorate, and the party-in-government. After completing the course, students should have a better understanding, from both a normative and empirical perspective, of the role played by parties in the American political system.

416. Ideology in Contemporary American Politics. (S)
Liberal, conservative, libertarian, neoconservative, populist, progressive, green, Tea Party—these and many other ideological labels are tossed around with abandon in contemporary American politics. But what is a political ideology and what are all these various factions actually arguing about? Why do some people hold a particular ideology and others a different one—or no ideology at all? How does ideology affect the way people—both ordinary citizens and elites such as members of Congress, presidents, and Supreme Court justices—think and act politically? How do the political parties differ in their ideologies? Is the United States becoming more polarized ideologically? These questions will be explored through the study of contemporary American political discourse, opinion surveys, and campaigns and elections. Prerequisite: GOV 100 and GOV 250.

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. Prerequisites: GOV 330 or GOV331. Permission of the instructor required.

**424. Post-War Japanese Politics and Society.** (NW) (S)
In this seminar, we analyze the development of Japan’s political and economic systems from the Occupation era to the present day. Topics include: changes to the party system, campaigns, and elections; the aging crisis; gender; citizenship and immigration policies; recent reforms to the business sector and legal system; foreign relations; and the crisis of 3/11. Students take turns leading discussion each week, present their research on panels at the end of the semester, and maintain a writing portfolio. 

**Hasunuma**

**427. 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**

**490. Independent Study.**
Independent study directed by the Government staff. Permission of chair.

**300 LEVEL TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016**

**Fall 2015**
378. Democratic Political Theory.
379. From Perestroika to Putin.

**SENIOR SEMINARS EXPECTED TO BE OFFERED IN 2015–2016**

**Fall 2015**
471. Insurgencies.

**Spring 2016**
411. Presidential Character.
475. Democracy and Deliberation.
HEBREW

Professor L. Scott Lerner, Chair

Marco Di Giulio  Assistant Professor of Hebrew Language and Literature
Maya Greenshpan Hebrew Language Teaching Assistant

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.

An Area Studies minor in Hebrew Language and Literature consists of six courses, including up to four courses in Hebrew language, and at least two 300-level courses in Hebrew literature or 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; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement.

COURSES IN MODERN HEBREW LANGUAGE

101, 102. Elementary Modern Hebrew I and II. (NW, for students entering Fall 2013 and earlier)
Introduction to the basic structures and vocabulary of Modern Hebrew, oral and written. 101 is offered every Fall, 102 is offered every Spring.

201, 202. Intermediate Modern Hebrew I and II. (LS) (NW) (H for 202)
Further development of oral, reading and writing skills in Modern Hebrew. 201 is offered every Fall, 202 is offered every Spring.

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 Liebericht, 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.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016

Modern Hebrew Literature.

Directed readings at more advanced levels may be arranged with Hebrew Language faculty.
HISTORY

Professor Van Gosse, Chair

Professor Richard Reitan, Associate Chair

Benjamin McRee
Maria D. Mitchell
Abby M. Schrader
Louise L. Stevenson
Douglas A. Anthony
Van Gosse
Matthew Hoffman
Ted Pearson
Richard Reitan
Laura Shelton
Hoda A. Yousef
Dylan Baun

Professor of History (on leave Spring 2016)
Professor of History
Professor of History
Professor of History and American Studies (on leave Fall 2015)
Associate Professor of History
Associate Professor of History
Associate Professor of Judaic Studies and History (on leave Fall 2015)
Associate Professor of History
Associate Professor of History (on leave Fall 2015)
Assistant Professor of History (on leave 2015–2016)
Visiting Assistant Professor of History

A major in History provides students with a broad understanding of long-term historical trends in introductory-level courses; an in-depth knowledge of regions, countries, and issues at the 300-level; an appreciation for historiography and the practices of history in the methodology course; and guidance in integrating these components of the major with research, presentation, and writing skills at the 400-level. 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 360 (History Workshop: Methods and Practice), which should be taken no earlier than spring of the sophomore year and no later than fall of the senior year; two seminars or one seminar and one Independent Study Course (HIS 490); and at least three additional courses at the 300-level, only one of which may be a Directed Readings Course (HIS 390). A student may count toward the major one course taken 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 360 (History Workshop: Methods and Practice), which should be taken no earlier than spring of the sophomore year and no later than fall of the senior year; 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 360 (History Workshop: Methods and Practice), which should be taken no earlier than spring of the sophomore year and no later than fall of the senior year; two seminars or one seminar and one Independent Study Course (HIS 490); and at least two additional courses at the 300-level, 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 are strongly urged to take the History Workshop (HIS 360) 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; Advanced Studies in England; and F&M in Paris. 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; (W) Writing requirement; (WH) departmental World History 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, Thorn

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

215. 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

217. 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

221. Revolution and Reform: Europe in the 19th Century. (S) (E)
Covers the development of centralized states, the Enlightenment, the French and industrial revolutions, nationalism, Liberalism, socialism, the emergence of gendered spheres, modern racism, and the dynamics of imperial conquest. Mitchell, Schrader

222. Revolution, Dictatorship, and Death: Europe in the 20th Century. (S) (E)
Covers gender roles across the century, communism, fascism, the two world wars, the Holocaust, decolonization, the Cold War, 1968, European unity, and the revolutions of 1989. Mitchell

225. Imperial Russian History. (S) (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

226. 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

227. History of the Islamic World to the 18th Century. (NW) (S) (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. Yousef, Baun

228. The Making of the Modern Middle East. (NW) (S) (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. Yousef, Baun
231. 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

232. 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

236. U.S. Empire. (S) (U)
Historical introduction to major themes and topics in United States international engagement from mid-19th century through the mid-20th century. Topics may include: North American empire, imperial ambitions in the Caribbean and Philippines, Wilsonianism, east Asian confrontations, international institutions, and ideological confrontations. Same as AMS 236. Stevenson

237. 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

238. 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

241. History of North and West Africa. (NW) (S) (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 241. Anthony

242. History of East and Southern Africa. (NW) (S) (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 242. Anthony

249. Africa and the Black World: Concepts and Context. (NW) (S)
Explores the emergency 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 249. Anthony
251. Premodern East Asian History. (NW) (S) (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

252. Modern East Asian History. (NW) (S) (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

253. 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 253.  

Hoffman

254. 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 254.  

Hoffman

300-LEVEL COURSES
Courses in this group are open to all students, but intended more for those who have taken a previous History course.

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

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 reformation 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

317. U.S.-Mexico Borderlands. (NW) (S) (WH)
This upper-division 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 317.  
Shelton

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 historian have approached the study of the environment. Same as ENV 318.  
Shelton

320. Women in American Society and Politics since 1890. (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.  
Stevenson

325. Jewish Culture in Eastern Europe. (S) (E)
Focuses on the Jews of Eastern Europe from the end of the Middle Ages through the Holocaust; looks at variety of cultural forms and expressions they have created. From tradition to modernity, Shtetl to Socialism, religious scholarship to secular literature, examines the rich cultural life of East European Jews in all its myriad manifestations. Specific emphasis on transformations in the culture of Yiddish-speaking Jews in Poland and Russia. Same as JST 325.  
Hoffman

326. Jewish Views of Jesus. (S) (E)
explores the ways in which Jews have related to and represented the figure of Jesus, using Jewish texts from the birth of Christianity to the present day. Beginning with the Talmud, examines numerous Jewish sources (including literature and art) and looks at a number of historical periods and the different religious, social, and intellectual developments that influenced Jewish perceptions and portrayals of Jesus. Same as JST/RST 326.  
Hoffman

327. Cinema and the American Jewish Experience. (S) (U)
Explores representations of American Jewish life, culture, and religion in cinema. Using a historical perspective, it analyzes the different ways in which Jewish identity and culture have been represented in American film. Looks at history of Jews in the United States, Jewish involvement in the film industry, and anti-Semitism. Films are viewed weekly, including feature films and several documentaries, in class and in an extra viewing session. Same as AMS/JST/RST 327.  
Hoffman

330. Ethnic America. (S)
Explores the meaning and significance of ethnicity in America by examining the historical and contemporary experiences of immigrants and their children. The heart of the course is class discussion
of readings, films, and primary documents. We will augment these with group work, lectures, and short documentary and feature film clips. In addition to completing weekly short reading response papers and submitting a take-home final examination, students will submit a “film fest” essay on three feature films that address ethnicity and a “lecture proposal” project in which they will propose a new topic to be included in a future offering of “Ethnic America.” Same as AMS 330.

333. 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 333.

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.

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.

345. America Since 1945. (S) (U)
Consideration of questions: How did the long Cold War shape American culture? How do we define “the Sixties”? What are the effects of the continuing revolution in consumption? Why have race and ethnicity continued to dominate political discourse? Was there a “sexual revolution”? Have the past 40 years constituted a “post-Vietnam” America? Has there been a conservative realignment? What happened to the middle class and who is working class now? Course presumes familiarity with the basic history of the U.S. during this period.

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.

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, re-direct, or internalize these representations? Finally, what significance do these questions have for us in the present?

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.

354. 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.

355. 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.

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, and queer 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.

360. 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 no earlier than spring of the sophomore year and no later than fall of the senior year.

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 383.

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.

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

HISTORY SEMINARS

HIS 360 is a prerequisite or corequisite for seminar enrollment. 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.”

403. Selected Studies in Modern European History. (S) (E)
Readings and research in modern 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.”

405. Selected Studies in Jewish History. (S) (E)
Readings and research on various topics, periods, and problems of Jewish history. Seminar topics include “Approaches to Jewish History.”

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.”

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.

409, 410, 411. Selected Studies in the Social and Political History of North America. (S) (U)

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) (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) (WH)
Readings and research in selected topics of the social, political, and cultural history of East Asia. Seminar topics include “Women and Gender in Chinese 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 “Knowledge and Power in Muslim Societies” and “Sexuality and the Middle East.”  
Yousef

490. Independent Study.
Independent study directed by members of the History staff. Permission of chairperson required.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
Being Young in the Modern Middle East.
Global Cold War.
From Perestroika to Putin.
Sectarianism and Violence in Middle Eastern and Global History.

INTERNATIONAL STUDIES
Professor Douglas A. Anthony, Chair

MEMBERS OF THE INTERNATIONAL STUDIES PROGRAM COMMITTEE
Richard K. Kent  Professor of Art History
Sylvia Alajaji  Associate Professor of Music
Douglas Anthony  Associate Professor of History
Zeshan Ismat  Associate Professor of Geosciences
Konstantinos Kourelis  Assistant Professor of Art History
Elizabeth De Santo  Assistant Professor of Environmental Studies
Amy Singer  Assistant Professor of Sociology
Kathrin Theumer  Assistant Professor of Spanish

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 an international perspective and immerse themselves in the language and culture of a non-English-speaking country. The program prepares students for future study, careers and life in the increasingly unbordered community of the 21st century. 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.
A minor in International Studies requires that a student: (1) take IST 200, typically in 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; and (5) complete IST 489. In addition, while not required, an international internship is highly recommended.

A joint major in International Studies requires that a student: (1) 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; and (2) achieve a level of proficiency in a foreign language.

A minor in Area Studies requires a student to take six courses on a given geographical area, of which at least two must be at the 300 level or above, selected in consultation with a faculty member specializing in that area. The Director 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 Director 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 could 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 Italy, Spain, Germany, China, Switzerland, Argentina, Dominican Republic, Bolivia, Uganda and France 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.

200. Introduction to International Studies. (S) (NW)
Interdisciplinary course required for students with an International Studies minor or concentration. Through coordinated lectures by a team of 5–6 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 Spring.

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

260. Gender and Global Childhoods. (NW) (S)
This course introduces students to gender and childhood studies. We examine the historical and theoretical foundations to the construction of childhood in a comparative and international perspective. We will focus on how gender, time, and place, shape understandings of childhood. Topics covered include child labor, militarization, children’s rights, citizenship and displacement, and the burgeoning field of girlhood studies.
Same as WGS 260.

Luttrell-Rowland

327. Latin American Politics. (NW) (S)
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

350. International Business. (S)
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.

Staff

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 2014 States, Non-States & the World. 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. Offered every Fall.

Anthony

TRAVEL COURSES

210. TRAVEL: Japanese Studies at Tohoku Gakuin University.
(Summer Travel Course) (NW)
Franklin & Marshall College offers a May–June Program that includes pre-departure sessions on the Franklin & Marshall campus; three weeks of classes at Tohoku Gakuin University, during which students live with Japanese families; field trips.

Staff
ITALIAN

Professor Giovanna Faleschini Lerner, Chair

L. Scott Lerner
Arthur and Katherine Shadek Professor of Humanities and French and Italian

Giovanna Faleschini Lerner
Associate Professor of Italian

Marco Di Giulio
Assistant Professor of Hebrew Language and Literature

Chelsea Pomponio
Visiting Instructor of Italian

Daniela Ciceri
Italian Language Teaching Fellow

The study of Italian at Franklin & Marshall is rooted in a modern liberal arts education, bringing together humanistic tradition and global society. The minor in Italian is designed to give students a solid knowledge of the language and a critical understanding of the literary, cinematic and artistic traditions of Italy. The courses offered within the program provide opportunities for students to refine the critical thinking, reading and writing skills that will serve them throughout their professional lives. Small classes allow students to work closely with faculty in an informal atmosphere that encourages individual learning. Each course includes additional individual and small-group sessions with an Italian teaching assistant who is a native speaker of the language. Courses are conducted in Italian, and students are given opportunities to practice the language outside of class.

Graduates of the Department of Italian are well prepared to pursue careers in a variety of fields. The rigorous study of Italian language structure helps develop the analytical and critical thinking skills necessary to succeed in many different professions. Courses in literature and civilization foster skills such as logical thinking, coherent writing and persuasive argumentation, while the ability to understand and communicate in another language requires advanced communication skills that are easily transferable to fulfilling careers—in international affairs, museums and auction houses, teaching and research and art. Students frequently combine Italian with another concentration in medicine and the healing arts, business or another field.

A minor in Italian consists of six courses beyond ITA101. Students must take ITA 310 and ITA 360. They may take one additional elective at the 200 or above level, which can be chosen in consultation with the chair of the department.

Students must complete all coursework in Italian. Students may include two courses from study abroad in the minor with the approval of the chair.

Franklin & Marshall has its own summer study abroad program in Tuscany, offering courses in Italian language and culture, advanced courses in literature, and independent studies. The department offers this program most summers (see SUMMER TRAVEL COURSES for information about the coursework). Students of Italian have studied abroad in the following programs in recent years: F&M Summer Program in Vicchio; IES in Rome or Milan; Arcadia University in Perugia; Boston University in Padova; Middlebury, NYU, Sarah Lawrence, or Syracuse in Florence. 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; (NW) Non-Western Cultures requirement.

All courses are taught in Italian unless indicated otherwise.

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, Pomponio

102. Elementary Italian II.
Continuation of ITA 110. Prerequisite: ITA 110 or placement. Offered every Spring.

S. Lerner, Pomponio

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 111 or placement. Offered every Fall.

G. Lerner, Pomponio

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.

Bertini-Jones, G. Lerner

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.

Pomponio

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 placement.

G. Lerner, Pomponio

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 TDF 356.

G. Lerner

360. Italian Literary and Cultural Studies I: From the Risorgimento to the Present. (H)
Provides a broad overview of modern Italian culture and history and includes studies in the 20th-century
short story (Verga, Pirandello, Calvino, Levi) and cinema (Visconti, Benigni, Giordana). Advanced study of spoken and written Italian and selected topics in grammar. Prerequisite: ITA 310 or placement.  

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 placement.  

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 TDF366.  

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.  

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.  

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 360.  

490. Independent Study.  

SUMMER TRAVEL COURSES  
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.  

ITA 272-273. 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: Italian 102 or 202. Taught in Italian.

**ITA 274-374. 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: Italian 102 or 202. Taught in Italian.

**TOPICS COURSE EXPECTED TO BE OFFERED IN 2015 - 2016**

**275. Intensive Intermediate Italian.**

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**JAPANESE LANGUAGE**

*Ken-Ichi Miura, Director*

*Professor Carmen Tisnado, Provost Office Designee for Japanese*

*Kumi Omoto*  
Assistant Director of the Japanese Language Program

*Naomi Asakura*  
Japanese Language Teaching Assistant

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 our summer study abroad program at Tohoku Gakuin University, Sendai, Japan, and semester abroad programs at such universities as Nanzan University, Kanda University of International Studies and Kyoto Consortium for Japanese Studies.

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.
101. Elementary Japanese I. (NW, for students entering in Fall 2013 and earlier)
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. (NW, for students entering in Fall 2013 and earlier)
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. Offered every Spring.

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.

Omoto

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.

Omoto

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.

Miura

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.

Omoto

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.

Omoto

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.

Miura

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.

Staff

Tutorials at more advanced levels may be arranged with the Director of the Japanese language program.

TRAVEL COURSE

210. TRAVEL: Japanese Studies at Tohoku Gakuin University.
(Summer Travel Course) (NW)
Franklin & Marshall College offers a May–June Program that includes pre-departure sessions on the Franklin & Marshall campus; three weeks of classes at Tohoku Gakuin University, during which students live with Japanese families; field trips.

JUDAIC STUDIES

Professor L. Scott Lerner, Chair (Fall 2015)
Professor Matthew Hoffman, Chair (Spring 2016)

Annette Aronowicz The Robert F. and Patricia G. Ross Weis Professor of Judaic Studies and Professor of Religious Studies
Matthew Hoffman Associate Professor of Judaic Studies and History (on leave Fall 2015)
Marco Di Giulio Assistant Professor of Hebrew Language and Literature

MEMBERS OF THE JUDAIC STUDIES PROGRAM COMMITTEE

Annette Aronowicz The Robert F. and Patricia G. Ross Weis Professor of Judaic Studies and Professor of Religious Studies
L. Scott Lerner Arthur and Katherine Shadek Professor of Humanities and French and Italian
Stephen Cooper Professor of Religious Studies
Matthew Hoffman Associate Professor of Judaic Studies and History (on leave Fall 2015)
Jeffrey Podosohen Associate Professor of Marketing
Marco Di Giulio Assistant Professor of Hebrew Language and Literature
Ryan Dulkin Visiting Assistant Professor of Judaic Studies

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
minor 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.

A minor in Judaic Studies consists of six courses: JST 112; one of the following courses: JST 252, 254; one of the following courses: JST 212, 253; three electives, two of which can be Hebrew language and at least one of which must be an upper-division seminar or independent study. At least one course (excluding JST 112) must be taught by HIS faculty; at least one course (excluding JST 112) must be taught by RST faculty. 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.

Minors in the Judaic Studies Program have studied abroad in the following programs in recent years: Hebrew University; Tel Aviv University; CET Academic Programs Jewish Studies in Prague; Crossworld of Three Cultures in Avila, Spain; CIEE Program in Czech Republic. 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.

COURSES IN MODERN HEBREW LANGUAGE

101, 102. Elementary Modern Hebrew I and II. (NW, for students entering Fall 2013 and earlier)
Introduction to the basic structures and vocabulary of Modern Hebrew, oral and written. 101 is offered every Fall, 102 is offered every Spring.  
Di Giulio

201, 202. Intermediate Modern Hebrew I and II. (LS) (NW) (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

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, chosen-ness, prophecy, exile, redemption, Jewish law) and the continuing debates around them. Same as RST 112.

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.

233. Religion in 20th-Century Jewish Literature. (H)
Readings of well-known 20th-century Jewish short story writers, novelists and poets. In an era in which many people, including many of the authors, thought they were moving away from religion, religious questions and imagery remain nonetheless prevalent. What are these questions? How does the fiction reflect and respond to the upheavals of the time? Same as RST 233.

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.

253. 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 253.

254. 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 254.

325. Jewish Culture in Eastern Europe. (S)
Course focuses on the Jews of Eastern Europe from the end of the Middle Ages through the present; looks at variety of cultural forms and expressions they have created. From tradition to modernity, Shtetl to Socialism, religious scholarship to secular literature, examines the rich cultural life of East European Jews in all its myriad manifestations. Specific emphasis on transformations in the culture of Yiddish-speaking Jews in Poland and Russia. Same as HIS/RST 325.

326. Jewish Views of Jesus. (S)
Course explores the ways in which Jews have related to and represented the figure of Jesus, using Jewish texts from the birth of Christianity to the present day. Beginning with the Talmud, examines numerous Jewish sources (including literature and art) and looks at a number of historical periods and the different religious, social, and intellectual developments that influenced Jewish perceptions and portrayals of Jesus. Same as HIS/RST 326.
327. Cinema and the American Jewish Experience. (S)
Course explores representations of American Jewish life in cinema and popular culture. Using a historical perspective, it analyzes the different ways in which Jewish identity and culture have been represented in American film. Looks at history of Jews in the US, Jewish involvement in the film industry, and anti-Semitism. Films viewed weekly, including feature films and several documentaries, in class and in an extra viewing session. Same as AMS/HIS/RST 327. Hoffman

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

359. Modern Religious Thinkers: Pascal, Kierkegaard and Rosenzweig. (H)
Focuses on three thinkers who rethought the meaning of their respective religious traditions—Catholicism, Protestantism, Judaism—in ways that were to influence not only their respective community but also how we think about religion in general. All three challenged what we mean by religion. Same as RST 359. Aronowicz

405. Selected Studies in Jewish History. (S)
Readings and research on various topics, periods, and problems of Jewish history. Seminar topics include “Approaches to Jewish History” and “Jewish Political Movements.” Same as HIS 405. Hoffman

445. Hannah Arendt: Terror, Identity, Politics. (S)
Seminar exploring 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. Same as GOV 445. Hammer

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 2015–2016
Modern Hebrew Literature.
Tales of the Sages.
Linguistics

Professor Beatriz Caamaño Alegre, Chair

Kimberly M. Armstrong  Professor of Spanish
Jessica Cox  Assistant Professor of Spanish
Ashley LaBoda  Visiting Assistant Professor of Spanish

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.

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.  

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.  

Mathematics

Professor Michael P. McCooey, Chair

Arnold D. Feldman  Carmie L. and Beatrice J. Creitz Professor of Mathematics
Annalisa Crannell  Professor of Mathematics (on leave 2015–2016)
Robert Gethner  Professor of Mathematics
Iwan Praton  Professor of Mathematics (on leave 2015–2016)
Wendell Ressler  Professor of Mathematics
Jing Hu  Associate Professor of Computer Science
Alan Levine  Associate Professor of Mathematics
Michael P. McCooey  Associate Professor of Mathematics
Barbara E. Nimershiem  Associate Professor of Mathematics
Christina Weaver  Associate Professor of Mathematics
Danel Draguljić  Assistant Professor of Mathematics (on leave fall 2015)
Erik Talvitie  Assistant Professor of Computer Science
Charles E. Buehrle  Visiting Assistant Professor of Mathematics
Austin J. Daughton  Visiting Assistant Professor of Mathematics
Corey M. Manack  Visiting Assistant Professor of Mathematics
Ehssan Khanmohammadi  Visiting Instructor of Mathematics
Anthony J. Weaver Jr.  Visiting Instructor of Computer Science
Wendy M. Fenwick  Senior Adjunct Instructor of Mathematics
Landon W. Rabern  Adjunct Assistant Professor of Mathematics  
Amy E. Antonucci  Adjunct Instructor of Computer Science (Spring only)  
Michael Melusky  Adjunct Instructor of Computer Science  

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 PHY 226, ECO 310, PHI 244, CHM 321, PSY 360, 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 of French, German and 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 216, 316, 323 and 338 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 323, 329, 337, 338, 339 and 442. Knowledge of probability, statistics and computer science is essential in many areas of applied mathematics.

A minor in Mathematics for the classes of 2016 - 2017 may be completed in one of two tracks. The “theoretical math track” consists of MAT 109, 110, 111, 211, and two courses chosen from MAT 325, 330, 331, 442, 445, 446 or other theoretical courses as designated by the department.
The “applied math track” consists of MAT 109, 110, 111, and three courses from MAT 216, 229, 316, 323, 329, 337, 338, 339, or other applied modelling courses as designated by the department.

A minor in Mathematics for the classes of 2018 - 2019 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 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.

Majors in the Department of Mathematics 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; American University in Cairo, Egypt. 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.

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.  

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.  

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.  

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.  

Probability, random variables, data analysis, estimation techniques, hypothesis tests, correlation and regression, analysis of variance, contingency tables, exploratory techniques. Not for credit after MAT 216. Prerequisite: MAT 109. Not for credit toward the mathematics major or minor.  

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.
216. Probability and Statistics I.
Draguljić

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.  
Staff

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

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.
Staff

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.  
Staff

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.  
Ressler

329. Fourier Series.
Fourier series, orthogonal series, boundary value problems, applications. Prerequisite: MAT 229.  
Staff

Algebraic systems and their morphisms including sets, functions, groups, homomorphisms, factor groups, rings and fields. Prerequisite: MAT 211.  
Daughton

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.  
Staff
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.  

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. C. Weaver

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. C. Weaver

370–379. Selected Topics.
Advanced Algebra, Advanced Multivariable Calculus, Measure Theory, Algebraic Topology, History and Development of Calculus.

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.

442. Complex Analysis.
Functions of one complex variable: analytic functions; mappings; integrals; power series; residues; conformal mappings. Prerequisite: MAT 331. Staff

Selections from: advanced synthetic geometry; groups of transformations; affine geometry; metric geometry; projective geometry; inversive geometry. Prerequisite: MAT 330. Staff

446. Topology.
An introduction to topological spaces and continuous functions. Prerequisite: MAT 330. Corequisite: MAT 331. Nimmershiem

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 2015 – 2016

Introduction to Statistical Modeling.
Advanced Mathematical Modeling.

MUSIC

Professor Sylvia Alajaji, Chair

John Carbon Richard S. and Ann B. Barshinger Professor of Music
Matthew Butterfield Associate Professor of Music
Sylvia Alajaji Associate Professor of Music
Karen Leistra-Jones Assistant Professor of Music
Christopher Lynch Visiting Assistant Professor of Music
Gwynne Geyer Artist in Residence, Voice
Doris Hall-Gulati Artist in Residence, Clarinet
Brian Norcross Senior Director of Instrumental Music and Conducting Studies
William Wright Choral Conductor
Michael Jamanis Senior Adjunct Assistant Professor of Music, Violin
Jerry Laboranti Jr. Senior Adjunct Assistant Professor of Music, Saxophone,
Jazz Ensemble Conductor
Mark Yingling Senior Adjunct Assistant Professor of Music, Percussion
Elizabeth Keller Senior Adjunct Instructor of Music, Piano
Kenneth Laudermilch Adjunct Professor of Music, Trumpet
Rusty Banks Adjunct Assistant Professor of Music, Guitar
Jessica Beebe Adjunct Assistant Professor of Music, Voice
Matthew Brown Adjunct Assistant Professor of Music, Low Brass
Kimberly Bucher Adjunct Assistant Professor of Music, Bassoon
Jarrett Cherner Adjunct Assistant Professor of Music, Jazz Piano/Improv
Devin Howell Adjunct Assistant Professor of Music, Double Bass
Sara Male Adjunct Assistant Professor of Music, Violoncello
Elizabeth Pfaffle Adjunct Assistant Professor of Music, Horn
Kimberly Trolle Adjunct Assistant Professor of Music, Flute
Tammi Hessen Adjunct Instructor of Music, African Drums,
African Drum Ensemble Conductor
Todd Sullivan Adjunct Instructor of Music, Viola

The study of music can be divided into four interrelated approaches: the creation of music (composition), the re-creation of music (performance), understanding music’s systems (music theory), and understanding music’s stylistic and societal contexts (music history and culture). Each of these areas draws on techniques and perspectives that are a focus in other approaches to music. Musical composition, for example, is not an entirely intuitive process, but makes use of knowledge gained through the study of music theory. Similarly, performance is most profound when it is informed by an understanding of the context for a work’s style, and the history of musical style is myopic without taking into account the culture in which a style developed.
The Music Department offers courses in all of these areas that are open to students with no formal background in music. All of its ensembles are open to the entire student body, and some private lessons are offered at the beginning level; there are also courses in music theory and in music history and culture that are specifically oriented to students with little or no previous background in music. At the same time, there are many offerings for students who have already made music an important element of their lives.

Many students choose to complete a major or minor in music whether or not they intend to undertake a musical career. Students going to medical school, for example, have often chosen to major in music, knowing that they want a lifelong involvement in music as an avocation. On the other hand, students who have chosen to go to graduate school in music or enter the music industry have found that their preparation through the music major program had prepared them well. Two music minor programs also offer an organization to the study of music that goes beyond a single course or participation in a single ensemble.

A major in Music consists of 11 course credits:

- Four credits in music theory (MUS 222, 223, 224 [half-credit], 225 [half-credit], 323);
- Four credits in music history and culture (MUS 229, 230, 231, and 430);
- Two electives selected from MUS 105, 106, 240, or any course above the 100-level chosen from the theory and/or music history and culture areas;
- Senior Project (MUS 490 Independent Study or MUS 38X-48X Senior Recital).

Students intending to major in music should begin the theory sequence by the beginning of the sophomore year. All students are advised to take MUS 224 with 222 and MUS 225 with 223.

Students majoring in music are expected to participate in one of the College’s choral or instrumental ensembles for at least four semesters.

The writing requirement in the Music major is met by completion of MUS 430.

A general minor in Music consists of six course credits:

- Three in music theory (MUS 222, 223, 224 [half-credit] and 225 [half-credit]; students are advised to take Music 224 with 222 and Music 225 with 223);
- Two in music history and culture (chosen from MUS 229, 230 or 231);
- One elective selected with the approval of the department chair. This elective should be a one-credit course selected from MUS 105, 106, 240, or any course above the 100-level, and may not include studio or ensemble courses.

A performance minor in Music consists of six course credits:

- One and one-half in music theory (MUS 222, 224 [half-credit]; students are advised to take MUS 224 with 222);
- Two in music history and culture (chosen from MUS 229, 230 or 231);
- 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; (W) Writing 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.

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.

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.)

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.

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.*
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. Carbon

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. Carbon

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. Carbon

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). Butterfield, Wright

225. Musicianship 2. (A)
A continuation of Music 224. Additional topics include modulation and score reading. Prerequisite: MUS 224; students are advised to take MUS 223 and MUS 225 concurrently. (one half credit) Butterfield, Wright

226. Popular Musics and Societies. (A) (NW)
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. Lynch
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.  

Lynch

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.  

Lynch

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

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.  

Carbon

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.  

Carbon

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.  

Carbon

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. May be repeated for credit. 

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.

150, 250. The Franklin & Marshall College Chorus.
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.

151, 251. The Franklin & Marshall Chamber Singers.
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.

A full orchestra with approximately 70 performers focusing on masterpieces of the orchestral repertoire. Two rehearsals per week. Prerequisite: Permission of the director.

153, 253, 353, 453. The Symphonic Wind Ensemble.
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. Prerequisite: Permission of the director.

155, 255. The Jazz Ensemble.
Performs music from big band to progressive jazz. Prerequisite: Permission of the director.

156, 256. Chamber Music.
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.

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.
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 and, at the 200 level, may be repeated.

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.

280 A. Flute.
Private lessons and masterclass in Flute. Admission by audition with the instructor. Trolier

280 B. Oboe.
Private lessons and masterclass in Oboe. Admission by audition with the instructor. Staff

280 C. Bassoon.
Private lessons and masterclass in Bassoon. Admission by audition with the instructor. Buchar

280 D. Clarinet.
Private lessons and masterclass in Clarinet. Admission by audition with the instructor. Hall-Gulati

280 E. Saxophone.
Private lessons and masterclass in Saxophone. Admission by audition with the instructor. Laboranti

281 A. Trumpet.
Private lessons and masterclass in Trumpet. Admission by audition with the instructor. Laudermilch

281 B. Horn.
Private lessons and masterclass in Horn. Admission by audition with the instructor. Pfaffle

281 C. Low Brass.
Private lessons and masterclass in Low Brass. Admission by audition with the instructor. Brown

282 A. Violin.
Private lessons and masterclass in Violin. Admission by audition with the instructor. Jamanis

282 B. Viola.
Private lessons and masterclass in Viola. Admission by audition with the instructor. Sullivan

282 C. Cello.
Private lessons and masterclass in ’Cello. Admission by audition with the instructor. Male

282 D. Double Bass.
Private lessons and masterclass in Double Bass. Admission by audition with the instructor. Howell

283 A. Percussion.
Private lessons and masterclass in Percussion. Admission by audition with the instructor. Yingling

283 B. African Drumming.
Private lessons and masterclass in Africa Drumming. Admission by audition with the instructor. Hessen

284 A. Piano.
Private lessons and masterclass in Piano. Admission by audition with the instructor. Keller
284 B. Jazz Piano and Improvisation.
Private lessons and masterclass in Jazz Piano and/or jazz improvisation (any instrument). Admission by audition with the instructor.

Private lessons and masterclass in Voice. Admission by audition with the instructor.

286. Guitar.
Private lessons and masterclass in Guitar. Admission by audition with the instructor.

The Music Department also offers private non-credit lessons for a fee in the above areas through its “Artist/Teacher Program.” 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 2015–2016

Composing.
Jazz Theory & Improvisation.
Advanced Musicianship.
Bebop.

PHILOSOPHY

Professor Lee Franklin, Chair

Glenn Ross  Dr. Elijah E. Kresge Professor of Philosophy
Bennett W. Helm  Dr Elijah E. Kresge Professor of Philosophy
Stephan A. Käufer  Professor of Philosophy
David Merli  Associate Professor of Philosophy
Lee Franklin  Associate Professor of Philosophy
Nicky Kroll  Assistant Professor of Philosophy
Daniel Koltonski  Visiting Assistant Professor of Philosophy
Charles A. Phillips  Visiting Assistant Professor of Government and 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 10 courses. Requirements are:

- PHI 244.
- One core history course from PHI 210, 213, 317.
- One value theory course designated (V).
- One course in metaphysics, epistemology, philosophy of language, or philosophy of mind designated (ME).
- PHI 498.
- Five electives.

At least four courses besides PHI 498 must be numbered 300 or higher. At most, one course 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; and four 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 requirement; (W) Writing requirement.
100. Introduction to Philosophy. (H)
Examination of traditional philosophical problems of method, knowledge, the nature of reality, religious belief and ethics.  

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, affirmative action and the limits of state authority.  

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. History of Ancient Philosophy. (H)
The origin and development of the major themes of Greek philosophy from the Milesians through Aristotle. 

\textit{Same as CLS 210.}  

213. 17th- and 18th-Century Philosophy. (H)
A survey of main currents in Western philosophy from Descartes through Kant, emphasizing how the figures replaced the intellectual foundations of the medieval world with assumptions heavily influenced by the Scientific Revolution.  

Käufer  

217. Existentialism. (H)
Existentialism is a label for a loose grouping of writers who investigate the personal and individual nature of one’s relation to the world and to others. These writers focus especially on questions about truth, commitment, responsibility, freedom and death. This class surveys some main texts in the existentialist tradition, with readings from Kierkegaard, Dostoevsky, Sartre, Camus, Nietzsche and Kundera.  

Käufer  

218. Nietzsche. (H)
In-depth study of Nietzsche’s thought through close reading of his major writings. We will focus on literary and philosophical aspects of his 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)
Ethical issues related to developments in biology and medicine, including population control, genetic engineering and the allocation of medical resources. \textit{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.  

Koltonski  

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.  

Phillips  

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.  

**244. Symbolic Logic. (H)**  
Deductive reasoning, emphasizing primarily symbolic; some discussion of issues in the philosophy of logic.  

**Kroll, Ross**

**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 philosophy or psychology. *Same as SPM 250.*  

**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.

**317. Kant and German Idealism. (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 the key texts of phenomenology and hermeneutics. We will study writings from Heidegger, Gadamer, Habermas and others. 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. Epistemology. (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.  

**Ross**

**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.  

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.  

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.  

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.  

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.  

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.  

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.  

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.  

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: PHI 210. Same as CLS 381.

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.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
Philosophy of Sex.

PHYSICS AND ASTRONOMY

Professor Fronefield Crawford, Chair (Fall 2015)
Professor Andrea Lommen, Chair (Spring 2016)

Gregory S. Adkins  William G. and Elizabeth R. Simeral Professor of Physics
Linda S. Fritz  Professor of Physics
Calvin Stubbins  Professor of Physics (on leave Spring 2016)
Fronefield Crawford III  Associate Professor of Astronomy (on leave Spring 2016)
J. Kenneth Krebs  Associate Professor of Physics
Christie L. Larochelle  Associate Professor of Physics (on leave 2015-2016)
Andrea N. Lommen  Associate Professor of Astronomy and Director of Grundy Observatory (on leave Fall 2015)
Etienne Gagnon  Assistant Professor of Physics
Amy L. Lytle  Assistant Professor of Physics
Zachary Huard  Visiting Assistant Professor of Physics and Astronomy
Kassandra S. Martin-Well  Visiting Assistant Professor of Physics and Astronomy
Ned Dixon  Senior Adjunct 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. Physics is the study of how objects interact, move and change. It covers objects as small as subatomic particles, such as quarks, to as large as the universe. It is inherently an experimental endeavor. The starting and ending points are the data and observations. From experiments and observations we develop fundamental theories that allow us to explain phenomena as commonplace as the flight of a baseball to as exotic as an electron travelling at a speed close to the speed of light.

Courses within the department seek to help students develop a deep understanding of fundamental concepts, problem-solving skills, oral and written communication skills, experimental skills and the ability to work independently as well as with others. The skills learned in studying physics translate well to many fields and careers.
Recent physics majors have gone on to graduate school in physics, astrophysics and engineering, to medical and law school and to careers ranging from teaching to working on Wall Street.

The department 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. Students interested in any of these programs are urged to discuss them with the department chair and the Dual-Degree Engineering adviser early in the planning of their academic programs.

Students considering a major in physics or astrophysics would normally take PHY 111 and MAT 109 or 110 in their first semester and PHY 112 and MAT 110 or 111 in their second semester. However, students have successfully completed these majors following other paths.

To be considered for departmental honors, in addition to meeting the College’s general requirements, a graduating senior must have an excellent record in required courses and complete a two-semester independent study project.

**A major in Physics** consists of 13 courses:

- PHY 111, 112, 223, 226, 333, 334, 344, 364 and either 222 or 224;
- MAT 109, 110, 111 and 229.

**A minor in Physics** 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.

The astrophysics major focuses on physical principles as they are applied to the study of the cosmos. The goal is to promote an understanding of a diverse array of extraterrestrial phenomena in terms of the fundamental physics principles on which this understanding is based. These phenomena range from the very small, such as the reactions between sub-atomic particles that power stars, to the very large, including the expansion and evolution of the universe itself. The astrophysics major emphasizes the same understanding of fundamental physical concepts and skills as the physics major and both majors provide the necessary grounding and background for advanced study in the sciences.

Students interested in a career in astronomy should complete an astrophysics major, or a physics major with a 100-level and at least one 300-level astronomy course as electives.

**A major in Astrophysics** consists of 15 courses:

- PHY 111, 112, 223, 226, 333, 334; and either PHY 222 or 224;
- AST 121, 421; and two of AST 312, 322, 332;
- MAT 109, 110, 111 and 229.

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 requirement; (W) Writing requirement.

PHYSICS

111. Fundamental Physics I. (N)
First semester of a two-semester sequence that investigates the physical laws governing the behavior of particles and systems. PHY 111 always covers Newtonian mechanics. Additional topics, such as special relativity, thermodynamics and wave phenomena are covered at appropriate times during the sequence.
Corequisite: MAT 109.

112. Fundamental Physics II. (N)
Second semester of a two-semester sequence that investigates the physical laws governing the behavior of particles and systems. PHY 112 always covers electromagnetism, optics, atomic and nuclear physics. Additional topics such as special relativity, thermodynamics and wave phenomena are covered at appropriate times during the sequence. Prerequisites: PHY 111. Corequisite: MAT 110.

222. 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. Prerequisites: PHY 112.

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.

224. 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 112 and MAT 111 or permission of the instructor.

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. Prerequisites: PHY 111. Corequisite: MAT 229. Offered every Spring.

237. Physics of the Earth. (N)
Principles of physics as applied to understanding features and properties of the solid earth. Gravity, seismology, geomagnetism and paleomagnetism, heat flow; geophysical surveys. Laboratory. Prerequisite: GEO 110 or 114 or 118. Same as GEO 237.

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 334 or permission of the instructor. Offered every Fall.
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.  

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 333. Corequisite: PHY 334 or permission of the instructor. Offered every Spring.  

364. Experimental 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. Prerequisite: PHY 222. Corequisite: PHY 333. Offered every Fall.  

431. 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. Prerequisite: PHY 226 or permission of the instructor.  

Development of concepts and methods for understanding the behavior of solids. Semiconductor physics. Laboratory projects related to the physics of solids and applications. Prerequisites: PHY 333 or permission of the instructor.  

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.  

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.  

Martin-Wells
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.  
*Lommen*

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. **Archeoastronomy.** (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*

421. **Experimental 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. Prerequisites: AST 312, AST 322 or AST332; Corequisite: PHY 333. Offered every Fall.  
*Gagnon, Crawford*

390, 490. **Independent Study.**
Independent study directed by the Astronomy staff. Permission of the department chair is required.
PSYCHOLOGY

Professor Meredith J. Bashaw, Chair

Professor D. Alfred Owens, Associate Chair

D. Alfred Owens  Charles A. Dana Professor of Psychology
Michael L. Penn  Professor of Psychology
Michael L. Anderson  Associate Professor of Psychology (on leave Spring 2016)
Meredith J. Bashaw  Associate Professor of Psychology
Krista M. Casler  Associate Professor of Psychology
Megan L. Knowles  Associate Professor of Psychology
Lauren H. Howard  Assistant Professor of Psychology
    and Scientific Philosophical Studies of Mind
Ryan T. Lacy  Assistant Professor of Psychology
Elizabeth V. Lonsdorf  Assistant Professor of Psychology (on leave 2015–2016)
Timothy C. Roth II  Assistant Professor of Psychology (on leave 2015–2016)
Allison S. Troy  Assistant Professor of Psychology (on leave 2015–2016)
Joshua D. Rottman  Assistant Professor of Psychology
    and Scientific Philosophical Studies of Mind
Christina L. Abbott  Visiting Assistant Professor of Psychology
Matthew M. Doran  Visiting Assistant Professor of Psychology
Travis Hartin  Visiting Assistant Professor of Psychology
Wayne R. Hawley  Visiting Assistant Professor of Psychology
Benjamin R. Meagher  Visiting Assistant Professor of Psychology
F. Blake Morton  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.
A major in Psychology consists of 10 courses:

PSY 100 and 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 301. Sensation and Perception.
PSY 302. Biopsychology.
PSY 240. Neuroscience.

**Development and Cognition**
PSY 304. Developmental Psychology.
PSY 305. Cognitive Psychology.
PSY 313. Cognitive Neuroscience.
PSY 317. Health Psychology.

**Personality, Social and Psychopathology**
PSY 307. Personality Psychology.
PSY 308. Psychopathology.
PSY 309. Social Psychology.
PSY 315. Cross-Cultural Psychology.
PSY 317. Health Psychology.

**Evolution and Adaptation**
PSY 250. Animal Behavior.
PSY 306. Evolution of Mind and Intelligence.
PSY 310. Conditioning and Learning.
PSY 312. Embodied Cognition.

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.

Joint Majors may be developed with several departments with permission of the respective department chairpersons. Students with a special interest in the Biological Foundations of Behavior may elect that major with a concentration in either animal behavior or neuroscience. Students with a special interest in the Scientific and Philosophical Studies of Mind may elect that major.

**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 at University of Copenhagen; Institute for Study Abroad at Butler University programs in England, Scotland, Ireland, Australia and New Zealand; IES programs. 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; (W) Writing requirement; (ER) Empirical Research requirement.

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.

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. Offered every semester. Students cannot earn credit for both PSY 100 and PSY 101 unless permission is obtained from the department.

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. Required laboratory will focus on design and methodology. Offered every semester. Prerequisite: PSY 100 or BIO 110.

270-279, 370–379. 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. Research in Psychology.
A laboratory or other scholarly independent research project conducted under the supervision of a faculty member from the department. Prerequisite: permission of chairperson.

AREA STUDIES COURSES

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/BIO/SPM 240.
250. Animal Behavior. (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 foraging and predation, communication, social organization and reproductive strategies. Observational and experimental research required. Prerequisites: BIO 110 and permission of instructor. Corequisite: either BIO 210 or PSY 230, or permission of the instructor. Offered every Fall. Same as BFB/ BIO 250.

Lonsdorf, Morton

301. Sensation and Perception. (N)
Review of phenomena and research on sensory processes and their role in perception. Readings and discussion will examine evidence from behavioral, psychophysical and physiological research and consider implications for explanations arising from the mechanistic, cognitive, computational and naturalistic theoretical perspectives. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Fall. Same as BFB/SPM 301.

Owens

302. Biopsychology. (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 BIO 110 or permission. Corequisite: PSY 230 or BIO 210. Offered every semester. Same as BFB/SPM 302.

Hawley, Lacy, Roth

304. 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 coursework. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Fall. Same as SPM 304.

Casler, Hartin, Howard

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 permission. Corequisite: PSY 230 or BIO 210. Offered every Fall. Same as SPM 305.

Howard

306. 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 coursework. Prerequisite: One of: PSY 100, PSY 301, PSY 302, PSY 303, PSY 304, PSY 305, BIO 240, BIO 250 or PHI 338, or permission. Corequisite: PSY 230 or BIO 210. Same as BFB/SPM 306.

Roth
307. 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 coursework. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Fall. Same as SPM 307. Meagher, Troy

308. 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 permission. Offered every Spring. Same as SPM 308. Penn

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 permission. Corequisite: PSY 230 or BIO 210. Offered every Spring. Same as SPM 309. 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. Offered every Fall. Same as BFB 310. Lacy

312. Embodied Cognition. (NSP)
In this course we will study intelligence by focusing on perception and action in the environment. To this end, we will focus on ecological psychology, robotics, artificial neural networks and simulated evolution. Although students will be expected to build simple robots and work with computer models, no background knowledge of engineering or computing will be assumed. (Knowledge of programming is not required.) Prerequisite: PSY 100. Same as SPM 312. Anderson

313. Cognitive Neuroscience.
Cognitive neuroscience explores the relations between neural systems and cognition. This course will provide both an introduction to some theoretical issues in cognitive neuroscience (e.g. the degree of localization of cognitive faculties), as well as an in-depth look at the neural bases of memory, language and motor control. Of particular interest will be understanding the technologies and techniques of cognitive neuroscience— including direct neural recording; functional magnetic resonance imaging (fMRI); magnetic encephalography (MEG); electroencephalography (EEG); and transcranial magnetic stimulation (TMS). Prerequisite: PSY 240 or 302 or 305. Anderson

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. Penn
317. 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 BIO 110. *Same as PBH 317. Abbott*

**400-LEVEL COURSES**

460. Advanced Quantitative Methods. (N, ER)
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. Offered every other Fall. Prerequisites: PSY 230 or BIO 210 and one 300-level PSY course. *Bashaw*

470–479. Special Topics in Psychology.

480. Collaborative Research in Comparative Cognition and Behavior. (N, ER)
Comparative perspectives and approaches to the study of selected topics drawn from cognitive and developmental psychology, cognitive ethology, cognitive and behavioral neuroscience, cognitive science and behavioral primatology. Research required. Prerequisites: PSY 230 or BIO 210, one of PSY 250, 301, 302, 303, 304, 305, 306, 310; OR one of BIO 250, 330, 379; OR one of BFB 250, 301, 302, 306, 330, 379; OR permission of the instructor. Offered every other Spring. *Same as BFB/SPM 480. Lonsdorf*

481. Collaborative Research in Developmental Psychology. (N, ER)
An overview of methods for conducting research with children, with an emphasis on ethics of working with child participants. Current empirical and theoretical issues in developmental psychology are addressed through literature review and group research projects. Topics reflecting student interests are considered. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY 304, or permission. Offered every Spring. *Same as SPM 481. Casler, Hartin*

482. Collaborative Research in Social Psychology. (N, ER)
Selected topics in experimental social psychology. Emphasis on experimental methods. Traditional areas of social psychology and topics that reflect student research interest are considered. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY 309, or permission. Offered every Fall. *Knowles*

483. Collaborative Research in Human Cognition. (N, ER)
An in-depth consideration of selected empirical and theoretical issues in cognitive psychology. Emphasis is on recent literature covering basic research in cognitive psychology, cognitive neuroscience and computational neuroscience modeling, including such topics as attention and resource allocation, representation, concept formation, memory and topics reflecting research interests of participating students. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY/SPM 305, or permission. Offered every Spring. *Same as SPM 483. Howard*

484. Collaborative Research in Personality. (N, ER)
Selected empirical and theoretical topics from the contemporary literature in personality psychology with emphasis on measurement issues and comparative analyses of major models and taxonomies. Topics that reflect student research interests will be discussed. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY/SPM 307, or permission. Offered every Spring. *Meagher, Troy*
485. Collaborative Research in Human Perception and Action. (N, ER)
Contemporary research and theories of the interrelations of perceptual and motor processes. Content will be
drawn from the literatures of experimental psychology, neurophysiology and human factors. Animal models
and computational algorithms will be considered when applicable, with primary emphasis on implications
for human performance. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY 301, or
permission. Offered every Spring. Same as SPM 485. Owens

487. Collaborative Research in Biological Psychology. (N, ER)
The neurophysiological and structural basis of behavior with emphasis on motivation and learning,
including the use of psychopharmacological methods. The role of endocrine and metabolic processes in
the regulation of behavior is integrated with considerations of structure. Laboratory research required.
Prerequisites: PSY 230 or BIO 210; PSY 302 or BIO/BFB 240 or permission. Offered every other year.
Same as BFB 487. Lacy, Roth

488. Collaborative Research in Psychopathology. (N, ER)
An upper-level, research-based seminar that explores normative, healthy and abnormal psychosocial
development across the life span. Students are assisted to undertake individual or group research projects
using a variety of methods—including both quantitative and qualitative approaches. Prerequisites: PSY 230
or BIO 210; PSY 308, or permission. Offered every Fall. Penn

489. 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 year. Same as SPM/STS 489. Owens, Anderson

Independent Research
490. Senior Independent Research. (ER)
Independent study under the direction of the Psychology staff. Permission of chairperson required.

TOPICS COURSES EXPECTED TO BE OFFERED 2015–2016
37X. Origins of Moral Thought. (Area Studies: Development and Cognition OR Evolution and Adaptation)
47X. Collaborative Research in Morality. (N, ER)
Public Health is an interdisciplinary major offered by the Biology and Government departments. 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 science 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 two tracks:

**Biology Track Core:** PBH 251, PBH 351, BIO 110, BIO 210 (or GOV 250), BIO 220, BIO 230, BIO 305, BIO 322, CHM 111, CHM 112, GOV 100, GOV 120, GOV 200, GOV 388, GOV 410 or PBH 470. Choose one elective from: ANT 234, BIO 310, BIO 323, BIO 336, BIO 338, ENV 315, GOV 130, GOV 208, GOV 305, GOV 309, PHI 223, PHI 337, PSY 309, STS 311, SOC 330, BIO 490.

**Government Track Core:** PBH 251, PBH 351, BIO 110, BIO 220, GOV 100, GOV 120, GOV 200, GOV 208 or GOV 309, GOV 250 (or BIO 210), GOV 305, GOV 388, GOV 410 or PBH 470, STS 311. Choose three electives from: ANT 234, BIO 310, BIO 336, ENV 315, GOV 130, PHI 223, PHI 337, PSY 309, SOC 330, PBH 303, GOV 490.
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.

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 GOV 100 or permission.

Everett, Miller

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. Permission required.

Ashworth

PBH 317. 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 BIO 110. Same as PSY 317. Abbott

PBH 351. Epidemiology.
The study of epidemics and their prevention, using tools that are mathematical, statistical, graphical, and logical. Students will learn to draw inferences from observations and apply them to public health. Students will learn how to evaluate the efficacy of measures intended to improve health. Prerequisite: PBH 251. Same as BIO 351. Everett, Miller

PBH 388. Public Health Research:
Pregnancy Outcomes in American Women. (S)
This interdisciplinary seminar will explore women’s health and pregnancy outcomes through the lenses of both science and social analysis. In addition to reading and discussion on influences on pregnancy outcomes, students will examine results of surveys of Amish women in Lancaster County, African American and Hispanic women in Lancaster County and women of child-bearing age in central Pa. This course is supported by funds from the PA Dept. of Health. Prerequisite: Any course that includes methods of data analysis and permission. Same as GOV/PUB/STS/WGS 388. Everett

PBH 410. U.S. Health Policy.
This seminar is an introduction to health policy in the United States. Health has emerged as a crucial and enduring issue on the nation’s policy agenda. How political culture, political structures, and policy processes in the American political system shape health policy is the object of our attention. Two questions infuse our deliberations: what can government do to shape the health of individuals and what should it do? Pondering health as a public policy issue and the political system’s responses to public expectations for health care should tell us much about government and about ourselves in the twenty-first century. Everett
BIO 110. Principles of Evolution, Ecology and Heredity. (N)
An introduction to Mendelian genetics, micro- and macro-evolutionary processes, the origin and diversification of life on earth and ecological patterns and processes at organismal, population, community and ecosystem levels. Offered every Spring. Ardia, Fischer, Howard, Mena-Ali, Olson, Sipe

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. Miller, Olson

BIO 220. Principles of Physiology and Development. (N)
An integrated study of cells, whole organisms and the interactions between organisms and their environments. The physiological and anatomical solutions to the physical and chemical challenges faced by plants and animals. Mechanisms by which a single cell develops into a complex, multicellular organism in which groups of cells perform specialized tasks. Lecture topics integrated with a laboratory that emphasizes independent research projects. Prerequisite: BIO 110. Offered every Fall. Moore, Shelley, Stoehr, Thompson

BIO 230. Cell Biology. (N)
A study of life at the cellular level through investigation of the functions and properties of the molecular components of cells. Topics will include: the physical and chemical principles governing biomolecules and their assembly, the structure and function of sub-cellular systems, energy generation, cell motility and information flow from DNA to protein. The ethical implications of current research techniques will also be discussed. Prerequisites: BIO 220 and CHM 112. Offered every Spring. Davis, Roberts

BIO 305. Genetics. (N)
Molecular genetics, gene expression, regulation of eukaryotic development, tumor viruses, oncogenes and cancer. Prerequisite: BIO 230. Offered every Fall. Jenik, Mena-Ali

BIO 322. Microbiology. (N)
Cytology, metabolism, taxonomy, phylogeny, development and ecological relationships of microbial life. Emphasis on insights into life processes in general. Laboratory includes training in basic microbiological techniques. Prerequisites: BIO 230 and permission of the instructor. Frielle

GOV 100. American Government. (S)
Political power within the framework of American national government. Current governmental and political problems are explored. Ciuk, Friedrich, Medvic, Stephenson

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. Hasunuma, McNulty

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. Melusky

GOV 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

**GOV 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 first semester of junior year. Prerequisite: GOV 100.

Ciuk, Friedrich, Medvic, Yost

**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.

Melusky

**GOV 309. The 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

**410. Health Policy. (S)**
This seminar focuses on the health care system in the United States with attention to political structures shaping public policy on health and to substantive areas of health policy debate. The seminar explores the role of the presidency and the executive branch, Congress, and the states in the evolution of health policy. Biotechnology, health care disparities, and political struggles over providing health care are among the substantive areas the seminar examines from the perspectives of cost, access, and quality. Permission of the instructor required. Prerequisite: GOV 100.

Nachlis

**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

**SOC 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
PUBLIC POLICY

Professor Michael H. Kulik, Chair

MEMBERS OF THE PUBLIC POLICY PROGRAM COMMITTEE

Dean C. Hammer  John W. Wetzel Professor of Classics and Professor of Government
Sean Flaherty  Professor of Economics
Jeffrey Nesteruk  Professor of Legal Studies
James E. Strick  Professor of Science, Technology, and Society
Linda S. Aleci  Associate Professor of Art History
Jerome I. Hodos  Associate Professor of Sociology
Janine Everett  Director of the Public Health Program
Michael H. Kulik  Director of the Public Policy Program

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; and Earth and Environment. Students wishing to combine Public Policy in a Joint Major with another existing major should first contact the department of Public Policy chairperson to determine the feasibility of the proposed Joint Major program. The usual rules for Joint Majors apply in the case of all Public Policy majors.

Students with a Joint Major in Public Policy may study abroad in a direct exchange program with the University of Glasgow. Public Policy students have studied abroad or off-campus in the following programs in recent years: Institute for the International Education of Students (European Union), Freiburg, Germany; School for International Training (SIT) Study Abroad in Argentina, South Africa and Viet Nam; Syracuse University, Madrid, Spain; Danish Institute for Study Abroad, Copenhagen, Denmark; Washington Semester Program, American University, Washington, D.C. 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.
ECO 200. Microeconomics I. (S)
ECO 201. Macroeconomics I. (S)
GOV 200. Understanding Public Policy. (S)
Statistics/Methods Course in department of Joint Major or other department

A Joint Major in Public Policy and Economics (ECO) consists of:
PPC (eight courses) plus ECO 203 Value and Distribution and seven (7) electives from among those on the PUB elective master list, of which two (2), but no more than four (4), must be ECO courses. At least one of these electives must be a course that involves a substantial research project. Students should consult with the chair of the Public Policy Committee to verify that they will have completed electives that satisfy these requirements.

A Joint Major in Public Policy and Sociology (SOC) consists of:
PPC (eight courses) plus SOC 100 Introductory Sociology; SOC 301 History of Sociological Theory; SOC 302 Sociological Research Methods (already in PPC as Methods course); SOC 490 Seminar or Independent Study and five (5) elective courses from among those on the PUB electives master list, of which four (4) must be SOC courses. At least one of these electives must be a course that involves a substantial research project. Students should consult with the chair of the Public Policy Committee to verify that they will have completed electives that satisfy these requirements.

A Joint Major in Public Policy and Business, Organizations, and Society (BOS) consists of:
PPC (eight courses) plus BOS 200 Strategies for Organizing; BOS 224 Accounting for Decision Making; BOS 250 Quantitative Methods (already in PPC as Methods course); BOS 315 Organizational Behavior; BOS 332 Law, Ethics and Society; BOS 341 Marketing; BOS 360 Finance and two (2) electives from among those on the PUB electives master list, of which at least one must be a BOS course. At least one of these electives must be a course that involves a substantial research project. Students should consult with the chair of the Public Policy Committee to verify that they will have completed electives that satisfy these requirements.

A Joint Major in Public Policy and Environmental Studies (ENV) consists of:
PPC (eight courses) plus ENV 117 Environment and Human Values; ENV/GEO 114 Earth, Environment and Humanity; ENV 216 Environmental Policy; BIO 110 Principles of Evolution, Ecology and Heredity; ENV 454 Environmental Problems; and three (3) electives from the ENV Human Environment Upper Level Core and Environmental Studies electives list. At least one of these electives must be a course that involves a substantial research project. Students should consult with the chair of the Public Policy Committee to verify that they will have completed electives that satisfy these requirements.

A Joint Major in Public Policy and Government (GOV) consists of:
PPC (eight courses) plus GOV 120 Comparative Politics; GOV 130 International Politics; GOV 241 Classical Political Theory or GOV 242 Modern Political Theory; 300 or 400-level
GOV elective; GOV 4XX Seminar in GOV and three (3) electives from among those on the PUB electives master list, of which no more than two (2) may be GOV and at least one must be at the 300 level or above. Students should consult with the chair of the Public Policy Committee to verify that they will have completed electives that satisfy these requirements.

The following courses are offered in support of the Public Policy curriculum:

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

388. Public Health Research: Pregnancy Outcomes in American Women. (S)
This interdisciplinary seminar will explore women’s health and pregnancy outcomes through the lenses of both science and social analysis. In addition to reading and discussion on influences on pregnancy outcomes, students will examine results of surveys of Amish women in Lancaster County, African American and Hispanic women in Lancaster City and women of child-bearing age in central PA. This course is supported by funds from the PA Dept. of Health. Prerequisite: any course that includes methods of data analysis or permission. Same as GOV/STS/WGS 388. Everett, Flaherty, Kibler, Miller, Yost

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 ENV/PBH/STS 352. Kulik

255. Political Economy of Health Care. (S)
A seminar format approach to issues in health and health care reform from an economics-based perspective but also including multi-disciplinary considerations. Topics include the following: the unique qualities of the market for health care; controlling costs/improving outcomes in health care delivery; the economic status of health care providers; economic and ethical issues of pharmaceutical development and distribution; health—and health care—disparities by income, race, ethnicity, and gender; the looming fiscal crisis of Medicare and Medicaid; the political economy of systemic health care reform; comparative health care systems. Prerequisites: ECO 100 or ECO 103. Same as ECO 255. Flaherty

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/ENV 240. Fleming, Green

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.

Phillips

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. Same as GOV 200.

Melusky

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

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 ENV/GOV 314.

De Santo

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 ENV/STS 313.

Strick

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/ENV 335.

Kurland
RELIGIOUS STUDIES

Professor John Lardas Modern, Chair

Annette Aronowicz The Robert F. and Patricia G. Ross Weis Professor of Judaic Studies and Professor of Religious Studies

David L. McMahan The Charles A. Dana Professor of Religious Studies

Stephen A. Cooper Professor of Religious Studies

John Lardas Modern Associate Professor of Religious Studies

SherAli Tareen Assistant Professor of Religious Studies (on leave 2015–2016)

Ryan Dulkin Visiting Assistant Professor of Religious Studies

Marin Shobhana Xavier Visiting Instructor of Religious Studies

Additional faculty members not in the department also contribute to this program.

The Department of Religious Studies is committed to exploring and analyzing in a non-sectarian way, a variety of religious traditions embedded in myth, ritual, art, ethics, doctrine, philosophy, literature, asceticism and other social practices. The study of religion engages 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 Interpreting Religion (RST 420), 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 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 420.

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; History of Christianity at Aberdeen University, Scotland; South India Term Abroad, Madhurai, India. 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.

INTRODUCTORY COURSES

111. Introduction to Religious Studies. (H)
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. McMahan

112. Judaism. (H) (NW)
This course introduces students to central aspects of Judaism from the ancient period to the early modern period and beyond. Judaism will be explored from three different yet complementary aspects: history, religious practice, and textual culture. Judaism has manifested itself in a variety of forms around the world and throughout history. It has developed through negotiations with the traditions of the past as well as with the changing conditions of the present, almost invariably influenced and affected by local non-Jewish cultures. Students shall acquire familiarity with the Jewish understandings of certain key notions (creation, law, chosenness, prophecy, exile, redemption) and the continuing debates around them. Same as JST 112. Staff

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. Xavier

122. Asian Religions. (H) (NW)
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)
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 AMS 167. Lardas 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 AMS 203.

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. Staff

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

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)
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

RELIGION AND CULTURE

250. Witchcraft and Sorcery in a Global Context. (S)
In this course we will consider how the categories of “witchcraft” and “sorcery” have been used in Anthropology, both to describe mystical acts (particularly mystical attacks) and as an ethnographic metaphor to discuss the pressures of communal life for individuals. Course content will consist of, but not be limited to, witchcraft and sorcery as a “social strain gauge,” witchcraft and sorcery as expressions
of symbolic power, the gendered name of witchcraft and sorcery, as well as witchcraft and sorcery under conditions of Western-style modernity. *Same as AFS/ANT/WGS 250*

**330. Anthropological Studies of Religion. (S)**
This course takes account of various aspects of religious and ritual practice, using material from both contemporary and classic ethnographies. Topics of special interest for the course will include, but are not be limited to: cosmological constructions; initiation; possession; commensality; magic; witchcraft and sorcery; ritual aesthetics; and performance. Prerequisite: ANT 200. *Same as ANT 330.*

**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 contemporary period, in which the place of Christianity in the public sphere is again shifting.

**359. Modern Religious Thinkers: Pascal, Kierkegaard and Rosenzweig. (H)**
Focuses on three thinkers who rethought the meaning of their respective religious traditions—Catholicism, Protestantism, Judaism—in ways that were to influence not only their respective community, but also how we think about religion in general. All three challenged what we mean by religion. *Same as JST 359.*

**AREA STUDIES**

**JUDAISM**

**233. Religion in 20th-Century Jewish Literature. (H)**
Readings of well-known 20th-century Jewish short story writers, novelists and poets. In an era in which many people, including many of the authors, thought they were moving away from religion, religious questions and imagery remain nonetheless prevalent. What are these questions? How does the fiction reflect and respond to the upheavals of the time? *Same as JST 233.*

**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.*

**253. 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. 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 253.*

**254. 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. *Same as HIS/JST 254.*
325. Jewish Culture in Eastern Europe. (S)
Course focuses on the Jews of Eastern Europe from the end of the Middle Ages through the present; looks at variety of cultural forms and expressions they have created. From tradition to modernity, Shtetl to Socialism, religious scholarship to secular literature, examines the rich cultural life of East European Jews in all its myriad manifestations. Specific emphasis on transformations in the culture of Yiddish-speaking Jews in Poland and Russia. Same as HIS/JST 325. Hoffman

326. Jewish Views of Jesus. (S)
Course explores the ways in which Jews have related to and represented the figure of Jesus, using Jewish texts from the birth of Christianity to the present day. Beginning with the Talmud, examines numerous Jewish sources (including literature and art) and looks at a number of historical periods and the different religious, social and intellectual developments that influenced Jewish perceptions and portrayals of Jesus. Same as HIS/JST 326. Hoffman

327. Cinema and the American Jewish Experience. (S)
Course explores representations of American Jewish life, culture and religion in cinema. Using an historical perspective, it analyzes the different ways in which Jewish identity and culture have been represented in American film. Looks at history of Jews in the United States, Jewish involvement in the film industry and anti-Semitism. Films viewed weekly, including feature films and several documentaries, in class and in an extra viewing session. Same as AMS/HIS/JST 327. Hoffman

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 JST 340. Cooper

CHRISTIANITY
335. Reformation/Counter-reformation. (A)
An examination of the political and doctrinal conflicts between the Roman Catholic Church and the “reformed” religions of northern Europe and their impact on art and architecture of Germany and the Netherlands during the 16th and 17th centuries. The following topics are emphasized: iconoclasm (the destruction of images), new forms of iconography and church architecture and the transformation of visual culture in emerging Protestant states. Prerequisite: Prior course in art history recommended. Same as ART 335. Aleci

ISLAM
370. 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. Xavier

ASIAN RELIGIONS
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 AMS 322.*

**337. Hindu Literature and Practice. (H) (NW)**

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)**

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. Lardas Modern*

### ADVANCED SEMINARS IN RELIGIOUS STUDIES

**420. Interpreting Religion. (H)**

What are the major theories in the West about the nature of religion? How do they help or hinder us in our interpretation of the documents of specific religious traditions? We will read some of the major theorists of religion in depth and see how they shed light on religious texts and movements. *Cooper*

**490. Independent Study.**

Independent study directed by Religious Studies staff. Permission of chairperson and departmental faculty.

### TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016

Sufism.
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 language and literature in Russian studies and courses for liberal arts education, thus serving students with specializations in many academic areas.

Minors in the Department of Russian have studied abroad in the following programs in recent years: University of Arizona programs in Moscow and St. Petersburg; Middlebury College programs in Moscow and Yaroslav; School of Russian and Asian Studies; Smolny-Bard program in St. Petersburg, as well as different programs tailored to combine Russian minor with the student’s major field of study (such as O’Neill Theater Program in Moscow, or Math University in Moscow). See the International Programs section of the Catalog for further information.

The department offers two minor programs.

**A minor in Russian Language and Literature** consists of six courses: RUS 101, 102, 201 and 202; and two other courses chosen from among RUS 214, 217, 301 and 302. Interested students should contact the chair of the program.

**A minor in Russian Studies** consists of six courses: RUS 102, 201, 202; one course from RUS 214 or RUS 217; one course from and HIS 225 or HIS 226; and one topics seminar on Russian culture from the RUS 270–279 series. Both courses in Russian literature and both in Russian history are strongly suggested for broadening the minors’ perspective on Russian culture. Appropriate substitutions may be approved by the program 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.

**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.*

**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*


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.

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.

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.

102. Elementary Russian II.
Continuation of Russian 101. Three 80-minute meetings per week, plus an additional conversation hour conducted by a native speaker. Prerequisite: Russian 101 or placement. Offered every Spring.

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. Three 80-minute meetings per week, plus an additional conversation hour conducted by a native speaker. Prerequisite: Russian 102 or placement. Offered every Fall.

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. Three 80-minute meetings per week, plus an additional conversation hour conducted by a native speaker. Prerequisite: Russian 201 or placement. Offered every Spring.

301. Readings in Russian Literature I. (H)
The primary purpose of this course is to provide students with an opportunity to read Russian literature in the original while improving their active command of the written and spoken language. Readings have been selected from among the acknowledged masterworks of Russian literature. Prerequisite: Russian 202 or placement. Offered every Fall.

302. Readings in Russian Literature II. (H)
This course continues Russian Literature I (301) and provides students with an opportunity to read Russian literature in the original while improving their active command of the written and spoken language. Readings have been selected from among the acknowledged masterworks of Russian literature. Prerequisite: Russian 301 or placement. Offered every Spring.

390. Independent Study.
490. Independent Study.
TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016

Russian Cinema.
Russian Popular Culture.

SCIENCE, TECHNOLOGY AND SOCIETY

Professor James E. Strick, Chair

MEMBERS OF THE SCIENCE, TECHNOLOGY AND SOCIETY PROGRAM COMMITTEE

Roger D.K. Thomas  John Williamson Nevin Professor of Geosciences
Glenn Ross        Dr. Elijah E. Kresge Professor of Philosophy
James E. Strick    Professor of Science, Technology and Society
                    and of Environmental Studies
Tim Sipe           Associate Professor of Biology
Cynthia Krom      Assistant Professor of Accounting and Organizations
Keith Miller       Adjunct Instructor of Science, Technology and Society

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: FND 134; STS 136; FND 137; FND 160; 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 383; STS 384; STS 385; STS 386; STS 387; STS/PSY 489.
Science and Society. Core: FND 111; FND 168; FND 185; 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 383; STS 385.

Medicine in Society. Core: FND 135; FND 168; FND 185; BIO 110. Methods: BIO 210; PSY 230; BIO 305. Electives: STS 223; ANT 225; ANT/WGS 355; SOC 330; STS 311; STS 383; HIS 400; STS/PUB 481.

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; (W) Writing 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 ENV 117. 

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

223. Biomedical Ethics. (H)
Ethical issues related to developments in biology and medicine, including population control, genetic engineering and the allocation of medical resources. Same as PHI 223. 

Merli

277. Science Writing: Fact & Fiction. (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. \textit{Same as ENG/ENV 258.} \textit{Anderson}

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. \textit{Same as HIS 311.} \textit{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. \textit{Same as ENV 312.} \textit{Strick, Dyl}

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. \textit{Same as ENV 313.} \textit{Strick}

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. \textit{Same as ENV 315.} \textit{Everett}

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. \textit{Same as PHI/SPM 337.} \textit{Ross}

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. \textit{Same as ENV/PBH 352.} \textit{Kulik}

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. \textit{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 383.*  

**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. *Same as GEO 384.*  

**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.*  

**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.*  

**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.*  

**388. Public Health Research: Pregnancy Outcomes in American Women. (S)**  
This interdisciplinary seminar will explore women’s health and pregnancy outcomes through the lenses of both science and social analysis. In addition to reading and discussion on influences on pregnancy outcomes, students will examine results of surveys of Amish women in Lancaster County, African American and Hispanic women in Lancaster City and women of child-bearing age in central Pa. This course is supported by funds from the PA Dept. of Health. Prerequisite: any course that includes methods of data analysis or permission. *Same as PUB/GOV/WGS 388.*  

**489. 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 PSY/SPM 489.*
TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
The History of Occult Knowledge and Pseudoscience.
Public Health Research: You are what you eat?.

SCIENTIFIC AND PHILOSOPHICAL STUDIES OF MIND

Professor Michael Anderson, Chair (Fall 2015)
Professor Bennett Helm, Chair (Spring 2016)

MEMBERS OF SCIENTIFIC AND PHILOSOPHICAL STUDIES OF MIND PROGRAM COMMITTEE

Joel P. Eigen  Charles A. Dana Professor of Sociology
Bennett Helm  Dr. Elijah E. Kresge Professor of Philosophy
D. Alfred Owens  Charles A. Dana Professor of Psychology
Glenn Ross  Dr. Elijah E. Kresge Professor of Philosophy
Michael Anderson  Associate Professor of Psychology (on leave Spring 2016)
Krista Casler  Associate Professor of Psychology
Megan L. Knowles  Associate Professor of Psychology
Nick Kroll  Assistant Professor of Philosophy

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 Areas of Concentration: 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 moral agent—worthwhile and responsible in a way that rocks, trees and the “lower” animals appear not to be. 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?

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 major aim to provide this background. The needed depth is provided in the concentrations themselves, in which majors 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 major culminates 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. Majors may also expand their senior thesis with the goal of presenting the project for departmental honors.
**A major in SPM** consists of 12 courses. Of these, five courses are required as a part of the common core, and six courses must be within a particular area of concentration. (For details, see below.) The remaining course can be from either concentration or from the following list: PHI 213; PHI 317

Students intending to major in SPM are encouraged to take one or more of the following courses in their first year: PSY 100, PSY 230 or one of the Foundations curriculum courses from the above list. Students who decide to enter the SPM major after reaching the 300-level in psychology, but without having taken Introductory Psychology, should substitute any second 300-level psychology course for PSY 100.

**CORE**

The following courses are required for the core:
- PSY 100: Introduction to Psychology.
- SPM 250: Philosophy of Mind.
- SPM 337: Philosophy of Natural Science.
- SPM 495: Senior Research Seminar.

**AREAS OF CONCENTRATION**

Majors may select either the Cognitive Science or the Moral Psychology Concentration. The six courses within the concentration must be evenly split between those designated as science courses and those designated as humanities courses. In addition, at least one course in the sciences and at least one course in the humanities must be at the 300-level or higher. The following summarizes what courses fulfil what requirements in the concentrations.

**Cognitive Science**

**Sciences:** CPS 112: Computer Science II; BIO 220: Principles of Physiology and Development; SPM 240: Neuroscience; BFB 250: Animal Behavior; SPM 301: Sensation and Perception; SPM 302: Biopsychology; SPM 304: Developmental Psychology; SPM 305: Cognitive Psychology; SPM 306: Evolution of Mind and Intelligence; PSY 310: Conditioning and Learning; SPM 312: Embodied Cognition; PSY 313: Cognitive Neuroscience; SPM 48x: Collaborative Research.

**Humanities:** LIN 101: General Linguistics; LIN 120: Sociolinguistics; PHI 244: Symbolic Logic; PHI 335: Epistemology; PHI 339: Philosophy of Language; PHI 342: Rational Choice; PHI 351: Mind-Body Problem; SPM 352: Philosophy of Emotions

**Moral Psychology**


Majors in the Scientific and Philosophical Studies of Mind Program have studied abroad in the following programs in recent years: Budapest Semester in Cognitive Science; University of Melbourne; University of Otago; Victoria University; Tohoku Gakuin (Japan); Tibetan Studies. We also have arranged an exchange program with the Institute of Cognitive Science at the University of Osnabrück, Germany. 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.

Note that courses below marked with an asterisk (*) have prerequisites that do not count toward the SPM major.

I. CORE

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 philosophy or psychology. Same as PHI 250. Helm

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. Same as PHI/STS 337. Ross

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. Anderson

Courses not cross-listed with SPM. See department listing for descriptions.
Psychology 100. Introductory Psychology. (N)

II. AREAS OF CONCENTRATION

A. Cognitive Science

1. Sciences

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/BIO/PSY 240.

301. Sensation and Perception.
Review of phenomena and research on sensory processes and their role in perception. Readings and discussion will examine evidence from behavioral, psychophysical and physiological research and consider implications for explanations arising from the mechanistic, cognitive, computational and naturalistic theoretical perspectives. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Spring. Same as BFB/PSY 301.

Owens

302. Biopsychology. (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 BIO 110 or permission. Corequisite: PSY 230 or BIO 210. Offered every Fall. Same as BFB/PSY 302.

Roth

304. 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 coursework. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Fall. Same as PSY 304.

Casler

305. Cognitive Psychology.
This course provides an overview of human cognitive processes. Topics covered include knowledge acquisition, memory, concept formation, text processing, thinking, problem solving and decision making. We will compare several approaches to the study of cognition, and we will examine and evaluate both classic and contemporary theory and research. Research activities and analyses integrated into coursework. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Fall. Same as PSY 305.

Howard

306. 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 coursework. Prerequisites: One of: PSY 100, PSY 301, PSY 302, PSY 303, PSY 304, PSY 305, BIO 240, BIO 250 or PHI 338, or permission. Corequisite: PSY 230 or BIO 210. Same as BFB/PSY 306.

Staff

312. Embodied Cognition. (NSP)
In this course we will study intelligence by focusing on perception and action in the environment. To this end, we will focus on ecological psychology, robotics, artificial neural networks and simulated evolution. Although students will be expected to build simple robots and work with computer models, no background knowledge of engineering or computing will be assumed. (Knowledge of programming is not required.) Prerequisite: PSY 100. Same as PSY 312.

Anderson

480. Collaborative Research in Comparative Cognition and Behavior. (N)
Comparative perspectives and approaches to the study of selected topics drawn from cognitive and
developmental psychology, cognitive ethology, cognitive and behavioral neuroscience, cognitive science and behavioral primatology. Research required. Prerequisites: PSY 230 or BIO 210, one of PSY 250, 301, 302, 303, 304, 305, 306; or one of BIO 250, 330, 379; or one of BFB 250, 301, 302, 306, 330, 379; or permission of the instructor. Offered every Spring. Same as BFB/PSY 480.  

481. Collaborative Research in Developmental Psychology. (N)  
An overview of methods for conducting research with children, with an emphasis on ethics of working with child participants. Current empirical and theoretical issues in developmental psychology are addressed through literature review and group research projects. Topics reflecting student interests are considered. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY 304, or permission. Offered every Spring. Same as PSY 481. Staff

483. Collaborative Research in Human Cognition. (N)  
An in-depth consideration of selected empirical and theoretical issues in cognitive psychology. Emphasis is on recent literature covering basic research in cognitive psychology, cognitive neuroscience and computational neuroscience modeling, including such topics as attention and resource allocation, representation, concept formation, memory and topics reflecting research interests of participating students. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY/SPM 305, or permission. Offered every Spring. Same as PSY 483. Hartin

485. Collaborative Research in Human Perception and Action. (N)  
Contemporary research and theories of the interrelations of perceptual and motor processes. Content will be drawn from the literatures of experimental psychology, neurophysiology and human factors. Animal models and computational algorithms will be considered when applicable, with primary emphasis on implications for human performance. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY 301, or permission. Offered every Fall. Same as PSY 485. Howard

Courses not cross-listed with SPM. See department listing for descriptions.

BIO 220. Principles of Physiology and Development.*(N)  
CPS 112. Computer Science II.*  
BIO/BFB 220: Principles of Physiology and Development. (N)  
PSY/BFB/BIO 250. Animal Behavior. (N)  
PSY/BFB 310. Conditioning and Learning.  
PSY/BFB 313. Cognitive Neuroscience.  
PSY 487. Collaborative Research in Biological Psychology. (N)  

2. Humanities  

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. Same as PHI 352. Helm

Courses not cross-listed with SPM. See department listing for description.

LIN 101. Introduction to Linguistics.  
LIN 120. Sociolinguistics.  
PHI 244. Symbolic Logic. (H)  
PHI 335. Epistemology. (H)  
PHI 339. Philosophy of Language. (H)
B. Moral Psychology

1. Sciences

304. 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 coursework. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Fall.  
*Same as PSY 304.*  
Casler, Hartin, Howard

307. 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 coursework. Prerequisite: PSY 100 or permission. Corequisite: PSY 230 or BIO 210. Offered every Spring.  
*Same as PSY 307.*  
Meagher, Troy

308. 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 permission. Offered every Spring.  
*Same as PSY 308.*  
Penn

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 permission. Corequisite: PSY 230 or BIO 210. Offered every Spring.  
*Same as PSY 309.*  
Knowles

481. Collaborative Research in Developmental Psychology. (N)
An overview of methods for conducting research with children, with an emphasis on ethics of working with child participants. Current empirical and theoretical issues in developmental psychology are addressed through literature review and group research projects. Topics reflecting student interests are considered. Laboratory research required. Prerequisites: PSY 230 or BIO 210; PSY 304, or permission. Offered every Spring.  
*Same as PSY 481.*  
Casler, Hartin

489. 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 PSY/STS 489.*  
Owens, Anderson
Courses not cross-listed with SPM. See department listing for description.

PSY 37x. Origins of Moral Thought.
PSY 47x. Collaborative Research in Morality. (N)
PSY 482. Collaborative Research in Social Psychology. (N)
PSY 484. Collaborative Research in Personality. (N)
PSY 488. Collaborative Research in Psychopathology. (N)
SOC 220. Social Psychology.*
SOC 301. History of Sociological Theory.*
SOC 320. Criminology.*
SOC 480. Sociology of Law.*

2. Humanities

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. Same as PHI 360. 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 PHI 362. Helm

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. Same as PHI 361. Helm

Courses not cross-listed with SPM. See department listing for description.

GOV 241. Classical Political Theory. (H)
GOV 242. Modern Political Theory. (H)
PHI 220. Moral Theory. (H)
PHI 319. 20th-Century Continental Philosophy. (H)
PHI 331. Free Will. (H)
RST 384. Soul in Search of Selfhood: The Writings of St. Augustine. (H)

III. SPECIAL TOPICS.

See program chairperson for information on what major requirements particular special topics offerings satisfy.

490. Independent Study.
Independent study directed by the SPM staff. Permission of the chairperson required.
SOCIOMETRY

Professor Katherine E. McClelland, Chair

Joel P. Eigen  Charles A. Dana Professor of Sociology
Carol J. Auster  Professor of Sociology
Howard L. Kaye  Professor of Sociology
Katherine E. McClelland  Professor of Sociology
Jerome I. Hodos  Associate Professor of Sociology (on leave 2015–2016)
Caroline Faulkner  Assistant Professor of Sociology
Emily Marshall  Assistant Professor of Sociology
Amy Singer  Assistant Professor of Sociology
Ashley C. Rondini  Visiting Assistant Professor of Sociology
Roscoe Scarborough  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.

For students completing a Sociology/Government double major or a Government major and a Sociology minor, GOV 250 may be substituted for SOC 302. Students electing this option are advised that the other requirements remain the same: eight courses in Sociology for a Sociology major; and six courses in Sociology for a Sociology minor. Thus, students who substitute GOV 250 will need to take an additional Sociology department course to bring their total number of Sociology courses up to eight (for the major) or six (for the minor).
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 selected in consultation with the student’s departmental adviser.

Majors in the Department of Sociology have studied abroad in the following programs in recent years: School for International Training in Salvador, Brazil; 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

**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, Rondini*

**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.

*Scarborough*
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.
Eigen, Kaye, 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.
McClelland, Marshall

310. Urban Sociology. (S)
A comprehensive introduction to the sociological study of cities. Topics include migration, theories of urban development, gentrification, poverty, urban politics, suburbanization and globalization. Cities discussed include Philadelphia, Bangkok, Barcelona, Mexico City, Lagos, Cairo, Chicago, Los Angeles, Boston and more. Prerequisite: 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. Eigen

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 foci 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. Staff

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 WGS 345. Faulkner

350. Sociology of Gender. (S)
An examination of the transmission of gender expectations and their impact on women’s and men’s educational and employment patterns, interpersonal relationships, psychological traits, family patterns and
sexual behavior. Consideration of the role of biology, the intersection of gender with other variables such as social class and the impact of micro- and macro-scale change. Prerequisite: SOC 100. Same as WGS 350.

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.

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.

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.

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 SOC 301, or permission of instructor.

430. Sociology of Work. (S)
Work as an activity and occupation as a socially defined role. Topics include occupational choice and socialization, work and family, worker alienation, deviant occupational behavior and mobility. 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.

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.

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.

490. Independent Study. (S)
Independent study directed by the Sociology staff. Permission of chairperson.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
370. Sociology of Music (S).
371. Sociology of the Family (S).

SPANISH
Professor Beatriz Caamaño Alegre, Chair

Kimberly M. Armstrong  Professor of Spanish  
Carmen C. Tisnado  Professor of Spanish (on leave 2015–2016)  
Beatriz Caamaño Alegre  Associate Professor of Spanish  
Sofía Ruiz-Alfaro  Associate Professor of Spanish  
Veronika Ryjik  Associate Professor of Spanish  
Jessica G. Cox  Assistant Professor of Spanish  
Kathrin L. Theumer  Assistant Professor of Spanish  
Karina Davidovich  Visiting Assistant Professor of Spanish  
Ashley LaBoda  Visiting Instructor of Spanish  
Elizabeth Osborne  Visiting Instructor of Spanish  
M. Elena Aldea Agudo  Spanish Language Teaching Fellow  
Jialing Liu  Spanish Language Teaching Fellow  
Mery Soto-Harner  Senior Adjunct Instructor of Spanish  
Giselle Román Medina  Adjunct Instructor of Spanish

A major in Spanish provides students a solid foundation in both oral and written Spanish at advanced levels. Further, our courses offer students the theoretical and critical tools to investigate different cultural traditions from Latin America and Spain.
A major in Spanish consists of nine courses above SPA 202. The required courses are: SPA 221, 222 and 261. In addition, each student must take one 300–400-level course in Peninsular Literature and one 300–400-level course in Latin American Literature. The remaining four required courses may be selected among the offerings in the Spanish upper-level courses. At least one of these courses has to be at the 400-level. Students can also fulfill requirements during their Study Abroad semester. The department encourages majors to study one semester or one year in a Spanish speaking country. Students should have completed the three required courses before they study abroad. Majors who plan graduate work in Spanish are advised to acquire at least minimum competence in another foreign language.

**A major in Spanish** is designed to give the student a thorough knowledge of its structure, literature and culture. 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 of Hispanic literature and cultures. Beginning with the first course, class work is conducted largely in the target language, and the student is encouraged to use Spanish both in and outside of the classroom whenever possible.

Majors can pursue independent studies on a topic in which they are especially interested. In order to register for an independent study, the student needs to have a specific research topic, and s/he needs to submit a written proposal describing the topic and possible approach of inquiry s/he would like to follow. This proposal can be prepared after preliminary conversations with the professor who will eventually evaluate and supervise the project. We will not accept independent studies requested because of schedule conflicts or lack of interest in courses offered in a given semester.

A minor in Spanish consists of six courses beyond SPA 201. Required courses are SPA 202, 221, 222 and 261; one 300-400-level course; and one 400-level course. Students can also fulfill requirements for the minor during their Study Abroad experience. All courses for the minor must be in Spanish.

Majors in the Department of Spanish have studied abroad in the following programs in recent years: Sweet Briar, Sevilla; IES Barcelona; IES Santiago, Chile; University of Virginia, Valencia; Syracuse University Madrid; IES Salamanca. See the International Programs section of the Catalogue for further information.

The writing requirement in the Spanish major is met by completion of the normal courses required to complete the major. Students who need help to write their literature papers can make appointments at the Spanish Writing Center.

**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.

**101. Beginning Spanish I.**

For students with no previous experience with the language. A communicative approach to Spanish using authentic materials. Students will be presented with knowledge about grammar, pronunciation, culture and
civilization with a strong emphasis on developing communicative skills and developing an understanding of the Hispanic World. Offered every Fall.

102. Beginning Spanish II.
A continuation of SPA 101. Prerequisite: SPA 101 or equivalent. Ryjik, Liu

201. Intermediate Spanish I. (LS)
Continuation of the study of Spanish language. Emphasis on oral communication, reading, writing and culture with an introduction to the reading of literary and cultural texts. Prerequisite: SPA 102 or placement. Aldea Agudo, Liu, Soto-Harner

202. Intermediate Spanish II. (H)
Continuing study of the structures of the Spanish language with particular emphasis on the subjunctive. Practice in conversation and writing. Vocabulary building through the reading of appropriate literary and cultural texts and films. Prerequisite: SPA 201 or placement. Davidovich, LaBoda, Osbourne, Román-Medina

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. Caamaño Alegre

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 221 or placement. Cox

261. Introduction to Hispanic Literatures and Literary Analysis. (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 222 or permission. Ruiz-Alfaro

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. SPA 221 or SPA 222. Armstrong

320. 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 261. Tisnado

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. 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 García Márquez and Mario Varas Llosa, as the four biggest representatives of this movement. Prerequisite: SPA 261.

412. 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 261.

414. 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 261.

415. La Novela del Dictador Hispanoamericano. (H)
“La novella 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’s El Señor Presidente—the first recognized novella del dictador—and explore other versions of the genre. Prerequisite: SPA 261.

422. Escritoras Españolas. (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 literature requirement for the Spanish major. Prerequisite: SPA261. Same as WGS 422.

431: Teatro del Siglo de Oro. (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. Prerequisite: SPA 261.  

435. Don Quijote. (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 literature requirement. Prerequisite: SPA 261.  

445. 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 261.  

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 2015–2016

Medical Spanish.
Latin American Post-Boom Narrative.
Don Quijote.
Encuentros y desencuentros.
Spanish in the US.

THEATRE, DANCE AND FILM

Professor Brian Silberman, Chair

Lynn M. Brooks  Arthur and Katherine Shadek Professor of Humanities and Dance
Dirk Etzen  Professor of Film and Media Studies (on leave Spring 2016)
Carol C. Davis  Associate Professor of Theatre
Brian T. Silberman  Associate Professor of Theatre
Pamela Vail  Associate Professor of Dance
Rachel Anderson-Rabern  Assistant Professor of Theatre
Jennifer L. Conley  Assistant Professor of Dance
Jeremy Moss  Assistant Professor of Film and Media Studies
Colin J. Williamson  Visiting Assistant Professor of Film and Media Studies
Jerrell Henderson  Visiting Instructor of Theatre (Spring only)
Elba Hevia y Vaca  Senior Adjunct Instructor of Dance
Virginia West ’78, P’12  Resident Costume Designer
John Whiting  Resident Scenic and Lighting Designer
Robert Marenick  Resident Technical Director
The studies offered by the Department of Theatre, Dance and Film (TDF) include dramatic literature, history and criticism; design, acting and playwriting; dance performance and studies; and film and media studies and production. Courses in dramatic literature, theatre art, dance and film/media studies meet distribution requirements either for Arts, Humanities, or Non-Western.

**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 and critical thinking skills and combine them with current practices in performance, playwriting, directing, 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 12 credits and the successful completion of at least two crew assignments.

- TDF 110. Foundations of World Theatre.
- TDF 121. Stagecraft.
- TDF 186. Acting I.
- TDF 225. Costume Design or TDF 228. Scene Design or TDF 229. Lighting Design.
- TDF 283. Playwriting I.
- TDF 386. Directing.
- TDF 385. Production Studio (two at 0.5 credits each).
- TDF 495. Senior Seminar.
- Two crew assignments
  - Two electives (Acting II (a, b, c, d), Playwriting II, Writing the Short Film, Dramatic Adaptation, additional Theatre studies courses above the requirement, or additional Design courses above the requirement).

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.

Majors in the Department of Theatre, Dance and Film 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 University 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 minor in Theatre consists of six courses and one crew assignment: Foundations of World Theatre, Acting I, Playwriting I, a design course (scene, lighting or costume), one theatre studies course, and one elective.

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. It features a balanced curriculum of performance-based and theory-based courses, while all courses address both studio and analytical components of topics covered.

A major in Dance consists of 11 credits as stipulated: eight dance courses demonstrating a balance between performance and theory work, four courses focusing on performance (technique and composition, listed under “Performance Focus” below) and four on history, theory and analysis, listed under “Analytical Focus”; TDF 320 (Kinesiology for Dance) and 331 (Dance History) must be among the analytical courses; the TDF capstone course, TDF 495 (Senior Seminar); an additional two TDF classes to be selected from other dance electives or entry-level acting, design, theatre studies, media studies, or other dance electives as approved by the Dance Program director; and 40 hours of technical crew work. At least three courses must be taken at or above the 300-level. Students wishing to study off campus should consult with dance faculty 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.

Students may develop a Joint Major in dance and another field in consultation with the the Dance faculty adviser. Templates for such a major are currently available for dance and biology, history, or psychology. Those students wishing to propose a Joint Major between dance and fields other than the three listed should meet with the heads of these programs (dance and the proposed field) to determine an appropriate program of study. For joint majors, 30 hours of technical crew work is required.

A minor in Dance consists of six course credits in dance: three from the “Performance Focus” course list and three from the “Analytic Focus” course list, as approved by the department chairperson. Dance minors must complete 20 hours of technical crew work.

FILM AND MEDIA STUDIES

The Film & Media Studies program explores all aspects of visual communication and expression. Students in our program make movies—narrative, documentary, and experimental. They study movies as cultural and historical artifacts. And they think deeply about how moving images work—as art, entertainment, technology, commerce, and a powerful instrument for discovering and sharing knowledge and ideas.
A major in Film and Media Studies consists of 11 courses:

TDF 162. Fundamentals of Motion Picture Production
TDF 165. Introduction to Film and Media Studies
TDF 267. Film History
TDF 363. Film Theory Seminar
TDF 467. Thesis Project in Film and Media Studies

Two of the following production workshops:

TDF 362. Narrative Video Workshop
TDF 364. Documentary Video Workshop
TDF 367. Experimental Video Workshop

One additional 300-level film history, criticism, or theory course.

Plus three electives in Film & Media Studies and related subjects approved by the program director. Automatically approved electives include TDF courses in writing, acting and design (186, 225, 228, 229, and 283), Videodance, and film courses in other departments (e.g., Italian Cinema, Cinema and the American Jewish Experience). Film History (343), Film Theory (363) and the 300-level video production workshops (362, 364, 367) may be repeated as electives. Students with an interest in interdisciplinary research involving Film & Media Studies (e.g., arts management, visual anthropology, movies for social change, the psychology of cinema) may petition the program director to include courses from other departments as electives within the major.

A minor in Film and Media Studies consists of six courses. These include the following four courses:

TDF 162. Fundamentals of Motion Picture Production
TDF 165. Introduction to Film and Media Studies
TDF 267. Film History
TDF 363. Film Theory Seminar

Plus two other Film & Media Studies courses or any of the electives described above as part of 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; (NSP) Natural Science in Perspective; (NW) Non-Western Cultures requirement; (W) Writing requirement.

THEATRE MAJOR—REQUIRED COURSES

110. Foundations of World Theatre. (A) (NW)

This course is designed to foster a global understanding of the composite art of theatre and the diverse history and cultures that have gone into its development. By examining some of the major achievements of theatrical arts, from their origins to the 18th century, including performance conventions, theories of acting, dramatic literature and criticism, and architecture, students will learn to recognize how meaning is constructed in the theatre.

Anderson-Rabern, West

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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. 

Marenick

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.

C. Davis

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.

C. Davis

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. Projects will allow students to apply theory, technique and research in achieving their own designs. Same as ART 228.

Whiting

229. Lighting Design. (A)
Explores theoretical fundamentals of light and visual perception and the process of lighting design from concept through execution. Projects will allow students to apply theory, technique and research in achieving their own designs.

Whiting

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 (0.5 credit per semester; may be repeated for credit). Prerequisite: permission of the instructor.

Anderson-Rabern, C. Davis, Henderson

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: Theatre Origins, Acting I, Playwriting I, and either Scene/Lighting/Costume Design. C. Davis

495. Senior Seminar. (A)
Designed as a culminating analytical and creative experience for senior majors, the course engages individual critical and aesthetic elements as a means towards integrating each student’s knowledge and experience of the various theatrical disciplines.

Anderson-Rabern, Silberman
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: TDF 186: Acting I.

C. Davis

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: TDF 186: Acting I.

C. Davis

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: TDF 186: Acting I.

Staff

285. Acting IIId: 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: TDF 186: Acting I).

Henderson

COURSES IN THEATRE STUDIES

250. Issues in Modern and Contemporary European Drama. (A)
A literary and theatrical examination of representative European Drama from the late nineteenth and early twentieth century to the present. The focus of this course centers on the era’s specific aesthetic movements and new theatrical forms.

Silberman

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 AMS/ENG 251.

Silberman

ELECTIVES

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.

490. Independent Study. (A)
Independent study directed by the Theatre, Dance and Film staff. Permission of chairperson.
COURSES IN DANCE: PERFORMANCE FOCUS

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. Brooks

200–201 and 300–301. Dance Production Ensemble I and II. (A)
Credit for work undertaken toward performance in at least two College productions in the course of one academic year. Students are cast in choreographies by audition. They study techniques, theory and history appropriate to mastery of the work in progress. Class/rehearsal and performance participation are mandatory. For TDF 200 and 300, students receive no credit, but a full credit is awarded for the completion of TDF 201 and TDF 301. Prerequisites: audition and permission of the instructor. Brooks, 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: TDF 116 or permission of the instructor. Vail

219 and 319. Flamenco Dance I and II. (A)
Technique, rhythms and history of Flamenco dance in a studio format. TDF 319 has a prerequisite of TDF 219 or permission of the instructor. Hevia y Vaca

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: TDF 117 or permission of the instructor. Vail

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. Prerequisite: TDF 116. 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: TDF 218 or permission of instructor. Vail

330. Choreography and the Creative Process. (A)
Investigation of choreographic problems and complex questions of artistry, based on reading, writing, discussion, feedback, movement exploration and performance. Questions asked include: What is creativity? How do we foster it for ourselves? Vail
490. Independent Study. (A)
Independent study directed by the Theatre, Dance and Film staff. Permission of chairperson.

495. Senior Seminar. (A)
See description under Theatre Required Courses.

COURSES IN DANCE: ANALYTICAL FOCUS

220. Introduction to Movement Analysis. (A)
Introduction to concepts of movement analysis, including theoretical and practical investigations of effort, shape, space and the body in motion. Motif-writing, movement fundamentals, observational techniques and history of movement analysis are introduced through lecture, discussion and movement exploration. Brooks

238. Dance on the American Musical Stage. (A)
A lecture-survey, supplemented by studio experiences, of musical stage dancing in America from the colonial period to the present. Dance styles covered include acrobatic, ballet, ballroom, melodrama, exotic, folk, jazz, modern and tap. Same as AMS 238. Brooks

240. Dance and World Cultures. (A) (NW)
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 apart 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 the lecture, discussion, movement exploration and composition, students will examine a variety of roles that music plays in the dance world, develop perceptive listening skills and undertake basic rhythmic and harmonic training. Prerequisite: TDF 116. Conley

308. Writing Dance. (A)
Exploration of dance writing through literature (fiction and poetry), scenarios, dance journalism including criticism and dance and notation. In addition to writing about dance, students will realize, through movement, dance poetry and scenarios. Prerequisite: TDF 116 or permission of instructor. Brooks

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

330. Choreography and the Creative Process. (A)
See text above, under Performance courses. 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. Videodance. (A)
An intensive workshop investigating the relatively young art form of video dance. In addition to reading and writing assignments, coursework will entail analysis of existing dance films and creation of
original works. Students will collaborate in all aspects of the creative process, which includes directing, choreography, filming, and editing. Prerequisite: TDF 116 or Permission.

380. Dance Notation and Repertory. (A)
Study of basic concepts and skills for reading and writing Labanotation, a system for recording movement in symbolic form. Studio work emphasizes recreating and performing dances from written scores.

490. Independent Study. (A)
Independent study directed by the Theatre, Dance and Film staff. Permission of chairperson.

COURSES IN FILM AND MEDIA STUDIES

162. Motion Picture Production I. (A)
This course teaches video production basics through a series of short creative exercises in videography, location lighting, sound recording, non-linear editing, and video effects. This course is designed as a prerequisite for upper-level video production workshops (e.g., 362, 364). Same as ART 162. Eitzen, Moss

165. Introduction to Film and Media Studies. (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. Williamson

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 Micheaux 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/WGS 213. Willard

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 ART 245. Kent

267. Motion Picture History. (A)
An introduction to doing history with movies. Treats movies from the 1890s to the 1960s. Provides an overview of the evolution of popular movies and of influential artistic and rhetorical counter-currents, including national film movements, experimental cinema and documentary. Same as ART 267. Moss

318. Media and Public Opinion. (S)
Examines the interrelationship between the mass media (including print, broadcast and new media), public opinion and American politics, giving particular attention to ways in which the media and public opinion both help influence and are influenced by the political process. (Previously GOV 214) Prerequisite: GOV 100. Same as GOV 318. Medvic

343. Motion Picture History Seminar. (A)
A seminar devoted to applying the methods of historical and cultural analysis to particular genres, periods, movements, or auteurs of motion pictures. Since the topic varies from term to term, this course may be repeated for credit. Recent offerings include “Hitchcock,” “The American New Wave,” “Bollywood Cinema,” “Film Noir,” “Surrealist Cinema,” and “The Films of Clint Eastwood.” Staff
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 ITA 356.

362. Narrative Video Workshop. (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: TDF 162, “Fundamentals of Motion Picture Production.” Same as ART 362.

363. Film Theory Seminar. (A)
Advanced seminar devoted to applying classical and contemporary film theory to particular problems and movies. Topic varies from term to term. Same as ART 363.

364. Documentary Video Workshop. (A)
An intensive video production workshop, focusing on documentary as a means of community building and grass-roots activism. Students work in small groups to produce short documentaries, frequently with a community partner. The topic or focus of the course varies from term to term. Students may take this course twice. Prerequisite: TDF 162, “Fundamentals of Motion Picture Production.” Same as ART 364.

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 ITA 366.

467. Thesis Project in Film and Media Studies. (A)
A thesis project may be a creative work or a research project. Students may work individually or collaboratively with rare exceptions, thesis projects are spread over two semesters, in students’ senior year. The purpose of this course is to facilitate and coordinate students’ projects. There are certain required benchmarks each term: a pitch, a project schedule, a grant proposal or research prospectus, a research portfolio, formal presentations of work in progress, etc. Beyond that, students set their own goals and agendas. Prerequisite: permission of the instructor. Film and Media Studies majors must complete two semesters. Prerequisite: permission of the instructor. (one half credit)

490. Independent Study.
Independent study directed by the Theatre, Dance and Film staff. Permission of chairperson.

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
Acting Rebellions.
Devising Theatre.
Acting 2: Classical Adaptations.
Intermediate/Advanced Modern Technique.
Music for Dance.
African Dance.
Writing for the Screen.
Science and the Media.

WOMEN’S, GENDER AND SEXUALITY STUDIES

Professor M. Alison Kibler, Chair

MEMBERS OF THE WOMEN’S, GENDER AND SEXUALITY STUDIES PROGRAM COMMITTEE

M. Alison Kibler  Professor of American Studies
and Women’s, Gender and Sexuality Studies
Maria D. Mitchell  Professor of History
Curtis C. Bentzel  Associate Professor of German
Carol Davis  Associate Professor of Theatre
Dennis Deslippe  Associate Professor of American Studies
and Women’s, Gender and Sexuality Studies
Gretchen E. Meyers  Associate Professor of Classics
Caroline Faulkner  Assistant Professor of Sociology
Linda Hasunuma  Assistant Professor of Government
Mikaela Luttrell-Rowland  Director of Alice Drum Women’s Center and Adjunct Assistant Professor of Women’s, Gender and Sexuality Studies
(on leave Fall 2015)
Marci Nelligan  Interim Director of Alice Drum Women’s Center and Visiting Assistant Professor of English (Fall Only)

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

Women’s, Gender and Sexuality Studies is an interdisciplinary major in which students learn 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 women’s and men’s experiences within a variety of contexts: historical, economic, and cross-cultural. The courses in the major help students to analyze critically the ways gendered perspectives inform fundamental concepts like race, class, or ethnicity. The major augments 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.

Three courses are required:
WGS 210 (Gendered Perspectives)
300-level WGS course in feminist theory
400-level WGS Senior Capstone
One course that focuses on sexuality within a women’s and gender studies framework, chosen from the following group:

WGS 242 (Gender, Sexuality in Antiquity); WGS 245 (Constructing Sexualities), WGS 356 (European Sexualities), or WGS 355 (The Body)

One non-western course in WGS, which emphasizes “non-Western cultures and societies, including indigenous, colonial, and post-colonial contexts.” Courses may be chosen from the following group:

WGS 260 (Gender and Global Childhoods) or WGS 282 (Women, Culture and Development).

The chairperson may also approve another WGSS course with substantial cross-cultural or transnational framework for this requirement.

Five courses in the major must be at or above the 300 level.

Courses in the major must be chosen from two different divisions (humanities, natural sciences and social sciences).

**A minor in Women’s, Gender and Sexuality Studies** consists of 6 courses.

Three of these are mandatory:

WGS 210 (Gendered Perspectives)
300-level WGS course in feminist theory
400-level WGS Senior Capstone

The other three are electives.

Courses in the minor must be chosen from two different divisions (humanities, natural sciences and social sciences).

Joint majors and minors in the Women’s and Gender Studies Program have studied abroad in the following programs in recent years: Advanced Studies in England Program in Bath, England; Butler University (IFSA) National University of Ireland in Galway; SIT Chile: Cultural Identity, Social Justice, and Community Development, SIT Netherlands: International Perspectives on Sexuality and Gender, and SU Abroad Florence, Italy.

The program also encourages students to consider IFSA Argentina: Advanced Argentine Universities Program (Concentration in Diversity, Minority and Gender Studies) and DIS: Prostitution and the Sex Trade 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 requirement; (W) Writing requirement.

**210. Gendered Perspectives. (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.  

Luttrell-Rowland, Kibler

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/TDF 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

244. Women in the Economy. (S)
An analysis of the roles women and men have historically played and continue 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 and labor market discrimination. Economic and interdisciplinary approaches are used. Prerequisite: ECO 100 and 103, or permission of the instructor. Same as ECO 244.  

Nersisyan

245. Constructing Sexualities: LGBTIQ Life, Theory and Culture. (H)
Is same-sex attraction “natural”? What is the difference between “transgender” and “intersex”? What is “heteronormativity”? What does it mean to “queer” a bar or an academic discipline? Can we say that there were “gay” Greeks and Romans? Why do we use all these letters? In this team-taught course, faculty from the natural sciences (Psychology, Biology), social sciences (Law, BOS, Anthropology), and the humanities (Classics, Linguistics, Comparative Literary Studies) will help students better understand issues surrounding gender and sexual orientation that we encounter in academic discourse, popular culture, and everyday life.  

Bentzel

250. Witchcraft and Sorcery in a Global Context. (S)
In this course we will consider how the categories of “witchcraft” and “sorcery” have been used in Anthropology, both to describe mystical acts (particularly mystical attacks) and as an ethnographic metaphor to discuss the pressures of communal life for individuals. Course content will consist of, but not be limited to, witchcraft and sorcery as a “social strain gauge,” witchcraft and sorcery as expressions of symbolic power, the gendered name of witchcraft and sorcery, as well as witchcraft and sorcery under conditions of Western-style modernity. Same as AFS/ANT/RST 250.  

Bastian

256. African American Literature I. (H)
Significant writers from the colonial period through the 19th century are studied to establish the Black literary tradition in the developing nation. Same as AFS/AMS/ENG 256.  

Bernard
257. African American Literature II. (H)
Selected writers from the Harlem Renaissance through the Black Aesthetics movement compose the modern study of the Black literary tradition in America. Same as AFS/AMS/ENG 257. Bernard

260. Gender and Global Childhoods. (NW) (S)
This course introduces students to gender and childhood studies. We examine the historical and theoretical foundations to the construction of childhood in a comparative and international perspective. We will focus on how gender, time, and place, shape understandings of childhood. Topics covered include child labor, militarization, children’s rights, citizenship and displacement, and the burgeoning field of girlhood studies. Same as IST 260. Luttrell-Rowland

282. Women, Culture and Development. (NW) (S)
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. Women in American Society and Politics since 1890. (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. Stevenson

322. Gender and Politics from a Global Perspective. (S)
This course explores how gender impacts politics and how the political system impacts women’s equality in the United States and around the world. The first part of the course evaluates theories and evidence from the political science scholarship about the “gender gap” in women’s political participation, preferences, leadership, and policy influence. The second part of the course focuses on women’s access to health care, education, employment, and legal/political rights in the developing world. We also consider how globalization, migration, religion, and conflict/wars impact the status of women around the world. Same as GOV 322. Hasunuma

325. 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 325. 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._

**350. Sociology of Gender. (S)**

An examination of the transmission of gender expectations and their impact on women’s and men’s educational and employment patterns, interpersonal relationships, psychological traits, family patterns and sexual behavior. Consideration of the role of biology, the intersection of gender with other variables such as social class and the impact of micro- and macro-scale change. Prerequisite: SOC 100. _Same as SOC 350._

_Faulkner_

**351. Politics of Gender in Contemporary Art. (A)**

An advanced seminar examining the challenges posed by the modern political movement of feminism to traditional ways of thinking about, looking at and making art. Emphasis is placed on work made during the last three decades of the 20th century. Questions considered include the feminist challenge to the cultural stereotype of “Artist”; women’s efforts to define a “female” aesthetic (or, is there such a thing?); the feminist critique of visual representation. Prerequisite: ART 103 or permission of the instructor. _Same as ART 351._

_Auster_

**355. The Body. (S)**

Examines contemporary theoretical and ethnographic discussions relating to the human body. Topics covered will include social constructions of gender, reproduction and reproductive technologies, cultural ideologies of sexuality, social inscriptions on the body, “the body in extremis,” cultural depositions of the corpse and what some might call hybrid, cyborg or even virtual bodies. Prerequisite: ANT 200 or permission of the instructor. _Same as ANT 355._

_Aleci_

**356. European Sexualities. (S) (E)**

This course 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, and queer 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_

**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_

**388. Public Health Research: Pregnancy Outcomes in American Women. (S)**

This interdisciplinary seminar will explore women’s health and pregnancy outcomes through the lenses of both science and social analysis. In addition to reading and discussion on influences on pregnancy outcomes, students will examine results of surveys of Amish women in Lancaster County, African American and Hispanic women in Lancaster City and women of child-bearing age in central Pa. This course is supported by funds from the PA Dept. of Health. Prerequisite: any course that includes methods of data analysis or permission. _Same as PUB/STS/GOV 388._

_Everett_
403. Selected Studies in Modern European History. (S)
Readings and research in selected aspects of the political, social, and cultural history of Modern Europe. Seminar topics include “Gender 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.” Some of these courses have prerequisites (see relevant departmental offerings). Same as HIS 403. Schrader, Mitchell

410. Girl Culture. (H)
This class explores the popular culture of American girls. We consider the representation of girls in American popular culture and the cultural constructions of “girlhood” itself. We follow girls as consumers, spectators, readers and producers of popular culture in contemporary and historical contexts. We are particularly interested in the role that popular culture plays in several contemporary problems associated with American girls: self-esteem, early sexualization, eating disorders, and violence. Our main case studies are dolls, children’s television, the quinceanera, and girl zines. Prerequisites: WGS 210 or AMS 100 or permission. Same as AMS 410. Kibler

462. Toni Morrison. (H)
Permission of the instructor required. Same as ENG 462. Bernard

490. Independent Study.
Permission of chairperson. Staff

TOPICS COURSES EXPECTED TO BE OFFERED IN 2015–2016
Feminist Theory.
Madonnas, Mothers, Virgins.
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 in a team-based model that is affiliated with a student’s assigned College House. 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

Hackman Scholars Program
This ten-week 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. It brings students and faculty together to work on challenging, high-level research projects. Ranging from astrophysics and chemistry to sociology and art, “Hackmans” receive a $3,500 stipend to experience first-hand the excitement and challenge of collaborating with professors in advanced scholarly work. The program is open to all current Franklin & Marshall students. Participants must be nominated by the faculty members with whom they wish to work. Typically, about 65 students and 45 faculty members participate each summer. Applications should be made by faculty sponsors to the Committee on Grants.

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 given annually; both are administered by the Office of the Provost and Dean of the Faculty. Applications should be made to the Committee on Grants.

**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, Dance and Film, the Department of Music and the Department of Art and Art History. 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 WARE INSTITUTE FOR CIVIC ENGAGEMENT**

The Ware Institute for Civic Engagement provides high-quality, transformative experiential learning opportunities that empower students to make a positive impact within their local and global communities. Through reciprocal partnerships with a variety of nonprofit organizations, the Ware Institute creates internships and volunteer opportunities for students to learn more about their communities and what it means to be a thoughtful and committed citizen of the world. The Ware Institute for Civic Engagement was founded in November 2000 through a generous gift from Trustee Paul W. Ware ’72. Among the Ware Institute’s flagship programs:

**Pre-Orientation Program**

- **Putting It Together in the Community (PIT):** PIT is a community service program for first-year students who have demonstrated a sincere commitment to service, leadership and/or civic engagement in high school and wish to continue these pursuits while in college. PIT is a great way to bond with other first-year students who share the same interest in community service. Announcements are sent to all incoming students in May and applications are due by June 15.

**Internships**

- **Public Service Summer Internship (PSSI):** This summer internship experience enables 14 students to make significant contributions to the community while learning meaningful job skills. Students are paid by the College and work full-time through June and July. Every Wednesday, interns come together on campus for discussions, reflection, and to participate in service projects. The application is made available in late January through an email announcement from the Ware Institute.
- **F&M Works in Lancaster Internship:** F&M Works in Lancaster is a year-long paid internship opportunity for students who are passionate about making a positive impact in the local community. Interns learn valuable work skills, explore potential career paths and
are mentored by dedicated community leaders. Interns also attend professional development workshops, networking dinners and reflection sessions. Applications are made available right before Spring Break through an announcement from the Ware Institute.

**Alternative Break Trips (Not for Credit)**

- **Spring Break in Honduras:** The spring break trip to Honduras is health-related and may be a good option for students who are interested in medicine, public health, and service to others. There is no course credit for this program. Spanish is not required. The Ware Institute partners with Central American Relief Efforts (CARE) for students to facilitate dental hygiene workshops and eye exams, and assist in the creation of rural self-sustainable pharmacies.

- **Winter Break in Ghana:** The winter break trip to Ghana is education-related and may be a good option for students who are interested in teaching. Students spend about two weeks at the Heritage Academy teaching lessons they have developed based on their interests or areas of study. This trip not only provides valuable teaching experience but it also exposes students to global education issues and immerses them in another culture. The Heritage Academy was founded by Kwesi Koomson ’97 to provide a progressive, empowering and life-changing education in Ghana that is in stark contrast to the antiquated and underfunded public school system.

**Volunteer Opportunities**

The Ware Institute helps students find volunteer opportunities that are fulfilling, meaningful and safe. While most opportunities take place in the Lancaster community, the Ware Institute offers three on-campus programs for students who are interested in committing to at least one semester. Background checks and clearances may be required before volunteering so students are encouraged to contact the Ware Institute for assistance.

- **Squash A.C.E.S. (Attitude, Community, Excellence and Service):** Squash ACES is an after-school enrichment program that combines academics, service and the exciting game of squash. Members of the F&M squash teams provide on-court coaching support while other F&M students volunteer to tutor and mentor the middle and high school students from the School District of Lancaster.

- **F&M S.L.A.M. (Sports, Leadership, Athletics and Mentoring):** F&M student volunteers work with Reynolds Middle School students on a one-to-one basis, providing homework help, mentoring and planned athletic activities.

- **V.I.T.A. Program (Volunteer Income Tax Assistance):** V.I.T.A. is an IRS program designed to help low and moderate-income taxpayers complete their annual tax returns at no cost. F&M partners with the United Way of Lancaster County to offer an on-campus site open on the weekends throughout tax season. Recruitment for volunteer tax preparers begins in September. Two training seminars are offered in November and then students are directed to complete training online during winter break.

**Community-Based Learning (CBL) Course Support**

Community-based learning is a method of teaching that integrates hands-on learning in the community with traditional in-classroom instruction. Students are challenged to link the theories they learn to the realities in the community through reflection and classroom discussions. The
Ware Institute works with faculty members to identify appropriate opportunities for their students and provides logistical support to facilitate placements. Students should look for the CBL designation in the course catalog to identify the various courses that are offered.

**CENTER FOR LIBERAL ARTS AND SOCIETY (CLAS)**

The Center for Liberal Arts and Society endeavors to provide a vibrant, intellectual space where faculty, students and staff, as well as our fellow citizens in Lancaster, can learn, analyze and reflect on the complex and challenging issues facing us all.

By connecting academic studies in the liberal arts and sciences to pressing cultural and social questions—from the expansion of democratic participation, the ethics and politics of war and peace, to the mechanics of how people learn, we aim to demonstrate the critical relevance of liberal learning to civic life.

We do this through our signature programs, speakers and colloquia, which enrich the curricula, foster interdisciplinary collaboration and engage the academic community as well as the general public.

CLAS also hosts The Seachrist Institute for Entrepreneurial Studies, which was established to develop programs that explore the power of entrepreneurship to foster positive change. Its emphasis is on public and social entrepreneurship and the use of entrepreneurial approaches to meet pressing civic and social needs.

**THE FLOYD INSTITUTE FOR PUBLIC POLICY**

The Center for Opinion Research seeks to provide empirically sound research solutions and opportunities for academic and public policy researchers and the local community. It conducts the Franklin & Marshall Keystone Poll, the oldest Pennsylvania statewide poll exclusively directed and produced in the state. It also aims to produce and disseminate information that supports learning by students, researchers and the general public.

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 Keystone Poll.

The Floyd Institute also houses the Local Economy Center, which provides learning opportunities for students interested in studying local economies and serves the research needs of the Lancaster community.

**THE CLINIC FOR SPECIAL CHILDREN**

In 2007 Franklin & Marshall and Lancaster General Hospital entered a five-year partnership with The Clinic for Special Children, located in Strasburg, Pennsylvania. The clinic is a non-profit medical and diagnostic service for children with inherited metabolic disorders that occur in the Old Order Amish and Old Order Mennonite communities in Pennsylvania. Under the direction of its founder, D. Holmes Morton, M.D., the clinic provides comprehensive medical care for children with chronic, complex medical problems due to inherited disorders. The mission of the clinic is to advance methods of newborn screening, to improve follow-up services, to develop better diagnostic methods and to further clinical research in an ongoing effort to improve treatment and outcomes for children who suffer from rare inherited disorders.
THE WRITING CENTER

The Writing Center provides assistance for students working on college writing assignments 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: the assignment, any data being used, a rough plan or formal outline, a few sketched-out paragraphs or a complete paper. Writing assistants will not edit a paper, but they can help writers recognize errors and make the necessary changes.

COOPERATIVE PROGRAMS OF STUDY

TEACHING

Franklin & Marshall College offers students the opportunity to secure the Pennsylvania Instructional I Teacher Certification in areas of secondary education through a cooperative program with Millersville University. Students may be certified in Citizenship (Social Studies), English, French, Spanish, German, Chemistry, Biology, Earth Science, Physics and Mathematics. Upon successful completion of the degree requirements and the certification program, the Pennsylvania Instructional I Teacher Certification is issued, granting permission to teach in public schools in Pennsylvania.

Franklin & Marshall faculty and professional staff support students who seek to apply their liberal arts education to the field of teaching and recognize that there are limitless possibilities and numerous ways to enter teaching careers. Examples include the Bank Street College Program (The Urban Semester), private school teaching, and internships (e.g., New Canaan Country School). Four years at Franklin & Marshall College does not always allow a student to complete both the Franklin & Marshall degree and full certification through Millersville University. Students are encouraged, however, to complete the Franklin & Marshall degree and a portion of certification and then fulfill certification requirements through post-baccalaureate work in education.

ENGINEERING

Franklin & Marshall students may participate in a cooperative engineering program with Case Western Reserve University, Columbia University, Pennsylvania State University College of Engineering, Rensselaer Polytechnic Institute or Washington University in St. Louis.

In this 3/2 (or 4/2) program, the student takes three (or four) years of prescribed undergraduate work at Franklin & Marshall, and then, upon successful completion of this work and receipt of the appropriate recommendation, transfers to one of the participating engineering schools. There, the student studies engineering for two additional years. Upon successful completion of five (or six) years of study, the student receives two degrees: a bachelor of arts from Franklin & Marshall, and a bachelor of science in engineering from the other institution. The student can sometimes complete a master’s degree in one additional year.

In addition to the conventional fields of engineering, other areas of study include: bio-medical engineering, environmental engineering, computer and systems engineering, engineering and policy and materials science and engineering.

Interested students should consult the Office of Student and Post-Graduate Development.
ENVIRONMENTAL MANAGEMENT AND FORESTRY

The College offers a cooperative program with Duke University in the areas of environmental management and forestry. 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 Duke 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 M.F. degree is in Forest Resource Management. Seven options are available for the M.E.M. degree: Coastal Environmental Management; Ecosystem Science and Conservation; Energy and the Environment; Ecotoxicology and Environmental Health; Global Environmental Change; Environmental Economics and Policy; or Water and Air Resources.

Interested students should consult the coordinator, Dr. Timothy Sipe, professor of biology, 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

Fundamental to the principle of independent learning is the requirement of honesty and integrity in performance of academic assignments, both in the classroom and outside. Accordingly, Franklin & Marshall College holds its students to the highest standards of intellectual integrity. Students who violate the responsibility of their educational freedom should understand the following:

A. A student charged with giving or receiving uncondoned assistance in an examination or other academic work will be brought before the Committee on Student Conduct or will be subject to administrative action.

B. Plagiarism, including unauthorized duplicate submission of work, is considered to be a violation of the Student Code. Penalties for plagiarism generally include a failing grade for the course and often suspension from the College for a period of one academic semester. It is mandatory that students adhere to the rules for acknowledging outside sources. The College relies upon a variety of means to uphold the principles of academic integrity, including the use of services to evaluate papers for plagiarism. The Writing Center makes available on its website “Using Outside Sources,” a useful guide to paraphrasing and quoting without plagiarizing. For more detailed information on documentation, students may consult the MLA Handbook for Writers of Research Papers, the Publication Manual of the American Psychological Association and the University of Chicago’s Term Papers, Theses and Dissertations by Kate Turabian.

C. No student may infringe upon the rights of others to have fair and equal access to library resources. Failure to sign out library materials appropriately is considered academic dishonesty and may result in the suspension of library privilege or other appropriate penalties. Failure to return promptly materials that have been recalled also constitutes an infringement upon the rights of others to fair and equal access to library resources. Offenders may be brought before the Committee on Student Conduct or may be subject to administrative action.

D. Academic honesty, integrity and ethics do not hinge upon, nor are they influenced by, technological change; plagiarism or other forms of cheating are just as wrong whether accomplished by pen, typewriter, computer, video or audio recording, telecommunications, or any other means. Similarly, interfering with student and faculty access to educational materials is wrong, whether the material is a computer disk or a library book.

E. A student who suspects another student of committing an act of academic dishonesty should consult with either the instructor for the course or the Office of the Dean of the College.

F. Faculty who suspect a student of academic dishonesty or receive a report of possible academic dishonesty from a student should contact the Office of the Dean of the College.

FACULTY STATEMENT ON PLAGIARISM AND OTHER FORMS OF ACADEMIC DISHONESTY

(Adopted by the Faculty in November 1980)

Plagiarism and other forms of academic dishonesty (e.g., cheating on examinations or the unauthorized duplicate submission of papers or other work) strike at the very heart of the
academic enterprise. They constitute instances of bad faith that are inappropriate to the College community. The College should make every effort to set papers and examinations that do not encourage academic dishonesty and make every effort to educate students about the nature of academic dishonesty, about why it is contrary to the spirit of learning and teaching, and about the consequences for those who engage in it.

If an instructor believes that a student has plagiarized material and can locate the source, then the instructor will normally bring the evidence promptly to the attention of the Dean of the College or designee. If the Dean of the College agrees with the instructor that the student may have plagiarized, then the Dean of the College or designee may send the case to the Committee on Student Conduct for prompt hearing. Alternatively, with the agreement of the faculty member, the student may accept a penalty imposed by the Dean of the College or designee.

If the Committee on Student Conduct finds a student guilty of plagiarism, the student will normally suffer suspension for an appropriate period. Furthermore, the instructor should award the student a failing mark for the course in which the plagiarism occurred. In the case of a student who has chosen the Pass/No Pass option, the Dean of the College will tell the Registrar to rescind the option. It is a matter of discretion of the Committee on Student Conduct whether or not to make the exact reason for the suspension a permanent part of the student’s transcript.

If an instructor believes that the student has misrepresented his or her work, but the instructor cannot locate a source, the instructor will normally consult with the department chair or the Dean of the College. If the chair or Dean agrees that there are sufficient reasons to believe a student may have misrepresented his or her work, the faculty members involved should try to determine whether or not misrepresentation has occurred. One means would be to ask the student to explain the paper. A student’s inability to understand the work he or she submitted will normally result in a significantly lowered grade for the course. Moreover, the chair should inform the Dean of the College when the instructor concludes that a misrepresentation has occurred. Again, in cases of Pass/No Pass options, the Dean of the College will tell the Registrar to rescind the option.

Allegations concerning other forms of academic dishonesty, such as cheating on an examination or unauthorized duplicate submission of papers or other work, will be subject to review in a manner similar to that described above. The penalties for such acts of academic dishonesty, which violate the spirit and purpose of an academic community, will be similar to those for plagiarism.

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 seb 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 (32) course credits are
required for graduation. A typical course is assigned one (1) course credit (equivalent to 4
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).

GRADUATION REQUIREMENTS
FOR STUDENTS ENTERING THE COLLEGE
IN THE FALL OF 2013 AND PRECEDING YEARS
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 General Education, Distribution, Writing, Language Studies,
      Non-Western Cultures, major or minor courses, or any other course used to satisfy a
      specific requirement;
3. Meet all General Education requirements by:
   a. completing the Foundations requirement during the first two years of study;
   b. completing the Distribution requirement by:
      (1) passing at least one course in the humanities, the arts and the social sciences;
      (2) satisfying the natural sciences distribution requirement by passing two natural
          science with lab courses or by passing one natural science with lab course and an
          additional course carrying the Natural Science in Perspective (NSP) designation;
      (3) satisfying the Language Studies requirement;
          a) for students matriculating in the Fall 2007 semester or beyond, the requirement
              is to complete the third course in a foreign language sequence or to demonstrate
              equivalent proficiency through testing. This requirement may be waived for
              international students from non-English speaking countries (see page 22 for
              further details).
          b) for students matriculating prior to the Fall 2007 semester, a two-course
              requirement was in place.
(4) satisfying the Non-Western Cultures requirement by passing a course which has been designated as “NW,” or through an experience which has been approved by the College as a suitable alternative, and

c. completing the First-Year Writing requirement by either:
   (1) passing ENG 105,
   (2) passing a first-year seminar,
   (3) passing an introductory course which has been designated writing intensive (W), or
   (4) earning a score of 4 or 5 on the Advanced Placement English Language and Composition exam;

4. Pass 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.

For special graduation requirements for transfer students, see “Transfer Credit Prior to Matriculation” pages 267–268.

**GRADUATION REQUIREMENTS**

**FOR STUDENTS ENTERING THE COLLEGE IN THE FALL OF 2014 AND FOLLOWING YEARS**

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, Exploration, Language Study, Non-Western Cultures, major or minor courses, or any other course used to satisfy a specific requirement;

3. Meet all Introduction and Exploration Phase requirements by:
   a. satisfying the Introduction phase of the curriculum through completion of the two-course Connections requirement during the first two years of study;
   b. satisfying the Exploration phase of the curriculum through completion of:
i. six course credits distributed as follows
   (1) one course credit in the Arts (A);
   (2) one course credit in the Humanities (H);
   (3) one course credit in the Social Sciences (S);
   (4) 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;
   (5) one course credit in Non-Western Cultures (NW) or through an experience which has been approved by the College as a suitable alternative; and

ii. 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.

For special graduation requirements for transfer students, see “Transfer Credit Prior to Matriculation” pages 267–268.

**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 Inside F&M 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 2009 was 86%.
**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

Degrees are conferred once each year at the annual Commencement exercises following the spring semester. Students who complete all requirements for the degree in summer or fall will receive their diplomas and will be listed in the Commencement program the following spring. Candidates for a degree are not required to attend these ceremonies. Those who elect not to attend should notify the Registrar and indicate their preferred mailing address in writing in order to receive their diploma.

Seniors who are close to completion of graduation requirements by the end of the spring semester may apply in the Registrar’s Office to participate in Commencement exercises 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 Assistant 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 Registrar for special permission to participate. Denial by the Registrar may be appealed to the Committee on Academic Status; 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 in the spring following completion of all requirements but will not be listed in that year’s Commencement program. For alumni 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
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
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.

Andrew M. Rouse Scholars
The Andrew M. Rouse Scholarship, endowed by and named in honor of Andrew M. Rouse ’49, former Trustee of the College, seeks to recognize two outstanding first-year students who have
demonstrated high academic achievement, strong character and significant leadership skills, whether through their communities, schools, or religious organizations. Rouse Scholars should have the potential to make a positive and significant impact on the student body, and to contribute to the legacy of the College. The scholarship covers all academic costs, including full tuition, books and laboratory fees and is renewable for three years (subject to demonstrating academic eligibility and showing leadership at the College). Each scholar is eligible to apply for a $3,000 research/travel grant that will enable the student to develop further his or her leadership skills.

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 Inside F&M.

B. ACADEMIC PERFORMANCE. Students must achieve the following minimum cumulative grade point averages as a function of the number of course credits earned:

<table>
<thead>
<tr>
<th>Course Credits Earned</th>
<th>Minimum CGPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 4</td>
<td>1.50</td>
</tr>
<tr>
<td>more than 4 to 8</td>
<td>1.60</td>
</tr>
<tr>
<td>more than 8 to 12</td>
<td>1.70</td>
</tr>
<tr>
<td>more than 12 to 16</td>
<td>1.80</td>
</tr>
<tr>
<td>more than 16 to 20</td>
<td>1.90</td>
</tr>
<tr>
<td>more than 20</td>
<td>2.00</td>
</tr>
</tbody>
</table>

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.

**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 completing the Foundations requirements; OR
- They fail all courses attempted in any one regular semester.

Students in their first semester at Franklin & Marshall College will generally not be suspended if they pass at least one course.

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. Although students may enroll in courses at another institution during the period of suspension, they may not earn credit toward graduation requirements at Franklin & Marshall College during this period. Return to the College after a first suspension is highly likely but not automatic.

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. Although students may enroll in courses at another institution during the period of suspension, they may not earn credit toward graduation requirements at Franklin & Marshall College during this period.

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. Prior to submission of this letter, students are expected to consult with their College House Dean.
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 whenever reasonably possible. If a schedule conflict occurs for a student, s/he 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 Inside F&M 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 prior to each 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.
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.

A student may neither initially enroll for fewer than three course credits nor drop to fewer than three course credits during the semester without the approval of the Committee on Academic Status.

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 Inside F&M. 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 the same as the “withdraw-without-record” deadline, 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 (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 2015–2016 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 some of their electives in areas that are of interest to them, regardless of the level at which they might perform. To this end, the College allows students the option of taking some electives on a Pass/No Pass basis. The purpose of this option is not to lighten course loads or to increase students’ grade point averages.
The following rules apply:

1. A student may elect to take up to eight course credits on a Pass/No Pass basis.
2. The Pass/No Pass option is not available during a student’s first semester at Franklin & Marshall College.
3. If a student is enrolled in fewer than five course credits, only one course credit may be taken on a Pass/No Pass basis (including courses with required Pass/No Pass registration).
4. If a student enrolls for five course credits, two course credits may be taken on a Pass/No Pass basis.
5. The Pass/No Pass option may not be used when completing a course that satisfies any of the curriculum requirements.
6. The Pass/No Pass option may not be used when completing a course that satisfies any requirements for a major, minor, or special studies area of concentration (including specified related courses).
7. The Pass/No Pass option must be elected no later than 28 calendar days after the opening of a semester. Election of the option requires the submission of a form to the Registrar’s Office with the signature of the adviser. The adviser should not be asked to sign the form if the adviser is also the instructor in the course. In this case, the student should obtain the signature of the department chair or the Dean of the College. The signature of the instructor in the course is intentionally not required, and the instructor should not be consulted in this process. The instructor should not know who is registered on a Pass/No Pass basis until after final grades are submitted.
8. A grade of “C-” (as of Fall 2005) or better earns a “P” grade.
9. 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.
10. 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.
11. The election of a Pass/No Pass option is final. To request the change of a grading option after the deadline, including changing from Pass/No Pass to a standard letter grade, a student must petition the Committee on Academic Status. The Committee rarely grants these petitions unless there were truly extenuating circumstances why the regular deadline was not met.

**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, by policy, 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. The administrative academic calendar can be found on the College server and on the College’s online calendar. Holy days are listed on the College’s website.

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 found in the Office of the Dean of the College (623 College Avenue or Old Main) and on the Registrar’s Office website.

MAJORS AND MINORS

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, preferably by the end of the second semester of the sophomore year.

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 eighty-five (85) 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 course, 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 and Gender 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. 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.

7. 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. Kimberly Armstrong, 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.

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. Students who have declared a Joint Major may not apply more than three courses from that major toward a second major or minor.

4. At least one of the departments/programs combined in the Joint Major must offer its own major.
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 one minor.
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.

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 two weeks 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 two-week deadline. 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 by completing an approved Internship-for-Credit with appropriate off-campus organizations. Internships-for-Credit broaden an educational experience by linking the theoretical and conceptual frameworks provided by the many academic disciplines offered at the College with the practical application of this knowledge.

Each Internship-for-Credit has two main components. The first 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 entails an Educational Plan that is developed in conjunction with the faculty sponsor. The Educational Plan includes a bibliography of related readings, a schedule of agreed-upon consultations between the student and faculty sponsor and a description of the proposed project, paper, or performance that the student will complete for the faculty sponsor. This project, paper, or performance will serve as the most important element of the grade received for the Internship. 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. Students must have sophomore, junior, or senior status in order to register for an Internship-for-Credit.

2. Only students with a cumulative grade point average of 2.0 or higher are eligible to register for an Internship-for-Credit. It is the student’s responsibility to verify this eligibility prior to proposing an Internship-for-Credit experience. Students may petition the Committee on Academic Status for an exemption from this policy.

3. Internships-for-Credit may occur during the academic year or during the summer. Summer Internships are approved only if they allow for regular consultation with a Franklin & Marshall faculty sponsor. Consultation may take place by e-mail or telephone where necessary. The cost of a summer Internship-for-Credit is not covered by regular tuition and must be handled directly with the Business Office.

4. A student may receive one-half, one, or two course credits for an Internship-for-Credit, depending on the time commitment per week or the length of the project. Two-course-credit Internships occur over two consecutive semesters or an entire summer and an adjoining semester (the summer counts as one semester). A one-course-credit Internship must involve a minimum of 96 hours for the semester. Almost all summer Internships-for-Credit are half-time or full-time over 10–12 weeks.

5. Internships-for-Credit may extend over two semesters; a summer internship-for-credit counts as one semester.

6. Only two course credits from Internships may count toward the completion of graduation requirements.

7. A student may receive credit for Internships that are embedded in off-campus study programs that have already been approved by the College, such as study abroad programs or the Washington Semester program.

8. A student may simultaneously receive compensation and credit for an internship.

9. Once the student has completed the Internship-for-Credit, 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 an Internship-for-Credit.

The regulations governing grading options for an Internship-for-Credit are as follows:
1. All Internships-for-Credit are graded on a Pass/No Pass basis and, therefore, credit earned for passing an Internship will not count toward a student’s major or minor.
2. Students who enroll for a two-semester Internship may not elect the “no grade/double grade” option.

The following regulations govern registration for an Internship-for-Credit:
1. The Office of Student & Post-Graduate Development (OSPGD) administers the Internship-for-Credit program. All of the appropriate application materials, along with detailed student guidelines for participation, may be obtained online by visiting the “Students” section of the OSPGD website.
2. Internships may be taken for credit only if a faculty member has agreed to act as an adviser for the Internship experience. Before speaking with the faculty member, a student should have received an offer for an Internship position from a field supervisor at an approved site. This stipulation means that a student chooses a position at a site that is part of a list of permanently approved sites, or gains approval of the site from OSPGD’s Director of Employer Partnerships.
3. The department chairperson of the faculty sponsor’s department must approve the Application for Internship Study and the Educational Plan for an Internship-for-Credit.
4. The student must submit an Application for Internship Study and an Educational Plan for an Internship-for-Credit to the Registrar’s Office after receiving approval of all application materials from OSPGD.
5. Students undertaking an Internship-for-Credit over the summer are required to register and pay the appropriate tuition charge as published each spring.

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. (Students participating in the secondary education program at Millersville University may take more than one course to meet the program requirements. See “Careers and Programs of Study-Teaching” for more information.)

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. 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 each assignment. 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 never be posted publicly but must be communicated to students individually, in private.

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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Numerical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
</tr>
<tr>
<td>B-</td>
<td>2.70</td>
</tr>
<tr>
<td>C+</td>
<td>2.30</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>1.70</td>
</tr>
<tr>
<td>D+</td>
<td>1.30</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
</tr>
<tr>
<td>D-</td>
<td>0.70</td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
</tr>
</tbody>
</table>

“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 “C-“ are converted by the Registrar to “P.” Grades of “D+” through “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, 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.

Any Incomplete grade not approved by a College House Dean will be returned by the Registrar to the instructor.

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 Dean of the College. 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 Inside F&M. 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 at the same time. 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 written request by the student. Current students may make these requests through Inside F&M, 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. Former students may request a transcript by mailing or faxing the request form found at www.fandm.edu/registrar.

Official transcripts released directly to the student will be marked as such. 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 Business Office, 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 courses that are completed at institutions that are accredited by one of the regional accrediting commissions and documented on an official transcript sent directly to the Registrar’s Office from the original institution.

Transfer of credit to Franklin & Marshall College is generally governed by the following regulations:

TRANSFER CREDIT PRIOR TO MATRICULATION (TRANSFER STUDENT)

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 amount of credit transferred is determined by dividing the total number of semester hours of credit earned by four (the number of credit hours per course at Franklin & Marshall College). This gives the number of course credits that may be granted 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 are not posted on a student’s Franklin & Marshall transcript. Graded courses for which credit is transferred from other institutions will count toward the requirement that a student must pass 21 regularly graded courses to graduate from the College.

The specific courses that are transferred are determined on the basis of the following considerations:

a. Existence of comparable courses in the Franklin & Marshall curriculum;
b. Intended field of concentration (including related courses);
c. Distribution requirements; and
d. Grades earned (“C-” or better is required; courses taken on a Pass/No Pass basis are generally not eligible for transfer credit).
No transfer credit is granted for technical courses, physical education courses, secretarial courses, engineering courses, drafting courses, courses in military science, real estate courses, or any courses from non-accredited schools or institutes. Additionally, criminal justice courses, communications courses (including oral communications), vocal or instrumental music lesson credits and most education courses, are not awarded Franklin & Marshall credit.

Online courses may transfer only upon approval of the appropriate department chairperson, and only for general elective credit.

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 (see pages 270–271)
d. International Baccalaureate Diploma (see pages 271–272)
e. CLEP Subject Tests (see page 272)
f. Proficiency examinations (see pages 266–267, under Examination Procedures).

Foreign student credentials 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. When the department chairperson is uncertain, the student may be offered the opportunity to take a proficiency examination (without charge).

Incoming transfer students are granted Franklin & Marshall credit upon receipt of their final official transcript from their previous institution. This transcript must be mailed directly from the previous institution to the Franklin & Marshall Registrar’s Office.

**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 is considered only for courses that are completed at institutions that are accredited by one of the regional accrediting commissions or by a recognized accrediting agency for that discipline. Transfer of credit requires approval of the appropriate department chairperson at Franklin & Marshall College before the course is taken. Foreign student credentials are evaluated on a case-by-case basis and may require the services of a course credit evaluation agency at the student’s expense.

The College grants transfer credit for work successfully completed elsewhere 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 course equivalencies can be made:

- 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.

No transfer credit is granted for technical courses, physical education courses, secretarial courses, engineering courses, drafting courses, courses in military science, real estate courses, or any courses from non-accredited schools or institutes. Additionally, criminal justice courses, communications courses (including oral communications), vocal or instrumental music lesson credits and most education courses, are not awarded Franklin & Marshall credit. 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, or unless the student receives approval from the Educational Policy Committee prior to registering for the course.

Online courses may transfer only upon approval of the appropriate department chair, and only for general elective credit.

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.

**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:

<table>
<thead>
<tr>
<th>AP Subject</th>
<th>Franklin &amp; Marshall Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Art: General</td>
<td>General Elective</td>
</tr>
<tr>
<td>Studio Art: Drawing</td>
<td>General Elective</td>
</tr>
<tr>
<td>History of Art</td>
<td>General Elective</td>
</tr>
<tr>
<td>Biology</td>
<td>BIO 179 (fulfills Natural Science with Lab)</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHM 179*</td>
</tr>
<tr>
<td>Chinese Language/Culture</td>
<td>CHN 401</td>
</tr>
<tr>
<td>Computer Science</td>
<td>CPS 111</td>
</tr>
<tr>
<td>Economics (Macro)</td>
<td>General Elective</td>
</tr>
<tr>
<td>Economics (Micro)</td>
<td>General Elective</td>
</tr>
<tr>
<td>English Literature/Comp.</td>
<td>General Elective</td>
</tr>
<tr>
<td>English Language/Comp.</td>
<td>ENG 105</td>
</tr>
<tr>
<td>Environmental Science</td>
<td>ENV 117 (or ENV 114, consult with department; 117 will not fulfill Natural Sciences)</td>
</tr>
<tr>
<td>French Language</td>
<td>FRN 202</td>
</tr>
<tr>
<td>French Literature</td>
<td>FRN 202</td>
</tr>
<tr>
<td>Human Geography</td>
<td>ENV Elective*</td>
</tr>
<tr>
<td>German</td>
<td>GER 202</td>
</tr>
<tr>
<td>Govt &amp; Pol: U.S.</td>
<td>GOV 100</td>
</tr>
<tr>
<td>Govt &amp; Pol: Comparative</td>
<td>GOV 120</td>
</tr>
<tr>
<td>U.S. History</td>
<td>HIS 238</td>
</tr>
<tr>
<td>European History</td>
<td>HIS 221</td>
</tr>
<tr>
<td>World History</td>
<td>HIS Elective</td>
</tr>
<tr>
<td>Italian Lang/Culture</td>
<td>ITA 202</td>
</tr>
<tr>
<td>Japanese Language</td>
<td>JPN 301</td>
</tr>
<tr>
<td>Latin: Literature</td>
<td>LAT 201</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>LAT 201</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>MAT 109</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>MAT 109</td>
</tr>
</tbody>
</table>
Statistics	MAT 116
Music Listening/Literature	MUS 101
Music Theory	MUS 222
Physics 1	PHY 101†
Physics 2	PHY 101†
Psychology	PSY 179*
Spanish Language	SPA 221
Spanish Literature	SPA 222

*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 FOREIGN AND 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. IB Certificate
recipients receive one or two course credits (depending on discipline) for each higher level examination 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. See the Registrar for details.

Other course credits from foreign countries are evaluated on an individual basis. If an accurate evaluation of foreign 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.

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, changes from full-time to part-time status, or takes a leave of absence, and officially notifies the Office of the Dean of the College, then the College refunds tuition, room and board charges previously paid by the student, less administrative costs, based on the following schedule:

- During First Week ....................... 87.5%
- During Second Week .................. 75.0%
- During Third Week ................... 62.5%
- During Fourth Week ................. 50.0%
- During Fifth Week ................... 37.5%
- During Sixth Week ................... 25.0%
- During Seventh & Eighth Weeks..... 2.5%

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.
LEAVE POLICY

There are four types of Leaves of Absence subject to the various conditions described in the following sections. See also International and Off-Campus Study.

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 the Dean of the College.
5. A student on Leave of Absence may not take courses at another institution for transfer credit, unless an exception is approved as noted below.

A. Leave of Absence for Health Reasons

1. Recommendations for a Leave of Absence for Health Reasons take the form of a written statement from Health Services or Counseling Services (or both) to the College House Dean. Under certain circumstances, upon the recommendation of the Director of Health Services and/or the Director of Counseling Services, a student may be placed on required Leave of Absence for Health Reasons. A detailed copy of this policy is available from the Office of the Dean of the College.
2. A request for a Leave of Absence for Health Reasons may be made at any time.
3. A Leave of Absence for Health Reasons is granted either for a specified length of time (usually one or two semesters) or for an unspecified length of time, depending upon the nature of the reason for the leave.
4. When a student is granted a Leave of Absence for Health Reasons during the course of a semester, the grade of “W” will normally be recorded for courses in which the student is enrolled that semester. If appropriate, and if the instructor is agreeable, a “W” may be replaced by a regular grade upon completion of work. A student who is interested in pursuing this option must contact the Office of the Dean of the College.
5. Students who are on a Leave of Absence for Health Reasons may not take courses at another institution for transfer credit without first obtaining written permission from Health Services or Counseling Services. If such approval is granted, transfer coursework is subject to the College’s policies on Transfer of Credit After Matriculation.
6. A student who is ready to return to Franklin & Marshall College must notify the Office of the Dean of the College in writing. Such notification must be accompanied by a written statement from Health Services or Counseling Services (or both). Notification is normally required no later than May 1 for the fall semester or December 1 for the spring semester.

B. Leave of Absence for Personal Reasons

1. A request for a Leave of Absence for Personal Reasons must be made to the College House Dean. A leave is normally granted only if the request is made no later than May 1 for the
fall semester or January 1 for the spring semester, and only if a student is in good academic standing for his or her most recently completed semester.

2. A request may be made for a variety of reasons; for example, a student may wish to work or travel for a time, or may need some time away from the College to consider future academic plans and goals. This leave is granted for a specified period of time.

3. A student who is on a Leave of Absence for Personal Reasons may not take courses at another institution for transfer credit without first obtaining written permission from the Committee on Academic Status. If such approval is granted, transfer coursework is subject to the College’s policies on Transfer of Credit After Matriculation.

4. A student who is ready to return to Franklin & Marshall College must notify the Office of the Dean of the College in writing. Notification is normally required no later than May 1 for the fall semester or December 1 for the spring semester.

C. Leave of Absence for Academic or Disciplinary Reasons
   1. A student may be placed on a Leave of Absence for Academic Reasons.
   2. Students may be suspended for one or two semesters because of administrative or Committee on Student Conduct disciplinary action.
   3. Students who are on a Leave of Absence for Academic Reasons may not take courses at another institution for transfer credit without first obtaining written permission from the Committee on Academic Status. If such approval is granted, transfer coursework is subject to the College’s policies on Transfer of Credit After Matriculation.
   4. Students who are on a Leave of Absence for Disciplinary Reasons may not take courses at another institution for transfer credit without first obtaining written permission from the Dean of the College. If such approval is granted, transfer coursework is subject to the College’s policies on Transfer of Credit After Matriculation.

D. Leave of Absence for Financial Reasons
   1. A student may be placed on a Leave of Absence for Financial Reasons.
   2. Students who are on a Leave of Absence for Financial Reasons may not take courses at another institution for transfer credit.

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. 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 is a critical tool for 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. Approximately 90% 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 Innovation Zone on the lower level of the Patricia E. Harris Center for Business, Government & Public Policy. These facilities also provide printing for a small fee per page. 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.

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 located in the 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 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 Information Technology Committee reserves the right to modify this policy at any point in time. You can find the full policy on the College website: www.fandm.edu/college-policies/technology/acceptable-use-policy.
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 that students take at least five academic courses during their senior year.

Other factors considered in a student’s evaluation are a demonstrated interest in the College (such as campus visit), participation in extra-curricular activities, standardized test scores, recommendations and information concerning the student’s personality and character.

Domestic students may elect to take advantage of our Standardized Test Option. Applicants choosing this option are required to submit two graded writing samples from their junior or senior year in place of their standardized tests. The writing samples may be creative or analytical essays written for English, humanities, or social science courses.

CAMPUS VISIT AND INTERVIEW

A campus visit and interview are important parts of the admission process and are strongly recommended. On-campus interviews are available by appointment Monday through Friday from 9:15 a.m. to 3:15 p.m. Campus tours depart from the Admission Office, Monday through Friday at 10 a.m., 11 a.m., 1 p.m., 2 p.m. and 3 p.m. For those who are unable to visit the campus on a weekday, group information sessions and tours are conducted on select Saturdays. Interested parties are advised to schedule appointments for interviews and sessions at least two weeks in advance by contacting the Office of Admission at (877) 678-9111 or online at www.fandm.edu/visit/admission-visit.

TYPES OF APPLICATION

EARLY DECISION

Candidates who select Franklin & Marshall as their first choice college and desire early notification are invited to apply through the binding Early Decision Program. 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 enrollment fee within one month of acceptance.

REGULAR ADMISSION
The Regular Decision deadline for submitting applications and all required credentials is January 15. An admission application must be accompanied by a $60, non-refundable application fee. Applicants for first-year status are notified of the Admission Committee’s decisions by April 1. Admitted students’ $500 non-refundable enrollment fee must be postmarked by May 1.

SPRING ADMIT
Each year, Franklin & Marshall offers admission to a small group of graduating seniors for the spring semester of the following year. Spring Admit students are individually advised to help them arrange fall opportunities which may include a study abroad program, community service, or academic credits at other institutions. Students may choose to apply for the Spring Admit program or they may be offered it as an alternative to fall admission.

ACCELERATED ADMISSION
Candidates for accelerated entrance to college are those outstanding secondary school students who are: 1) qualified to enter college after having completed three years of secondary school and who will receive their high school diploma after having satisfactorily completed their first year of college; or 2) those students who will graduate from secondary school in less than four years, having successfully completed all academic units required for a diploma.

The College welcomes applications from such students who are socially mature and academically prepared for a college experience. An on-campus interview is a requirement for all Accelerated Admission candidates. These students must identify themselves as such when making an appointment. These candidates also need to include a personal statement articulating the reason for beginning college early. A letter of recommendation from the high school administration and a statement of permission from parents/guardians must be part of the submitted credentials. To apply, students should follow the normal application procedure, using the Early Decision & Regular Decision deadlines for their applications.

HOME SCHOoled OR NON-T raditionally EDUCATED STUDENTS
Students who have been home schooled or educated in a non-traditional setting are welcome to apply to Franklin & Marshall College. Candidates for admission who have been 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 that home schooled students also submit a reading list, and that he or she have an on-campus interview. It is strongly recommended that home schooled students submit standardized test scores for best admission consideration.
TRANSFER STUDENTS

Transfer applicants are welcome for either the fall or spring semesters. Transfer applicants are expected to be in good academic and social standing at their present college or university. The Office of Admission maintains a May 1 priority deadline for fall transfer applications. For spring transfer admission, the priority deadline is November 15. 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 by June 1. Completed spring applications will be notified by December 15.

Transfer students are eligible for financial assistance if funds are available. However, no financial aid is available for international transfer students. Financial aid applications and all supporting financial aid documentation must be submitted as soon as possible, but no later than May 1 for the fall semester and by November 15 for the spring semester. Applicants are expected to complete all financial aid documentation at the time of application submission.

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 son’s or daughter’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.

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. Fellows also receive special opportunities for excursions and on-campus activities.

NATIONAL MERIT SCHOLARS
National Merit Scholars who are designated National Merit Finalists and who notify the National Merit Scholarship Corporation that Franklin & Marshall College is their first choice (by the date specified by the National Scholarship Corporation) will be named National Merit Scholars. These students may receive a National Merit Scholarship Corporation scholarship in addition to any Franklin & Marshall awards that may be granted during the application process.

WILLIAM H. GRAY, JR. SCHOLARS
The William H. Gray, Jr., Scholarship, established by its namesake’s son William H. Gray III, provides need-based financial aid to outstanding students from backgrounds that are traditionally underrepresented in higher education. Gray Scholars are chosen on the basis of potential for achievement as demonstrated by academic strength, leadership ability and commitment to service. The financial aid package for Gray Scholars is designed to reduce loan and job expectations over the course of four years. Gray Scholars receive student and alumni mentors and can apply for special internships on and off campus. Questions may be directed to the Office of Admission at (717) 358-3951 or (877) 678-9111.

COURTNEY ADAMS MUSIC SCHOLARS
Musically active students in the applicant pool are invited to audition for a music scholarship at Franklin & Marshall. Renewable for four years, the scholarship is awarded to students on the basis of musicianship, dedication and the potential for making positive contributions to the Music program at Franklin & Marshall.
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, laboratories, and special events such as lectures and theater productions. 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 of expenses shown below indicates actual charges for 2015–2016 and is subject to change:

Tuition, Services & Activities Fee ....................... $50,300 per year
Health Services Fee ........................................... $100 per year
New Student Orientation Fee .............................. $200 (one-time fee)
—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) ...................... $7,550 per year
Special Room Fee (Single) ................................. $8,190 per year
Suite ...................................................................... $8,490 per year
New College House Apartment Fee ..................... $8,850 per year

Meal Plan Options (Block Plans & Weekly Plans Available):

Block Plans:
225 Block Meal Plan/$120 Flex Dollars* .............. $2,610 per semester
150 Block Meal Plan/$400 Flex Dollars** .......... $2,545 per semester
125 Block Meal Plan/$220 Flex Dollars*** .......... $2,325 per semester
70 Block Meal Plan/$225 Flex Dollars*** .......... $1,630 per semester
50 Block Meal Plan/$340 Flex Dollars*** .......... $1,395 per semester

Meals Per Week Options:
14 Meals Per Week w/$250 Flex Dollars* .......... $2,610 per semester
7 Meals Per Week w/No Flex (DHall Only)*** .... $1,445 per semester
*First-years are required to select one of these options, available to Sophomores, Juniors and Seniors
**Minimum required for Sophomores, available to Juniors and Seniors
***Available to Juniors and Seniors

First-year and Sophomore students are required to purchase a meal plan, unless they are commuting students. See above for the meal plans that are available to First Years and Sophomores. Please contact the Office of the Dean of the College to determine if a student is considered a commuter.

In the event a student depletes the meals in his/her meal plan prior to the end of the semester, the student can purchase additional meals. Rates for additional meals can be found at www.fandm.edu/student-accounts-and-billing/tuition-and-fees.

Student Health Insurance Options:
Student Health Insurance Plan (SHIP) ................... $1,800 per year
Complementary Care Option ............................. $300 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 Hulse Q/M. The SHIP policy runs from August 1 through July 31. The SHIP can be waived if the student provides verifiable proof of comparable insurance coverage to Hulse/QM. The waiver process must be completed by September 15.

If a student is not covered by any other health insurance, the student will automatically be enrolled in the SHIP. International students must select the SHIP option.

If student has personal insurance that allows the student to waive enrollment in F&M’s SHIP but the student’s personal plan has limited in-network options for the Lancaster area and/or a high deductible, the student may purchase Complementary Care.

Other Fees:
- Part-time students .................................................. $6,288 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.

All fees are subject to change without notice.

**PAYMENT**

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 credit card payments.

Franklin & Marshall does recognize that full payment due at the beginning of each semester may present a problem, so we have formed a relationship with Tuition Management Services...
(TMS) to provide a monthly tuition payment plan. This plan provides a convenient alternative to lump sum semester payments.

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 expected to be made in order for the student to enroll in a subsequent semester. 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:

Jan Masland
Appel Health Services Bldg.
Franklin & Marshall College
Lancaster, PA 17604
telephone number: 717-358-7178
eemail address: jmasland@fandm.edu

Inquiries or complaints may also be directed to:

The Office for Civil Rights Philadelphia Office
U.S. Department of Education
100 Penn Square East, Suite 515
Philadelphia, PA 19107-3323
telephone number: 215-656-8541; fax: 215-656-8605
eemail address: OCR.Philadelphia@ed.gov.
Institutional Procedures Relating to the Family Education Rights and Privacy Act of 1974 (FERPA)

The Family Education Rights and Privacy Act, commonly referred to as the Buckley Amendment, is supportive of previously adopted policy of Franklin & Marshall College concerning the rights of students to the confidentiality of their educational 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. A copy of the Act and the regulations issued thereunder are available at the reserve desk of the library.

The major features of the Act are the identification of “educational 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 establish the procedures used at Franklin & Marshall College for the implementation of the Act.

A. Definition of Educational Records

1. Educational Records are defined by the Act as those records, files, documents and other materials that contain information directly related to a student and which 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 are:
   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 slips 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 Committee on Student Conduct and general information regarding the student’s curricular and extracurricular performance and activities, held in the office of the Dean of the College.
   d. Records held by the student’s academic adviser.
   e. Records and documents held in the Office of Financial Aid.
   f. Records and documents relating to the decisions of the Health Professions Advisory & Review Committee.
   g. Records and documents relating to the decisions of the Pre-Law Adviser.
   h. Records of the Office of Student and Post-Graduate Development.

Further information about files, their location and their custodian is in the Office of the Provost and Dean of the Faculty.

B. Privacy of Student Educational Records

1. Release of Student Educational Records. No educational 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. Student requests for the release of information may be made by filing the forms provided for the purpose with the officer of the College holding such educational record(s).
2. Exceptions to Release Only at Student Request. 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. The following persons and organizations may have such access, subject to the limits stated in each case:

a. School officials who have a legitimate interest in the records. School officials include 1) 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, or 3) a person employed or under contract to the College to perform a special task. A school official has a legitimate educational interest if the official is 1) 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 family, such as health care, counseling, job placement, or financial aid.

b. Authorized representatives of government who need the information to audit, oversee, or administer the Act, federally supported education programs, or financial obligations of the College or the student.

c. 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.

d. Accrediting organizations for the performance of their accrediting function.

e. Parents of a student who have established with the office of the Dean of the College or the Registrar (depending on the record sought) that student’s status as dependent according to Internal Revenue Code of 1954, Section 152.

f. Such information as may be required by judicial order, or any lawfully issued subpoena, will be released on condition that the student is notified prior to release of the information and on condition that the College will not suffer legal liability.

g. 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.

h. To officials of another school, upon request, in which a student seeks or intends to enroll.

i. 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.

j. If required by a state law requiring disclosure that was adopted before Nov. 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
3. Directory Information. Neither the Act nor these regulations preclude the publication by the College of directory information providing 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:
   a. Name, home address, home phone number, local address, local phone number, e-mail address, photograph and names and addresses of parents;
   b. Name and address of secondary school attended, periods of enrollment and degrees awarded, field of concentration, date of graduation, confirmation of signature and membership in College organizations;
   c. Such information as is normally included on rosters and programs prepared for athletic contests.
   d. 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 Registrar’s Office. Students are responsible for any impact that such an action may have and should carefully consider the consequences. Questions should be directed to the Registrar’s Office.

4. Implementation by Instructors. 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. This policy entails the following:
   a. 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;
   b. In many cases, it is helpful for students to know the distribution of grades for each assignment. 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 distribution on graded assignments;
   c. Student grades may never be posted but must be communicated to students individually and in private.

C. Access to Educational Records

Subject to the procedures and the exceptions contained below, students have a right of access to the records described in Section A, above, and a right to challenge the accuracy of these records and to have explanations or comments on these records placed in their file.

1. Exceptions. The Act contains exceptions to the general right of students to access to files and documents. These exceptions are:
   a. 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;
   b. Confidential letters and statements as to which students have waived a right of access;
   c. 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.);

d. Records and documents of the Department of Public Safety;

e. Records created and maintained by Health Services, Counseling Services and the Office of Student and Post-Graduate Development that are used in connection with the treatment of the student;

f. Confidential financial records of students’ parents;

2. 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 school or a professional school. 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.

3. Access Procedure. Students who wish to review their records may do so by submitting an application to the pertinent officer of the College on a form provided for the purpose that shall identify what part of the educational records the student wishes to review. Within 45 days of the submission of the application, the College officer responsible for maintaining those records will meet with the student and present to the student 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 and Dean of the Faculty (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 and Dean of the Faculty (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 Dean of the Faculty and a member chosen by the Provost and Dean of the Faculty’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 and Dean of the Faculty.

4. Record of Access. Those officers under whose care the records are kept shall keep a log of the names (and dates) of those who have requested or have had access to the student’s record, and the legitimate interest that each person has in obtaining this information.

5. 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 Committee on Student Conduct, or any other committee or officer 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 educational records are made and to allow corrections of that information or inclusion of explanatory statements.

D. Administration of Policy and Procedures
The Provost and Dean of the Faculty shall have general oversight of the administration of the Act and the above regulations. Questions concerning the matters covered by these regulations and the Act should be directed to the Provost and Dean of the Faculty in such form as may be required. Recommendations for changes and amendments to these regulations will be welcomed by the Provost and Dean of the Faculty, and such changes as experience demonstrates should be made will be made in a manner and at such times as conform to Franklin & Marshall procedures.
Accommodation for Disabilities: Rehabilitation Act of 1973, Section 504

In accordance with equal education opportunity laws, Franklin & Marshall College arranges to provide appropriate academic accommodations for students whose disabilities limit their participation in academic programs for which they are qualified. Students are required to notify the College if they will require special services or accommodations in the classroom or if they want faculty, academic advisers, or administrative offices notified of a disability. Appropriate 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 Coordinator of Disability 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 appropriate academic accommodations for each individual student. Every student at the College has the opportunity to complete a Disability Notification Form available throughout the year at the Office of Disability Services. The College considers information provided on this form as confidential and uses it to provide appropriate 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 Disability 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 Senior Associate Dean Flores-Mills. 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 the Dean of the College within 90 days and should include a description of the nature of the alleged discrimination and the parties. If the participation of the Senior Associate Dean of the College in the process would create a conflict of interest, written complaints may be made to the Dean of the College.

Within 30 business days of receipt of the complaint, the Senior Associate Dean of the College 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 Senior Associate Dean of the College 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, Dean of the College. 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, Administration and Treasurer, David Proulx.

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 Disability 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.