### College of Arts and Science

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A Community for Liberal Learning

“The work of the College of Arts and Science is fundamental. It is the basis of all professional study. No professional school can be self-sufficient. The College in its undergraduate and graduate work must remain the heart of the whole situation, and send its quickening life blood into every fiber and tissue.”
— Chancellor James H. Kirkland
at the semicentennial celebration of the university
October 1925

CHANCELLOR Kirkland’s words were prophetic of our times as well as true of his own. Since its founding Vanderbilt has pursued its mission of excellence in the liberal arts with a commitment to liberal learning that is the special concern of the College of Arts and Science. Liberal learning endures because it brings men and women to subjects, concepts, and modes of thought that enable them to think critically about where humanity has been and where it ought to be going. The liberal arts spark curiosity and broaden vision, help to instill understanding of matters otherwise unknown, and encourage individuals to live their lives with a sense of purpose, context, and relatedness. A liberal education has perennial relevance and usefulness: it should prepare its recipients to think precisely, to reason clearly, and to judge wisely—all practical considerations in the pursuit of constructive and satisfying lives and in the practice of today’s professions and vocations.

Today the College of Arts and Science maintains its historic position as the heart of the university. Excellence in undergraduate and graduate education is its unwavering aim. The College of Arts and Science provides intellectual stimulation, training, and incentive designed to foster the lifelong liberal learning of its graduates. It offers challenging, forward-looking programs of study in the humanities, natural sciences, and social sciences resourcefully taught by distinguished faculty recognized for excellence in research, scholarship, and creative expression. It promotes self-realization and expression in the context of social responsibility.

Facility and Students
The College of Arts and Science derives its strength from the range of its academic offerings, from the quality of the faculty who teach, and from the quality of the students who come to learn. Traditionally fortunate in its ability to attract and retain a superior faculty, the College of Arts and Science has about 400 full-time professors who supplement their achievements in the classroom with significant research, creativity, and writing. Many faculty members hold awards for distinguished scholarship and have been elected to high offices in their professional associations, including the Classical Association of the Middle West and South, the American Economics Association, the American Political Science Association, the American Philosophical Association, the American Physical Society, the American Historical Association, and the Biophysical Society.

The quality of the College’s faculty is matched by that of its diverse student body. Undergraduates come from the fifty states and fifteen to twenty foreign countries and are almost evenly divided between men and women.

Academic Support

The Writing Studio / Arts and Science Tutoring
The Writing Studio provides undergraduate students the opportunity to meet with trained writing consultants to discuss individual writing concerns, from invention to drafting to revision. The Writing Studio provides a space for students to discuss work-in-progress with expert writers, to create their own writing, and to utilize available resources for improving both writing and critical thinking skills.

The mission of the Vanderbilt Writing Studio is to enhance student writing and writing instruction, and to encourage regular conversation about the writing process. The Writing Studio’s extensive programming includes individual consultations, workshops, creative writing groups, workshops focused on specific issues in academic writing, open-mike readings, and student-run writers’ support groups.

The Writing Studio is located at 1801 Edgehill Avenue, Suite 112, and there is a satellite location in 217 Commons Center convenient to the first-year residence halls. The Writing Studio website can be accessed at vanderbilt.edu/writing.

One-on-one tutoring in many subjects is available through Arts and Science Tutoring located at 1801 Edgehill Avenue. This service is free to all undergraduates.

Computers
The following locations are available for walk-in use of computers and software:

- Center for Second Language Studies (Furman Hall 001) — 2 Macintosh and 2 Windows systems, 12 iPads, and 10 digital recorders for student use in the center
- Garland lab and computer classroom (Garland Hall 119) — 24-seat lab/30-seat classroom with 50 Windows and 4 iMac systems
- Stevenson computer lab and lounge (Stevenson Center 2200) — 33 Windows systems
- Wilson computer lab (Wilson Hall 120) — 30 iMac systems

All of the college’s computer labs and classrooms offer a wide variety of “courseware” and commercial “productivity software,” including word processing packages. Color printing and scanners are available in most of the labs. In addition to accessing software on the local servers, students may also connect to both campus services and the Internet, including VUmail and e-resources in the libraries, as well as course materials in Blackboard. While use of the above facilities is free, printing is charged at a rate of four cents per page.

The Garland and Wilson labs are open six days a week, with the Garland lab available for walk-in use for more than ninety hours per week. The computer classrooms in the Center for Second Language Studies and Wilson Hall are available for walk-in use during the late afternoon and evening hours. Stevenson Center lab and lounge are card-accessible seven days a week, 6:00 a.m. to 1:00 a.m. All lab hours are posted by semester at as.vanderbilt.edu/vuvt/computer_services/facilities/Labs.php. In addition to the college facilities, a few “kiosk” systems are available in the Sarratt Student Center. As a result, access to computers in the College of Arts and Science is extensive.
At last count, more than 98 percent of Vanderbilt students own a personal computer. Since all students also have a high-speed network connection, it is convenient for students to have their own system (please consult the ResNet guidelines for supported systems). However, most students will find that the college computing facilities provide all of the computing resources that are needed for success at Vanderbilt.

The Advising System

Entering first-year students are assigned faculty advisers from CASPAR (College of Arts and Science Pre-major Academic Advising Resources Center). These first advisers, called "pre-major faculty advisers," counsel students during their first three and one-half semesters, or until the students choose majors, when they are assigned faculty advisers in their major department or program. Pre-major faculty advisers are especially trained to help students move efficiently through the requirements of AXLE (Achieving Excellence in Liberal Education) and chart a course of study.

During the last two years of study, when a student is acquiring depth of knowledge in a major field, studies are guided by a specialist in that field. Students are encouraged to see their faculty advisers at any time since the advisers are available for guidance and counseling and are faculty members with whom advisees may be studying.

All students are required to see their faculty advisers prior to registration for each semester.

Advisers are generally happy to talk over any problems students may have, although their chief function is academic counseling. In addition, three members of the Office of the Associate Deans of the College, themselves teaching faculty members, have as their principal duty counseling students and referring them to sources of expertise on non-academic problems.

Public Lectures

THE BERRY LECTURES. Established in 1988 through the generosity of Kendall and Allen Berry, John and Shirley Lachs, Steve Turner, and Jim Burke. Three annual lectures—the Berry lecture, the Steve Turner lecture, and the Jim Burke lecture—are given by distinguished philosophers.

THE LOUIS JACOB BIRCHER LECTURE IN CHEMISTRY. Established in 1976 in recognition of Professor Bircher’s forty-one years of service to Vanderbilt beginning in 1921. He served as the sole professor of physical chemistry until 1954, was chair of the Department of Chemistry from 1955 to 1961, and retired as professor emeritus in 1962. Family, colleagues, students, and friends of Professor Bircher have provided generous support for the series. The lecture is presented by a leading physical chemist.

THE BYRN HISTORY LECTURE. Established in 1986 and endowed by the late J. W. Bynm of Dickson, Tennessee, a student and admirer of the thought of the British historian Arnold Toynbee. Annual lectures deal with his fields of interest: world history, philosophy of history, and historiography.

THE FREDERICK LEROY CONOVER MEMORIAL LECTURE. First given in 1977 in honor of Vanderbilt’s first analytical chemist, Professor Conover came to Vanderbilt in 1923 and remained for thirty-seven years. Lectures given by a distinguished analytical chemist are supported by family, colleagues, students, and friends of Professor Conover.

THE WALTER CLYDE CURRY SHAKESPEARE LECTURE. Inaugurated in 1982 and funded by one of his former students, this lecture honors the late Walter Clyde Curry, distinguished medieval and Renaissance scholar, author of books on Chaucer, Shakespeare, and Milton, and for forty years beloved professor of English at Vanderbilt. Bringing to campus in alternate years eminent Shakespearean scholars and experienced Shakespearean performers, the lectureship gratefully recognizes Professor Curry’s devoted service and lasting contributions to the university.

THE WAITE PHILIP FISHEL LECTURE. Established in 1974 as a tribute to Professor Fishel, who was known as an outstanding, popular teacher and was renowned for his research in metallurgy. Through the generosity of family, colleagues, students, and friends, the lecture is presented by a leading inorganic chemist.

THE HARRY C. HOWARD JR. LECTURESHIP. Established in 1994 at the Robert Penn Warren Center for the Humanities in honor of Harry C. Howard Jr. (B.A. 1951). The lecture ship was endowed by Mr. and Mrs. Thomas Nash Jr., and Mr. and Mrs. George Renfro, all of Asheville, North Carolina, in honor of their longtime friend and attorney. The lectureship allows the Warren Center to bring an outstanding scholar to Vanderbilt annually to deliver a lecture on a significant topic in the humanities.

THE ARTHUR WILLIAM INGERSOLL MEMORIAL LECTURE. Established in 1973 to honor Arthur Ingersoll, professor of organic chemistry at Vanderbilt until his death in 1969. Each year contributions for this lecture are received from family, colleagues, students, and friends. A leading organic chemist is invited to present the lecture.

THE CARL K. SEYFERT LECTURE IN ASTRONOMY. Established in 1983 as part of the astronomy program’s commemoration of the thirtieth anniversary of the Arthur J. Dyer Observatory. The lectureship recognizes the untiring efforts and contributions to astronomy made by Carl K. Seyfert, professor of astronomy and first director of the Dyer Observatory. A distinguished astronomer is invited to present this lecture every third year.

THE SHANKS LECTURES. Established in 1984 and named for E. Baylis Shanks and Olivia H. Shanks in honor of their accomplishments in the fields of mathematics and education and in recognition of their loyalty and service to Vanderbilt University, these lectures are presented on two successive days in the fall of each year. A special committee from the Department of Mathematics, influenced by the professional interests of Professor and Mrs. Shanks, chooses the lecturers from mathematicians of the highest reputation. The topics of the lectureship vary from year to year according to the area of specialization of the speaker chosen. The lectures have been endowed by members of the family of Olivia and Baylis Shanks.

THE FRANCIS G. SLACK LECTURES IN PHYSICS. Established in 1977 by the Department of Physics and Astronomy in honor of Francis G. Slack, former Landon C. Garland professor of physics and chair of the department, these lectures recognize his many contributions to physics. The series was first partially endowed by his colleagues and students and then with the generous help of Professor Slack. Each speaker gives one lecture of general interest to the university and one more specialized lecture for the department.

THE DAVID STEINE LECTURE. Established in 1978 as a memorial to David Steine, professor of business administration in the Department of Economics and Business Administration, by members of his family, friends, and associates. The lecture is devoted to an economic problem of interest to the general public.

THE GERTRUDE VANDERBILT AND HAROLD S. VANDERBILT VISITING WRITERS PROGRAM. Established in the Department of English in 1958 under the generous sponsorship of the late Mrs. Vanderbilt, this program has annually presented readings and public lectures by a poet, a novelist, and a critic—each of whom also visits classes and meets informally with members of the university and Nashville communities. Recent participants have included Dannie Abse, Madison Smartt Bell, Ellen Gilchrist, Alison Lurie, Czeslaw Milosz, Wyatt Prunty, Ann Thwaite, Anthony Thwaite, and Helen Vendler.
Degrees Program in the College

The Bachelor of Arts
The bachelor of arts degree is granted upon successful completion of the following five requirements:

1. At least 120 semester hours of creditable college work,
2. A final grade point average of at least 2.00,
3. Completion of the AXLE requirements,
4. Completion of one of the options listed under Area of Concentration,
5. Completion of at least 102 credit hours of course work within the College of Arts and Science, or a minimum of 90 credit hours for those students with a second major outside the College of Arts and Science.

Limitation on Credit Hours outside the College
Candidates for the bachelor of arts degree must successfully complete a minimum of 102 credit hours within the College of Arts and Science. Students who are completing an approved second major from one of the other schools within Vanderbilt are required to complete 90 credit hours within the College of Arts and Science for the bachelor of arts degree.

AXLE: Achieving Excellence in Liberal Education
The Arts and Science core program of study—known as AXLE—is anchored in intensive practice in writing and a diverse thirteen-course component of classes that has been designed to allow maximum choice in course selection (based on student interests and achievement levels). At the same time, the distribution requirements of AXLE ensure that students will explore intellectually and academically the breadth of possibilities represented by the liberal arts.

What Is Liberal Education?
The study of the liberal arts—what is historically called a liberal education—is the oldest and most venerable form of higher education. It has proved itself perennially flexible and adaptive over the past centuries, and it remains the single best educational preparation for further, specialized study in the professions (medicine, law, education, business, et al.), as well as for doctoral work in the humanities and social sciences and advanced research in the sciences. The holistic focus of a liberal education encompasses all areas of human knowledge: the natural and social sciences, mathematics, foreign languages and cultures, the arts, and the humanities. The empirical disciplines guide us in our efforts to live most productively and efficiently. But the rest of the curriculum—the humanities and the arts—makes it possible to reflect upon the right use of the remarkable scientific knowledge we have acquired. In a liberal arts education, content is always considered in its larger context. Thus, the reflective and discursive aspects of study in the liberal arts call upon students to move beyond the mere acquisition of information to inquire into the deeper issues within their studies, and to connect their learning across disciplines and cultures as they live and work in the communal environment of Vanderbilt. The end product of a successful liberal arts education is a thoughtful citizen who is prepared to take up his or her rights and responsibilities in a democratic society, to analyze and critique received information, to articulate the issues at hand or the personal values at stake, and whose intellectual life is marked by ongoing internal dialogue about the quality and meaning of life for him or her, as well as for the community at large.

Fear No Learning!
The interdisciplinary inclination of many courses in the College of Arts and Science is an ideal training ground for learning new methodologies for problem solving in the complex, global world of the 21st century. Here, students may work with biologists and psychologists in the Neuroscience program; study with creative writers, sociologists, historians, or cinema and media arts scholars in the African American and Diaspora Studies program; or take a class, team taught, by professors from the School of Music and the Department of English in the College of Arts and Science. Over the course of a Vanderbilt education, students challenge themselves with the academic demands of the classes they select, and are challenged by new ideas and unfamiliar ways of looking at issues. Exploring beyond the boundaries of one’s intellectual comfort zone in order to admit new ideas is one of the most important aspects of higher education. The time and effort devoted to selecting thoughtfully the courses that will satisfy AXLE requirements prepare students for the more specialized study that they undertake in their major (or majors) beginning in the third year of study.

What Is AXLE?
AXLE is the acronym for Achieving Excellence in Liberal Education. It is the core curriculum that all students in the College of Arts and Science must fulfill. The AXLE curriculum is flexible and very user-friendly. It consists of two parts: the Writing Requirement and the Liberal Arts Requirement.

The Writing Requirement has four segments: completion of English 1100 or demonstration (by a combined score of 1220 on the Writing and Critical Reasoning sections of the SAT test with a minimum score of 500 in each, or a score of 27 on the English portion combined with a score of 7 on the Writing portion of the ACT test, or by appropriate AP or IB credit in English) of basic skills in English Composition; completion of a First-Year Writing Seminar; completion of a 1000-level (introductory) writing course no later than the fourth semester in residence; and completion of a second 1000-level writing course OR a 2000, 3000, or 4000-level (discipline-specific, major-oriented) writing course OR a course in oral communication.

The Liberal Arts Requirement is composed of a total of thirteen courses taken at Vanderbilt, and distributed across six categories. The First-Year Writing Seminar and all writing courses, and approved Oral Communication courses are also counted in the thirteen-course Liberal Arts Requirement.
1. The Writing Requirement (three to four courses)
   a. English Composition (appropriate test score or one course)
   b. First-Year Writing Seminar (one course)
   c. 1000-level W Requirement (one course)
   d. One 1000-level W or 2000, 3000, or 4000-level W or Oral Communication course
2. The Liberal Arts Requirement (13 courses)
   a. HCA — Humanities and the Creative Arts (three courses)
   b. INT — International Cultures (three courses)
   c. US — History and Culture of the United States (one course)
   d. MNS — Mathematics and Natural Sciences (three courses)
   e. SBS — Social and Behavioral Sciences (two courses)
   f. P — Perspectives (one course)

All students must also complete requirements for at least one major (between 27 and 48 credit hours of course work) and earn a minimum number of 120 earned credit hours in order to graduate.

How to Get Started
The program of studies is divided approximately into thirds:

1/3 — courses to meet the requirements of the Writing and Liberal Arts requirements;
1/3 — courses required to complete the chosen major;
1/3 — electives, which will complete the 120 credit hours required for graduation.

These divisions are approximate and may differ for individual students.

For a student’s first semester, most selections should be from the first group, courses that will fulfill the Writing and Liberal Arts requirements. Academic background, career goals, and general talents and interests will affect choice of courses.

Upon graduation, students in the College of Arts and Science will receive a bachelor of arts degree upon completion of the other four requirements in addition to AXLE: fulfillment of requirements for one major, a 2.000 average in the major, 120 cumulative earned credit hours, and a 2.000 average overall.

Where to Get Information
In addition to this catalog’s sections on the rules, regulations, and policies of the College of Arts and Science as well as descriptions of the academic programs of all the undergraduate schools, students may refer to the booklet, On the Road with AXLE, a College of Arts and Science manual for entering students.

Where to Get Advice
Entering students are assigned pre-major faculty advisers from CASPAR (College of Arts and Science Pre-major Academic Advising Resources). Pre-major faculty advisers are carefully selected and receive intensive training on how to help students proceed effectively through the requirements of AXLE and chart a course of study. These advisers will counsel students through their first three and a half semesters or until they declare a major. At that time, students are assigned faculty advisers in their major departments. Students are encouraged to see their advisers at any time; they must, however, consult their pre-major faculty adviser three times during the first year: during summer before the fall semester, prior to the opening of enrollment windows for the spring semester, and prior to the opening of enrollment windows for the fall semester of their second year. Prior to their first semester, entering first-year students must consult in June with their pre-major faculty adviser who will assist with course selections for registration for the fall and begin to understand each student’s interests and goals. (This initial contact is typically via phone and/or email.)

Overview of AXLE
AXLE consists of two parts: the Writing Requirement (including a First-Year Writing Seminar) and the Liberal Arts Requirement.

The First-Year Writing Seminar
The First-Year Writing Seminar is an integral part of the first-year experience in the College of Arts and Science. Through these seminars, first-year students engage in independent learning and inquiry in an environment in which they can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. The small-group nature of these seminars allows for direct student-faculty interaction that stresses training in techniques of scholarly inquiry. The students’ written work and oral presentations are subject to thoughtful critical review by the faculty member, providing feedback that can be used to reconsider the manner in which they articulate their ideas and to refine their skills in these areas. Thus, first-year students learn not only about the subject matter of the seminar, but are also exposed to new methods of acquiring knowledge, different ways of expressing and sharing ideas, and unique opportunities to participate in critical inquiry.

All first-year students must enroll in a First-Year Writing Seminar. (First-Year Writing Seminars in the College of Arts and Science are numbered 1111.) This course may be taken during the fall or the spring semester. Students are permitted to enroll in only one First-Year Writing Seminar per semester. All First-Year Writing Seminars also count in their appropriate distribution areas within the Liberal Arts Requirement, but a second seminar will not count toward the writing requirement. Students who transfer into the College of Arts and Science (whether from another school at Vanderbilt or from another college or university) do not complete a First-Year Writing Seminar.

The Writing Requirement
Excellent communication skills, including the ability to articulate ideas and defend positions in writing, will be paramount for the 21st-century graduates of Vanderbilt University; therefore, all students in the College of Arts and Science must successfully complete the Writing Requirement.

a) All students must demonstrate competence in English composition. Appropriate skills in composition are essential to successful progress at the university. Most students will complete the requirement by presenting a combined score of 1220 on the Writing and Critical Reading sections of the SAT test with a minimum score of 500 in each, or a minimum score of 27 on the English portion combined with a minimum score
of 7 on the Writing portion of the ACT test, or by appropriate AP or IB credit in English. Students who do not must enroll in English 1100 in the freshman year.

b) First-Year Writing Seminar (see above).

c) All students must successfully complete at least one Arts and Science 1000-level writing course (indicated by a “W”) at Vanderbilt University, regardless of AP or IB credits, SAT scores, or ACT scores earned prior to matriculation. Writing-intensive courses emphasize general writing skills within the context of discipline-specific subject matter. All students are encouraged to complete Part b of the Writing Requirement as soon as possible; this requirement must be completed no later than the fourth semester at Vanderbilt University. All Arts and Science 1000-level W courses also count in their appropriate distribution areas within the Liberal Arts Requirement. Students may not substitute a 2000 or higher-level writing course for the first 1000-level writing course requirement. Students may, however, complete a writing course at the 2000 or higher-level before completing a 1000-level writing course so long as they complete a 1000-level writing course by the end of their fourth semester at Vanderbilt.

d) All students must successfully complete either (1) a second Arts and Science 1000-level W course, or (2) an Arts and Science 2000, 3000, or 4000-level W course, or (3) an approved course in oral communication at Vanderbilt University, regardless of AP or IB credits, SAT scores, or ACT scores earned prior to matriculation. The 2000 and higher-level W courses foster advanced, discipline-specific writing skills. Departments or programs that offer these courses determine their specific writing content. In 2000 or higher-level W courses, continued attention to the process of writing is included in the classroom. Students receive regular feedback on their writing that will contribute toward enhancing writing skills appropriate to specific disciplines. The process of revising written work allows students to reflect on the writing process; writing tutorials may also be included. Oral communication courses focus on developing improved public speaking skills. These courses introduce students to the principles and practices of public discourse and reasoned argument. Attention to the process of effective oral communication is integral to these classes. Students receive regular speaking assignments throughout the semester and regular feedback on their speaking that will contribute toward enhancing effective speaking skills. All students must complete Part d of the Writing Requirement before graduation. All Arts and Science 2000 or higher-level W courses and approved oral communication courses also count in their appropriate distribution areas within the Liberal Arts Requirement.

The distribution of all Arts and Science courses into AXLE categories is posted once a year, in the fall, online at: as.vanderbilt.edu/academics/axle/distribution_courses.php. The most up-to-date information for any semester is available in the “advanced class search” section of YES.

The Liberal Arts Requirement

The Liberal Arts Requirement consists of successful completion of thirteen courses from the College of Arts and Science. Most courses in the College of Arts and Science fulfill one of these Liberal Arts requirements. Courses must carry three or more credits to count toward the AXLE Liberal Arts Requirement. Although some courses may be appropriate to more than one requirement, each course will fulfill only one requirement. These thirteen courses must be distributed as outlined below. They must be taken from at least seven departments or subject areas.

a) Humanities and the Creative Arts — HCA (3 courses)
 Courses in the humanities and the creative arts challenge students to examine their personal understanding of life and how their individual experiences overlap with those of the rest of humankind. These courses testify to the varying ways in which people think, form values, confront ambiguity, express spiritual and aesthetic yearnings, and grapple with moral and ethical problems. By analyzing and interpreting literary, philosophical, religious, or artistic works, students examine the foundations of human experience. By producing original artistic works in imaginative writing, studio art, theatre, film, music, and dance, students have the opportunity to connect the universal sources of human inspiration with their own creative processes.

b) International Cultures — INT (3 courses)

The study of international culture provides students with a basis for understanding the diversity of experiences and values in our contemporary, global society. Options in this category include not only international history and cultural studies courses, but also courses in literature, cinema and media arts, the social sciences, art, music, and languages. Students may satisfy this requirement by choosing courses that focus on the history and culture of a single society or time period in human history and/or that represent a broad spectrum of different human societies and time periods. Language courses introduce students to the language of a different culture and provide insight into that culture in ways that are not possible to achieve through detached study. At intermediate and advanced levels, students are able to explore the culture in depth, using the language itself to read, discuss, and write about its various aspects. Even at the most basic level, exposure to the language of a different culture prepares students to think and act in terms of living in a global community.

Intermediate and advanced language courses prepare students for study abroad programs, which the College of Arts and Science strongly recommends. A maximum of one course in this requirement may be satisfied through study abroad in a Vanderbilt-sponsored program, or in a pre-approved program offered through another provider. Summer study abroad programs must earn 6 or more credit hours to satisfy this requirement.

In addition to the Vanderbilt-sponsored programs in France and Germany, students may choose from pre-approved study-abroad options in:

- Argentina
- Australia
- Austria
- Brazil
- Canada
- Chile
- China
- Costa Rica
- Czech Republic
- Denmark
- Dominican Republic
- Egypt
- England
- France
- Germany
- Hungary
- India
- Ireland
- Israel
- Italy
- Japan
- Jordan
- Kenya
- Morocco
- Nepal
- Netherlands
- New Zealand
- Northern Ireland
- Russia
- Samoa
- Scotland
- Senegal
- Serbia
- Singapore
- South Africa
- Spain
- Sweden
- Switzerland
- Uganda
- Vietnam
Additional course credit may be earned toward AXLE curriculum requirements by successfully completing study abroad courses through Vanderbilt in France or the Vanderbilt in Berlin summer program that have A&S numbers and titles. No other courses taken through either of these two programs or through other study abroad programs, including courses offered by Vanderbilt-approved programs and including courses that are deemed to be direct equivalents to A&S courses, count toward AXLE curriculum requirements.

All students must complete three courses in this category, irrespective of previous language study or proficiency in a language other than English. At least one of the three courses presented in fulfillment of this category must be a second-semester (or higher) language acquisition class taught at Vanderbilt University (or through the Duke-UVa-Vanderbilt Partnership for Less Commonly Taught Languages), unless the student successfully demonstrates proficiency in a language other than English at or above the level achieved by second-semester language acquisition classes taught at Vanderbilt University. Students may demonstrate proficiency in a number of ways: SAT Subject Test scores (French, 540; German, 470; Hebrew, 530; Italian, 540; Japanese with Listening, 440; Latin, 530; Spanish, 520); by appropriate score on proficiency tests (written and oral) administered by the Tennessee Foreign Language Institute; or with AP or IB credit in a foreign language. The first semester of an introductory language acquisition class in any language a student has studied for at least two years in high school, or in which a student transfers credit from another institution, cannot be used in partial fulfillment of this requirement. Intensive elementary language courses that cover the content of two semesters in one shall count as one course toward this category.

Students who, because of special ability and achievement, are admitted to the College of Arts and Science without the normally required two years of one foreign language in high school must enroll in a foreign language course during their first semester and must remain continuously enrolled until they successfully complete a full year of one foreign language. They must complete this requirement by the end of their fourth semester in the College of Arts and Science.

c) History and Culture of the United States — US (1 course)
The study of the history and culture of the United States provides students with a basis for understanding the American experience and the shaping of American values and viewpoints within the context of an increasingly global society. Interpreting history and culture in the broadest sense, options in this category include traditional history and cultural studies courses, but also courses in literature, cinema and media arts, the social sciences, art, and music, which illuminate historical periods or cultural themes in United States history. Students may satisfy this requirement by choosing a course that focuses on the history and culture of a single social group or time period in American history and/or that represents a broad spectrum of different social groups and time periods.

d) Mathematics and Natural Sciences — MNS (3 courses, one of which must be a laboratory science)
Courses in mathematics emphasize quantitative reasoning and prepare students to describe, manipulate, and evaluate complex or abstract ideas or arguments with precision. Skills in mathematical and quantitative reasoning provide essential foundations for the study of natural and social sciences. Students are generally introduced to mathematical reasoning through the study of introductory courses in calculus or probability and statistics.

Courses in the natural sciences engage students in hypothesis-driven quantitative reasoning that helps to explain natural phenomena, the roles of testing and replication of experimental results, and the processes through which scientific hypotheses and theories are developed, modified, or abandoned in the face of more complete evidence, or integrated into more general conceptual structures. Laboratory science courses engage students in methods of experimental testing of hypotheses and analysis of data that are the hallmarks of the natural sciences. Natural science courses prepare students to understand the complex interactions between science, technology, and society; teach students to apply scientific principles to everyday experience; and develop the capacity to distinguish between science and what masquerades as science.

e) Social and Behavioral Sciences — SBS (2 courses)
Social scientists endeavor to study human behavior at the levels of individuals, their interactions with others, their societal structures, and their social institutions. The remarkable scope represented by these disciplines extends from studying the underpinnings of brain function to the dynamics of human social groups to the structures of political and economic institutions. The methods employed by social scientists are correspondingly broad, involving approaches as varied as mapping brain activity, discovering and charting ancient cultures, identifying the societal forces that shape individual and group behavior, and using mathematics to understand economic phenomena. By studying how humans and societies function, students will learn about individual and societal diversity, growth, and change.

f) Perspectives — P (1 course)
Courses in Perspectives give significant attention to individual and cultural diversity, multicultural interactions, sexual orientation, gender, racial, ethical, and religious issues within a culture across time or between cultures, thereby extending the principles and methods associated with the liberal arts to the broader circumstances in which students live. These courses emphasize the relationship of divergent ethics and moral values to contemporary social issues and global conflicts.

The Major

All students must successfully complete a course of study leading to one of the approved major programs in the College of Arts and Science, or successfully complete an individually designed interdisciplinary major designed in consultation with College of Arts and Science faculty and approved by the Committee on Individual Programs in the College of Arts and Science.

AXLE Curriculum Course Distribution

The distribution of Arts and Science courses into AXLE categories is posted once a year, in the fall, online at: as.vanderbilt.edu/academics/axle/distribution_courses.php. The most up-to-date information for any semester is available in the “advanced class search” section of YES.

AXLE, the Major, and the Optional Minor

Courses used to satisfy requirements of AXLE may also be used to satisfy requirements of the major or the optional minor.
Advanced Placement under AXLE
Other than the basic English composition requirement, no AXLE requirement may be fulfilled with any form of advanced placement credit (AP, IB, A-level, etc.).

Transfer Credit under AXLE
Generally, only courses taken in the College of Arts and Science may be used toward AXLE; however, any college course credit earned prior to graduation from high school, and transfer credit earned before admission to Vanderbilt, may be used toward fulfilling AXLE requirements.

Vanderbilt Study Abroad Programs and AXLE
Additional course credit may be earned toward AXLE curriculum requirements by successfully completing study abroad courses through Vanderbilt in France or the Vanderbilt in Berlin summer program that have A&S numbers and titles. No other courses taken through either of these two programs or through other study abroad programs, including courses offered by other Vanderbilt-approved programs and including courses that are deemed to be direct equivalents to A&S courses, count toward AXLE curriculum requirements.

For more information on study abroad, see the chapter on Special Programs for Undergraduates in the front section of this catalog.

Area of Concentration
During the junior and senior years, much of the student’s work is concentrated in one large unit of intellectually related courses. The program of concentration may be arranged through a single major, an interdisciplinary major, or a double major. Each of the three options is described below. A triple major may be declared with the approval of the Administrative Committee.

Major Field
Under this plan, the student majors in one of the recognized fields. There shall not be fewer than 27 credit hours in the major field, but a given department may require up to 48 credit hours. Students may take more than the required number of credit hours in any major; any given department, however, may limit the total permissible credit hours in a discipline.

For graduation, a student must have achieved a grade point average of at least 2.000 in all classes taken in the major. This set of courses includes all courses a student takes in the department or program of the major and all courses a student takes outside the department or program that may count toward the major. All courses that are listed as fulfilling credit hours required for the major, as listed in the Undergraduate Catalog, are included in calculating the grade point average in the major.

Within the framework of these general requirements, each department has its own policies governing major work, which are published elsewhere in this catalog or otherwise available to students.

Academic programs of the College of Arts and Science are varied and broad in scope, with majors offered in the following fields:

- Anthropology
- Art
- Biological Sciences
- Chemistry
- Classical Civilization
- Classical Languages
- Classics
- Communication Studies
- Earth and Environmental Sciences
- Ecology, Evolution, and Organismal Biology
- Economics
- English
- Environmental Sociology
- French
- German
- History
- History of Art
- Mathematics
- Molecular and Cellular Biology
- Philosophy
- Physics
- Political Science
- Psychology
- Religious Studies
- Russian
- Sociology
- Spanish
- Spanish and Portuguese
- Theatre
- Asian Studies
- American Studies
- African American and Diaspora Studies
- American Studies
- Asian Studies
- Cinema and Media Arts
- Communication of Science and Technology
- Economics and History
- Economic Studies
- European Studies
- French and European Studies
- German Studies
- German and European Studies
- Italian Studies
- Italian and European Studies
- Jewish Studies
- Latin American Studies
- Latino and Latina Studies
- Medicine, Health, and Society
- Neuroscience
- Public Policy Studies
- Russian and European Studies
- Spanish and European Studies
- Spanish, Portuguese, and European Studies
- Women’s and Gender Studies

Students may also major in defined interdisciplinary programs. There shall not be fewer than 27 credit hours in the major field, but a given program may require up to 48 credit hours. The student must achieve at least a 2.000 grade point average in all work taken in the major. The interdisciplinary programs that offer majors are:

- African American and Diaspora Studies
- American Studies
- Asian Studies
- Cinema and Media Arts
- Communication of Science and Technology
- Economics and History
- Economic Studies
- European Studies
- French and European Studies
- German Studies
- German and European Studies
- Italian Studies
- Italian and European Studies
- Jewish Studies
- Latin American Studies
- Latino and Latina Studies
- Medicine, Health, and Society
- Neuroscience
- Public Policy Studies
- Russian and European Studies
- Spanish and European Studies
- Spanish, Portuguese, and European Studies
- Women’s and Gender Studies

Students may combine an interdisciplinary major with a major in one of the recognized fields listed at the beginning of this chapter.

Declaration of the Area of Concentration
Students may formally declare a major at any time during the third semester of residence and must do so no later than the Friday before Spring Break of the fourth semester. The student selects a department or interdisciplinary program and applies to that department or program for assignment to an adviser. Students who wish to develop an individually designed interdisciplinary program apply to the associate dean who chairs the Committee on Individual Programs.

Each fall a program is arranged that provides for consultation of sophomores with department chairs, for the purpose of
helping students select a major. Sophomore students who have not declared a major should participate in this program if they intend to attain junior standing before the next spring.

The selection of a major is of considerable importance, and the entire program of concentration for the junior and senior years should be planned with the major adviser before the beginning of the junior year. Students officially declare their majors by registering with the chosen department(s) or interdisciplinary program(s), and with the Office of Academic Services in Arts and Science. When the student’s major has been registered, access to the student’s academic record is transferred from the pre-major adviser to the new major adviser.

Students may not add a major(s) past the fifth class day of the first semester of the senior year.

Individually Designed Interdisciplinary Majors

This plan permits students to contract for an individually designed program of concentration consisting of at least 48 credit hours of approved work. The program is constructed around a coherent academic purpose and may draw together the academic resources of a number of departments and schools. The program’s purpose may include topical, period, or area studies, and must be consistent with the philosophy underlying a liberal arts education (see “What is Liberal Education?” on page 48 of this catalog). The program should not be designed with a focus on pre-professional training (e.g., pre-business, pre-law, or pre-medicine). The student may be required to achieve a standard of proficiency in appropriately related areas such as foreign languages or mathematics in addition to the 48 credit hours constituting the program of concentration.

Each student must identify a major adviser who will offer advice and guidance. The major adviser must be a professor or full-time senior lecturer in the College of Arts and Science. The student’s plan for an individually designed interdisciplinary major is a statement of required courses. Furthermore, because of the nature of interdisciplinary majors, all courses that have previously been included in the student’s plan are considered to be part of the major discipline. The student must achieve at least a 2.000 grade point average in all courses that are (or have been) part of the plan.

Upon approval of the Committee on Individual Programs and the student’s adviser, (a) as many as 6 credit hours may be counted as part of both the interdisciplinary major and the second major, or (b) normally, no more than three introductory-level courses will be counted toward the interdisciplinary major.

Double and Triple Majors

This program permits a student to concentrate in two or three fields, which may or may not be intellectually related. With approval of the departments concerned, the student completes all of the requirements stipulated for the majors. Triple majors require approval of the Administrative Committee.

Each A&S non-interdisciplinary major must include at least 24 credit hours that are being counted solely toward the major. This rule also applies to students who combine (in a double or triple major) a non-interdisciplinary major with an interdisciplinary major.

Approved Second Majors Outside the College

All undergraduate courses, majors, and minors offered by Blair School of Music, School of Engineering, and Peabody College are approved for students in the College of Arts and Science. See the appropriate sections of the Undergraduate Catalog under each school for details. Arts and Science students with a second major from another Vanderbilt undergraduate school must earn a minimum of 90 credit hours in Arts and Science. Consultation with the student’s Arts and Science major adviser is especially important.
Additional Programs

For information on the College Scholars program and departmental honors, please see the chapter titled Honors.

The Optional Minor

A minor is a program within a recognized area of knowledge offering students more than a casual introduction to the area but less than a major in it. Although the completion of a minor is not a degree requirement, students may elect to complete the courses specified for one or more minors. A student who completes all designated courses in a minor with a grade point average of at least 2.00 will have the minor entered on the transcript at the time of graduation.

Minors may be combined with any departmental major or interdisciplinary major, but minors may not be earned in the department or program of the major. Each minor must, however, include at least 15 credit hours that are being counted solely toward the minor. Courses may not be taken on a P/F basis if they are offered in the department of the minor or if they are being counted toward an interdisciplinary minor (see Academic Regulations).

Minors consist of a minimum of five courses of 3 or more credit hours each. Many minors require a greater number of credit hours and specific courses. When a minor is offered in a discipline that offers a major, only those courses that count toward the major may be counted toward the minor.

Students should refer to the appropriate sections of this catalog for specific requirements. Minors available at present are listed below.

Students should declare their intention to pursue specific minors by completing forms available in the Office of the Associate Deans as well as the various departmental and program offices. Departments and programs assign advisers to students who declare minors in their respective areas. Students have the responsibility to know and satisfy all requirements for minors that they intend to complete.

Students may not add or change a minor after the fifth day of classes in the second semester of their senior year.

Optional minors are offered in the following fields and interdisciplinary programs:

- African American and Diaspora Studies
- American Studies
- Anthropology
- Art
- Asian Studies
- Astronomy
- Biological Sciences
- Brazilian Studies
- Chemistry
- Chinese Language and Culture
- Cinema and Media Arts
- Classical Civilization
- Classics
- Communication of Science and Technology
- Communication Studies
- Earth and Environmental Sciences
- Economics
- English
- Environmental Science
- Environmental and Sustainability Studies
- European Studies
- French
- German
- History
- History of Architecture
- History of Art
- Islamic Studies
- Italian Studies
- Japanese Language and Culture
- Jewish Studies
- Latin American Studies
- Latino and Latina Studies
- Managerial Studies:
  - Corporate Strategy
  - Financial Economics
- Mathematics
- Medicine, Health, and Society
- Nanoscience and Nanotechnology*
- Neuroscience
- Philosophy
- Physics
- Political Science
- Portuguese
- Psychology
- Religious Studies
- Russian
- Scientific Computing*
- Sociology
- Spanish
- Theatre
- Women’s and Gender Studies

*Administered by the School of Engineering in collaboration with the College of Arts and Science

Approved Minors Outside the College

Arts and Science students are permitted to pursue a second major and/or a minor that has been approved by the faculties of the other Vanderbilt undergraduate schools: the Blair School of Music, the School of Engineering, and Peabody College of Education and Human Development. See the appropriate sections of the Undergraduate Catalog under each school for details. Minors may not be earned in the department or program of the major.

Undergraduate Research

All students have ample opportunity to participate in faculty research projects or to pursue research projects independently, both on campus and at remote sites. Such research has led to the publication of coauthored or student-authored papers and other presentations to the scholarly community. Summer and academic year research by undergraduates in all fields may be subsidized by the university or the College of Arts and Science.

Study Abroad Programs

Vanderbilt offers study programs for all undergraduate students from Arts and Science, Blair School of Music, School of Engineering, and Peabody College. Among others, programs are offered in Argentina, Australia, Austria, Brazil, Canada, Chile, China, Costa Rica, the Czech Republic, Denmark, the Dominican Republic, Egypt, England, France, Germany, Hungary, India, Ireland, Israel, Italy, Japan, Jordan, Kenya, Morocco, Nepal, Netherlands, New Zealand, Northern Ireland, Russia, Samoa, Scotland, Senegal, Serbia, Singapore, South Africa, Spain, Sweden, Switzerland, Uganda, and Vietnam to provide undergraduates immediate contact with cultures different from their own and to aid in the mastery of foreign languages. Students interested in applying for study abroad should consult their advisers to determine whether all degree requirements can be completed on schedule.

Brochures on all programs are available in the Global Education Office in Room 115, Student Life Center. GEO also maintains a website, vanderbilt.edu/geo. The study abroad programs are described in more detail in the chapter on Special Programs for Undergraduates in the front section of this catalog.
When choosing programs in a city for study abroad, College of Arts and Science students may only apply to the Vanderbilt-approved overseas program(s) in that city.

There are four cities/programs for which this rule does NOT apply because of the specificity of the course of study on the Vanderbilt programs: Institut d’Etudes Politiques in Paris, France (designed for social science majors with a high degree of French proficiency); St. Charles University in Prague, Czech Republic (designed for Jewish studies majors); Classical Studies in Rome, Italy (open ONLY to classical studies majors); and Vienna, Austria (open ONLY to Blair students). That is, Arts and Science students who wish to study in Paris, Prague, Rome, or Vienna may choose to study in a program that is not Vanderbilt sponsored.

Additional Options
Students interested in receiving transfer credit for Vanderbilt-approved study abroad programs through other universities should apply to the Committee on Individual Programs. They must meet the same academic requirements for participation in Vanderbilt’s study abroad programs. Information is available from the Office of the Associate Deans (311 Kirkland Hall).

It should be noted, however, that if a program has been approved for direct credit by Vanderbilt, it must be taken as the approved direct-credit program by matriculated Vanderbilt students. In no case, after matriculating at Vanderbilt, may a student apply to participate in an approved direct-credit program for transfer credit through a different university, or through an external agency, and then seek to transfer that credit into Vanderbilt.

Pre-Professional Studies

Medicine
Students interested in the study of medicine should plan their undergraduate programs in consultation with Robert Baum, doctor of orthopaedics and rehabilitation, and health professions adviser. There is no formal premedical program of courses in the College of Arts and Science or elsewhere at Vanderbilt. Each student should plan a program to meet individual needs. The program should include whatever courses may be necessary to meet medical school admission requirements, all courses required for the major, all AXLE requirements, and elective options. Students may choose majors from any of the four undergraduate colleges and may elect to pursue a double major or an interdisciplinary program of concentration.

A student who plans to apply for admission to the Vanderbilt University School of Medicine, as well as other medical schools, may choose either of the following options:

1. A student may qualify for admission with a B.A. degree, whether completed in three years or in four. Minimum requirements for admission generally would be met by completing at least two semesters of English, four semesters of chemistry including organic, two semesters of biology, two semesters of physics, and at least one semester of calculus/math. Since prerequisites may vary across medical schools, students are urged to consult the online resource, Medical School Admission Requirements (MSAR) published by the American Association of Medical Schools (at aamc.org) for school-specific information.

2. A student may qualify as a three-year student in the senior-in-absentia program (see Senior-in-Absentia in this catalog).

Dentistry
Students interested in predental studies should plan their undergraduate program in consultation with Robert Baum, doctor of orthopaedics and rehabilitation, and health professions adviser. There is no formal predental program of courses at Vanderbilt. Predental studies should include courses necessary to meet dental school admission requirements, all courses required for the major, all AXLE requirements, and elective options. Students may choose majors from any of the four undergraduate colleges. They may also elect a double major or an interdisciplinary program of concentration. A student may apply to dental school under the senior-in-absentia program (see Senior-in-Absentia in this catalog) or apply for admission after three years of college work without a degree.

Any student contemplating application to dental school should take at least two semesters of English, four semesters of chemistry including organic, two semesters of biology, two semesters of physics, and at least one semester of calculus/math. Since prerequisites may vary across dental schools, students are urged to consult the ADEA Official Guide to Dental Schools published by the American Association of Dental Schools.

Nursing
Students interested in developing a program that could lead to a master of science in nursing are advised to consult the Office of Admissions in the School of Nursing. For further information on pre-nursing studies, see the chapter on Special Programs for Undergraduates near the front of this catalog.

Architecture
Undergraduate students in the College of Arts and Science expecting to pursue architecture at the graduate level should complete at least one year of analytic geometry and calculus and one year of physics. Students may select any major but would want to include courses that emphasize a broad sense of art and architectural history, including courses in studio art. Before applying to specific schools of architecture, they would develop a portfolio of creative work. Further information is available in the Department of Art.

Engineering
Undergraduate students in the College of Arts and Science expecting to pursue engineering at the graduate level should normally major in a natural science or mathematics and, at a minimum, should complete two years of calculus or its equivalent, one year each of chemistry and physics, and at least an additional year of a natural science or mathematics. A
minimum of one year of computer science is highly desirable. Students should seek specific information concerning admission from the engineering school of their choice as early as possible, preferably by the end of the sophomore year, to assure optimum preparation for entry into that school. Standards for admission vary, but usually a 3.00 average or better is required.

**Law**

There is no formal program of prelaw studies at Vanderbilt. Most law schools have no specific requirements for a prelaw curriculum but place great emphasis on the development of the student’s ability to read and comprehend accurately, thoroughly, and rapidly; to speak and write clearly and correctly; to think precisely; and to analyze complex situations and weigh and appraise their several elements. The development of analytical skills and of mature study habits is vital. A broad cultural background is important—since law touches life at every point, every subject in the college curriculum may bear on the lawyer’s work. Students interested in the study of law should plan their undergraduate programs in consultation with Professor Carrie Russell, prelaw adviser.

**Management**

**Dual Five-Year Baccalaureate–M.B.A Program.** By combining one and one-half years of study in the Vanderbilt Owen Graduate School of Management with three and one-half years in Vanderbilt’s College of Arts and Science, students may obtain both the baccalaureate degree and the M.B.A. degree in five years—the baccalaureate from the College of Arts and Science at the end of the fourth year under the senior-in-absentia program, and the M.B.A. from the Owen School after the fifth. Students may major in any subject in the College of Arts and Science.

Students must apply to the Owen School for admission to the five-year program during their junior year and to the Administrative Committee of the College of Arts and Science for acceptance into the senior-in-absentia program. Students are subject to normal Owen School admission requirements, and no student is assured of admission to the Owen School. Students who are accepted will be registered in the Owen School for three semesters (a minimum of 48 credit hours). Up to 16 credit hours of Owen School courses approved by the College of Arts and Science may be counted toward completion of the undergraduate degree. Upon acceptance to the Owen School, students should contact the Office of Student Services for an advising appointment. The Owen School registrar will review undergraduate courses and arrange for transfer of those credit hours toward the student’s M.B.A. degree.

**Financial Aid.** The scholarship or other financial aid commitment of the College of Arts and Science will not be continued automatically beyond the seventh semester for students enrolled in the dual program. Eighth semester scholarships or other financial aid are the responsibility of the Owen School. The Owen School will advise students of the level of financial support, if any, prior to their enrollment in the dual program, to be provided during the eighth and subsequent semesters. This ensures that an eighth semester scholarship from the College of Arts and Science is protected for the student until a final decision is made to enroll in the Owen School.

**Planning for the Program.** Students interested in this program should consult William Damon or Malcolm Getz in the Department of Economics, or the Owen Admissions Office, for advice on planning undergraduate studies to meet the program’s requirements.

**Teacher Education**

Details will be found in Licensure for Teaching in the Peabody College section of this catalog.

**Internships**

Students may earn academic credit for the work of internships in the College of Arts and Science on a Pass/Fail basis through interdisciplinary or departmental internships. Credit hours earned will not count toward major or minor requirements or toward AXLE, but will count as part of the total credit hours required for graduation. Students obtain their own placement and faculty adviser who works with them to develop a list of readings or research agenda for the internship, which must be approved by the director of internships in the College of Arts and Science (Associate Dean Yollette Jones). The necessary forms for earning academic credit for an internship may be obtained from the A&S Associate Deans’ Office in 311 Kirkland Hall, although students register for internships through the Office of Academic Services of their respective school. The deadline for submitting registration forms to Dean Jones’s office for internship courses taken during summer term and fall semester is May 1. Students expecting to intern during the spring semester should submit registration forms by January 1.

**Finding an Internship**

Students searching for an internship opportunity locally or elsewhere should contact the Center for Student Professional Development.

**Interdisciplinary Internships**

INDS 3880 (fall, spring), 3884 (summer). 1 credit hour (repeatable)

Any student who is at least a sophomore and in good academic standing may earn one credit hour per semester or summer for an internship under this designation. This course may be repeated twice for a maximum of 3 credit hours exclusively on a Pass/Fail basis.

**Departmental Internships**

**Maximum of 15 credit hours (may be taken only once)**

Under this option students from any discipline may earn academic credit for internships in the departments listed below if they meet the minimum GPA requirements and have 6 credit hours of prior work in the department in which they wish to intern. Students are responsible for securing a faculty adviser for the internship and developing an academic plan of work for the internship opportunity, both of which must be approved by the director of undergraduate studies in the department in which the internship is housed. (In some instances, the DUS will serve as the faculty adviser for all internships taken in that discipline.) All internships under this designation are taken concurrently with a research and/or readings course. The latter is taken on a graded basis and may count toward requirements for a major or minor. Students should consult the director of undergraduate studies in the department of interest to obtain additional information about internships in that discipline. The following departments offer up to 15 credit hours of academic credit per semester.
or summer for the following courses (internship courses are offered during FALL, SPRING, and SUMMER sessions):

- **AADS 3880-3881.** 3880: Internship Training [1–9], 3881: Internship Readings and Research [3–6].
- **AMER 3880-3881.** 3880: Internship Training [1–6], 3881: Internship Readings and Research [3–6].
- **ANTH 3880-3881.** 3880: Internship Training [1–9], 3881: Internship Readings and Research [1–6].
- **CMA 3880-3881.** 3880: Internship Training [1–9], 3881: Internship Readings and Research [1–6].
- **FREN 3880-3881.** 3880: Internship Training in France [1], 3881: Internship Readings and Research in France [3].
- **HART 3880, 3883.** 3880: Internship Training [1–9], 3883: Internship Research [1–3].
- **JS 3880, 3883.** 3880: Internship Training [1–3], 3883: Internship Research [3].
- **LAS 3880–3881.** 3880: Internship Training [1–9], 3881: Internship Readings and Research [3–6].
- **MHS 3880–3881.** 3880: Internship Training [1–9], 3881: Internship Readings and Research [1–6].
- **PSCI 3880, 3882–3883.** 3880: Internship Training [1–9], 3882: Internship Readings [1–3], 3883: Internship Research [1–3].
- **RUSS 3880–3881.** 3880: Internship Training [1–9], 3881: Internship Readings and Research [3–6].
- **SOC 3880–3881.** 3880: Internship Training [1–9], 3881: Internship Readings and Research [3–6].
- **SPAN 3880–3881.** 3880: Internship Training in Spain [1], 3881: Internship Readings and Research in Spain [3].
- **WGS 3880, 3882–3883.** 3880: Internship Training [1–9], 3882: Internship Readings [1–3], 3883: Internship Research [1–3].

More complete information regarding departmental internship courses may be found in the course descriptions in this catalog. (Courses which have been approved recently by the faculty may not appear in the most recent edition of the catalog.)

**Cost of an Internship**

Internships taken during the fall or spring semester will fall under the normal tuition charge unless the student falls below 12 or exceeds 18 credit hours during the semester. In both instances, the hourly tuition charge will apply with permission for an underload overload from the appropriate academic dean. Students will be charged for internships taken during summer on the basis of the hourly tuition rate for summer school unless approved in advance to receive the internship subsidy (see the Center for Student Professional Development website).

**Combined B.A./M.A. (4+1) Program**

The College of Arts and Science offers students in many departments and programs the opportunity to earn both the bachelor’s degree and the master’s degree in a shorter period of time and at less cost than is normally the case. Exceptional students in the College of Arts and Science can obtain both degrees in an expedited period, typically within but not less than five years.

The usual period of study for both the bachelor’s and the master’s degree is six years. Through the 4+1 option, the student and her or his adviser plan a five-year program of study. It is important to note that there is no provision for obtaining both degrees in a period shorter than five years. The program is intended for selected students for whom the master’s degree is sufficient preparation for their career goals, is desirable as a goal in itself, or is viewed as additional preparation before pursuing a doctorate or a professional degree.

The areas of study available for the Combined B.A./M.A. (4+1) option within Arts and Science are determined by individual departments and programs, who also determine the policies and guidelines to be followed. Students will be admitted to the Combined B.A./M.A. program only by the invitation and the approval of the department or program.

**Programs of Study**

The 4+1 option is currently available in the following departments and programs: English; French; German; history; Latin American studies; mathematics; medicine, health, and society; philosophy; political science; and psychology. Students are welcome to discuss the Combined B.A./M.A. (4+1) option with any of these departments and programs.

**Admissions Overview**

The Combined B.A./M.A program allows Vanderbilt University students to study for both degrees typically, but not necessarily, in the same department. Undergraduates with strong academic records may apply for admission to the program after the first semester of their junior year. Qualifying students are normally accepted into the program in the second semester of the junior year.

To apply for admission, students will first consult with Associate Dean Martin Rapisarda, and then submit to the prospective graduate department or program a “Petition to Apply to the Combined B.A./M.A. (4+1) Degree Program” (available at vanderbilt.edu/4plus1), a statement of purpose, a formal application to the Graduate School, a preliminary program proposal, two letters of recommendation from Vanderbilt faculty, and a current transcript. Application forms are available for download or can be completed online at vanderbilt.edu/gradschool. GRE scores or other admissions requirements may be specified by the prospective department. Admission to the 4+1 option is highly selective. An accomplished academic record, a demonstrated commitment to pursue graduate study, and a strong endorsement from Vanderbilt faculty are key elements to the successful applicant. Students will be provisionally accepted as graduate students, pending completion of all undergraduate requirements. Graduate student status will apply in the fifth year.

**Advising**

Prospective students should discuss with one of their advisers general information on the program and how this program is appropriate to their long-term goals. All students are encouraged to discuss their plans and goals with their undergraduate pre-major and major adviser. Especially in those cases where the intended graduate program differs from the undergraduate major, the student is further encouraged to seek advice from the advisers in the graduate program, too.
Curriculum

Students in a 4+1 program must satisfy all requirements for both degrees. Advanced Placement (AP) credits will often be used toward satisfying general curriculum requirements, for a maximum of 18 credit hours. The principal distinction between this program and the standard graduate program is two-fold: (1) students are allowed to take master’s courses while completing the bachelor’s degree, and (2) students are thereby enabled to complete both degrees within five years.

In order to complete the program in five years, students will be expected to complete most, if not all, of the requirements for their undergraduate degree by the end of the first semester of the senior year. Until all baccalaureate requirements are fulfilled, the student will follow College of Arts and Science undergraduate policies and procedures. It is also suggested that students begin taking graduate courses toward the master’s degree in the second semester of the senior year. Most graduate programs participating in this option have a non-thesis plan of study requiring 30 graduate credit hours in addition to the requirements for the undergraduate degree. An average load per semester as a graduate student is 9–12 credit hours.

Scholarships and Financial Aid

Students who are receiving scholarships or other forms of financial aid as a Vanderbilt undergraduate are advised that such aid applies in most cases only toward the completion of the bachelor’s degree or the first four years of their studies (which may include their taking some graduate courses during their senior year). Students wishing to pursue the 4+1 option should seek support for their fifth year of study through student loans and other financial aid.

For additional information, contact Associate Dean Martin Rapisarda, 311 Kirkland Hall, martin.rapisarda@vanderbilt.edu, or consult the website vanderbilt.edu/4plus1.
Honors

Founder's Medal
The Founder’s Medal, signifying first honors, was endowed by Commodore Cornelius Vanderbilt as one of his gifts to the university. The recipient is named by the Dean after consideration of faculty recommendations and overall academic achievements, as well as grade point averages of the year’s highest ranking summa cum laude graduates.

Latin Honors Designation
Honors noted on diplomas and published in the Commencement program are earned as follows:

*Summa Cum Laude.* Students whose grade point average equals or exceeds that of the top 5 percent of the previous year’s Vanderbilt graduating seniors.

*Magna Cum Laude.* Students whose grade point average equals or exceeds that of the next 8 percent of the previous year’s Vanderbilt graduating seniors.

*Cum Laude.* Students whose grade point average equals or exceeds that of the next 12 percent of the previous year’s Vanderbilt graduating seniors.

Graduates who complete the requirements of the College Scholars program are awarded “Honors in the College of Arts and Science,” and this designation appears on their diplomas. Candidates successfully completing departmental honors programs are awarded honors or highest honors in their major field, and this designation appears on their diploma.

College Scholars Program
Entering first-year students with outstanding academic records and students who achieve academic distinction during their first semester at Vanderbilt are invited to participate in the College Scholars program. These students have the exclusive opportunity to pursue advanced scholarly work in honors seminars and enriched courses or independent-studies projects. They may earn the designation “Honors in the College of Arts and Science” on their diplomas.

To earn the designation, College Scholars must accumulate fifteen “honors points” by achieving the grade B or better in approved courses and projects. A maximum of thirteen of these honors points may be earned in honors seminars. Honors seminars in the humanities, natural sciences, and the social sciences serve toward satisfaction of AXLE requirements in these areas. For a complete description of how honors points may be earned and a listing of honors seminars offered, see the entry on Honors in alphabetical order under Courses of Study.

College Scholars are not required—although many will choose—to earn honors in the College of Arts and Science; all, however, may enroll in as many honors seminars as they want. To remain in good standing in the program, students must maintain a minimum grade point average of 3.000. Further information on the College Scholars program and honors in the College of Arts and Science may be obtained from Associate Dean Dan Morgan.

Departmental Honors
To encourage individual development and independent study in a special field of interest, many departments and interdisciplinary programs of the College of Arts and Science offer honors programs for selected, superior candidates. Students normally begin departmental honors work in the junior year, but exceptions may be made in the case of outstanding seniors. To qualify for consideration, students must have (a) attained a minimum grade point average of 3.300 in all work previously taken for credit and in the major, and (b) exhibited to the department(s) and/or interdisciplinary program(s) other evidence of the student’s capacity for independent study. Some departments and interdisciplinary programs require higher grade point averages in all work previously taken for credit and/or in the major. Formal admission is by the director of honors study in the Office of the Associate Deans after election by the department(s) and/or interdisciplinary program(s) concerned.

Requirements vary somewhat from department to department (see descriptions in the appropriate department sections of this catalog). Candidates are required to demonstrate some degree of originality and maturity in the methods of independent investigation, analysis, and criticism, and skill in the written presentation of independent work. This standard usually requires a senior thesis but may be satisfied, in departments that have gained approval of this procedure, by a series of briefer critical papers.

Departmental honors work culminates in an examination given in the second semester of the senior year. The examination shall be both oral and written except in departments where honors students must take all courses required of standard majors in addition to those required of honors students. These departments have the option of making the examination either oral or both oral and written. The examination shall be conducted by a committee with a majority of examiners who have not participated in the candidate’s honors work. Where feasible, examiners from other institutions may be included. The examination shall cover the thesis and specific fields of the independent work and may, at the discretion of the department, include all of the major work. Successful candidates are awarded honors or highest honors in their field, and this designation appears on their diploma.

Dean’s List
The Dean’s List recognizes outstanding academic performance in a semester. Students are named to the Dean’s List when they earn a grade point average of at least 3.500 while carrying 12 or more graded credit hours, with no temporary or missing grades in any course (credit or non-credit), and no grade of F. A student must be in a degree-granting school.

Phi Beta Kappa
The Alpha Chapter of Phi Beta Kappa in the state of Tennessee honors scholarly attainments in the liberal arts and sciences and annually elects seniors and juniors to membership during the spring semester.

Seniors who have completed at least 60 credit hours in the College of Arts and Science and earned a cumulative grade point average of 3.65 or higher are eligible for consideration,
as are juniors who have completed at least 70 credit hours at Vanderbilt with a cumulative grade point average of at least 3.90. Juniors must have completed most AXLE requirements by the end of their junior year. For calculating credit hours and judging residence requirements, the chapter treats foreign study programs in the same manner as does the College of Arts and Science.

Attainment of the minimum required grade point average does not guarantee election. Membership in Phi Beta Kappa is based on a demonstration of scholarly achievements, broad cultural interests, and high moral character. The scholarly work must emphasize liberal rather than applied or professional studies. As a guideline, for seniors at least 90 credit hours must qualify as liberal. Grades earned in applied (vocational) or professional course work are not counted in computing the grade point average. The breadth of a candidate's program, as shown by the number and variety of courses taken outside the major, is also considered.

Phi Beta Kappa has long emphasized the importance of mathematics and foreign language in a liberal education. In keeping with this tradition, the chapter considers only those students who have demonstrated proficiency in these areas beyond the AXLE graduation requirements. Proficiency in reading, writing, and speaking a foreign language is typically demonstrated by passing a course in a language at a level at least one semester beyond the AXLE requirements. Courses must be taken on a graded rather than a P/F basis. The foreign language requirement may be satisfied with College Board SAT Subject, Advanced Placement, International Baccalaureate, or Tennessee Foreign Language Institute test scores.

Mathematics proficiency may be demonstrated by taking at least one semester of calculus and a second mathematics, statistics, or formal logic course which has calculus as a prerequisite. Courses must be taken on a graded rather than a P/F basis. Non-calculus-based statistics or introductory logic courses generally do not satisfy the mathematics criteria. The mathematics requirement may be satisfied with Advanced Placement or International Baccalaureate credit but not College Board SAT Subject Test scores.

In no event may the total number of persons elected from any senior class exceed 10 percent of the class, and from any junior class exceed six persons. Eligible juniors who are not elected are reconsidered for membership in their senior year.

Refer to the chapter website my.vanderbilt.edu/phibetakappa for additional information and updated eligibility criteria.

Honor Societies for First-Year Students
First-year students who earn a grade point average of 3.500 or better for their first semester are eligible for membership in the Vanderbilt chapters of Phi Eta Sigma and Alpha Lambda Delta.

Other Awards and Prizes
MORRIS H. BERNSTEIN JR. PRIZE IN LATIN DECLAMATION. Established in 1983 by William H. Bernstein (B.A. 1983) in memory of his father (B.A. 1943, M.D. 1946). Awarded after a competition, open to any undergraduate who has studied two semesters of Latin, in which participants deliver from memory Latin passages selected to reflect classical ideals.

FOUNDER’S MEDAL FOR ORATORY. Awarded to the senior who has demonstrated the highest standard in public speaking.

FRENCH GOVERNMENT PRIZES. Awarded for excellence in French studies.

EDWIN S. GARDNER MEMORIAL PRIZE FOR EXCELLENCE IN FRENCH. Awarded to a graduating senior who majored in French.

ALEXANDER HEARD AWARD. Presented annually to the outstanding senior political science major.

RICHARD J. LARSEN AWARD FOR ACHIEVEMENT IN UNDERGRADUATE MATHEMATICS. Established in 2005 to honor the commitment to undergraduate education of Richard J. Larsen, member of the faculty from 1970 to 2005. Presented each spring to the senior math major judged by the faculty to have excelled in all aspects of undergraduate mathematics.

avery leiserson award. Presented for the best research paper or essay written by an undergraduate in a political science course.

MERRILL MOORE AWARD. Endowed in 1961 by Mrs. Merrill Moore, Squantum, Massachusetts, in memory of her husband. Presented to a graduating senior or a student entering the junior or senior class, selected by the Department of English on the basis of “literary promise and the psychological or practical usefulness of the award” to the student.

DANA W. NANCE PRIZE FOR EXCELLENCE IN A PREMEDICAL CURRICULUM. Endowed in 1985 by the family and friends of Dana W. Nance (B.A. 1925, M.D. 1929). Awarded annually to a student who has demonstrated the perseverance to succeed in a premedical curriculum and who embodies the attributes of a caring physician.

JUM C. NUNNALLY AWARD. Established in 1987 in memory of this professor of psychology from 1960 to 1982. Presented to a graduating senior in the honors program of the Department of Psychology for the best research project.

DONALD E. PEARSON AWARD. Presented annually to a graduating senior in chemistry adjudged the most distinguished in undergraduate research in chemistry.

PHI BETA KAPPA FRESHMAN SEMINAR AWARD. Awarded annually to students who have done outstanding creative work in freshman seminars.

AWARD FOR OUTSTANDING RESEARCH IN MOLECULAR BIOLOGY. Presented to a senior in molecular biology for outstanding research performed as part of the major program in molecular biology.

OUTSTANDING SENIOR IN CHEMISTRY AWARD. Presented annually to that graduating senior in chemistry who, in the opinion of the faculty of the Department of Chemistry, shows most promise of an outstanding career.

HENRY LEE SWINT PRIZE. Awarded since 1978 for the best essay in history.

D. STANLEY AND ANN T. TARBELL PRIZE IN ORGANIC CHEMISTRY. Awarded annually to a graduating senior who has excelled in organic chemistry by earning the highest grades in courses or performing outstanding research in organic chemistry.

UNDERWOOD MEMORIAL AWARD. Endowed in 1961 by the late Newton Underwood in memory of his father, Judge Emory Marvin Underwood, long-time member of the Board of Trust. The cash award is given to the most deserving and most promising graduating senior or graduate student in physics.

SUSAN FORD WILTSHIRE PRIZE. Cosponsored by the Women’s and Gender Studies program and the Women’s Faculty Organization, this award is given annually for the best undergraduate essay that deals with gender issues.

KATHARINE B. WOODWARD PRIZE. Awarded since 1943 and endowed in 1962 by Miss Katharine B. Woodward, Class of 1919, for excellence in Spanish studies.

MARGARET STONEWALL WOOLDRIDGE HAMBLET AWARD. Endowed in 1983 by Clement H. Hamblet in memory of his late wife, who began her art studies at Peabody College. The award is given to a graduating student of outstanding merit in studio art to enable the pursuit of his or her creative development through one year of extensive travel and further studies in studio art.
Academic Regulations

Honor System
All academic work at Vanderbilt is done under the Honor System. (See the chapter on Life at Vanderbilt.)

Class Attendance
Students are expected to attend all scheduled meetings of classes in which they are enrolled; they have an obligation to contribute to the academic performance of all students by full participation in the work of each class. At the beginning of the semester, instructors explain the policy regarding absences in each of their classes, and thereafter they report to the Office of the Associate Deans of the College of Arts and Science the name of any student whose achievement in a course is being adversely affected by excessive absences. In such cases an associate dean, in consultation with the instructor, takes appropriate action, which may include dropping the student from the class; students dropped after the deadline for withdrawal (see Period for Withdrawal) receive the grade F. Class attendance may be specified as a factor in determining the final grade in a course, and it cannot fail to influence the grade even when it is not considered explicitly.

The last day before and the first day after official holidays are considered to be the same as any other day on which classes are scheduled. Assignments are made for classes scheduled on these days, and tests may be given in them. Students should take this fact into account in making travel plans.

The faculty of the College of Arts and Science recognizes that occasions arise during the academic year that merit the excused absence of a student from a scheduled class or laboratory during which an examination, quiz, or other graded exercise is given. Examples include participation in sponsored university activities (e.g., debate team, varsity sports), observance of officially designated religious holidays, serious personal problems (e.g., serious illness, death of a member of the student’s family), and matters relating to the student’s academic training (e.g., graduate or professional school interviews). While determination of the merit of a case is left primarily to the discretion of the individual instructor, conflicts arising from personal travel plans or social obligations do not qualify as excused absences. Except in unusual circumstances, the Office of the Associate Deans does not grant excused absences for students.

The primary determination of whether a student’s absence from class occurs for a reason that warrants rescheduling a graded exercise for that student is left to the judgment of the individual instructor. A standard of reasonableness should apply in making such judgments.

Except in cases of true emergency, student petitions for making up missed graded exercises must be made prior to the missed class, preferably at the beginning of the semester or at the earliest time thereafter when the need to be absent is known to the student. Faculty members retain discretion in the form and timing of makeup exercises or in devising other strategies for accommodating students.

The faculty of the College of Arts and Science authorizes the Office of the Dean to resolve through arbitration any cases that cannot be directly resolved between students and their instructors.

Classroom Recording Policy
The use of technologies for audio and video recording of lectures and other classroom activities is allowed only with the express permission of the instructor. In cases where recordings are allowed, such content is restricted to personal use only unless permission is expressly granted in writing by the instructor and by other classroom participants, including other students. Personal use is defined as use by an individual student for the purpose of studying or completing course assignments. When students have permission for personal use of recordings, they must still obtain written permission from the instructor to share recordings with others.

For students registered with EAD and who have been approved for audio and/or video recording of lectures and other classroom activities as a reasonable accommodation, applicable federal law requires instructors to permit those recordings. Such recordings are also limited to personal use, except with permission of the instructor and other students in the class.

Course Registrations

Normal Course Load
Each semester, regular tuition is charged on the basis of a normal course load of 12 to 18 semester hours. No more than 18 or fewer than 12 credit hours may be taken in any one semester without authorization of the Administrative Committee or an associate dean in 311 Kirkland Hall. (There is an extra charge for more than 18 credit hours at the current hourly rate.) First-year students may not take more than 18 credit hours in a semester.

Students permitted to take fewer than 12 credit hours are placed on probation, unless their light load is necessary because of outside employment or illness. During the summer session, there is no minimum course load. Summer loads exceeding 14 credit hours must be authorized by an associate dean in 311 Kirkland Hall.

Credit hours are semester hours; e.g., a three-hour course carries credit of 3 semester hours. One semester credit hour represents at least three hours of academic work per week, on average, for one semester. Academic work includes, but is not necessarily limited to, lectures, laboratory work, homework, research, class readings, independent study, internships, practica, studio work, recitals, practicing, rehearsing, and recitations. Some Vanderbilt courses may have requirements that exceed this definition.

A student must be enrolled in a minimum of 12 credit hours to be classified as a full-time student.

Auditing
Regularly enrolled Arts and Science students who want to audit courses in any of the undergraduate schools of the university must obtain the written consent of the instructor to attend the class but do not register for the course for credit. Forms are available from the Office of Academic Services in each school. No permanent record is kept of the audit. Regular students may audit one class each semester.
Taking Courses for No-Credit

Students may want to take elsewhere in the university courses that are not creditable toward the bachelor’s degree. They may do so on a no-credit basis, attending classes, doing all the work of the course, and receiving a grade that is recorded on the transcript with a notation that it does not count toward the degree.

No-credit courses count in computation of the student’s academic load and in computation of tuition, but not in computation of the grade point average. They also do not count toward the attainment of class standing.

Taking Courses for P/F Credit

Students may elect to take a limited number of courses on a Pass/Fail (P/F) basis. To enroll for a course on a Pass/Fail basis, students must have completed at least two semesters at Vanderbilt, must have achieved at least sophomore standing, and must not be on academic probation.

No more than 18 credit hours graded P may be counted toward the degree, and no more than one course per term may be taken P/F.

The P/F option does not apply to courses in the following categories:

1. Courses counted toward AXLE requirements;
2. Courses in the major field(s), other courses that may be counted toward the major(s), or courses required for the major(s);
3. For students with a defined interdisciplinary major, courses that are required for the major or that are eligible to count toward the major;
4. For students with an individually designed interdisciplinary major, courses listed in the student’s plan of study;
5. For students planning an optional minor, courses in the minor field or those eligible to count toward an interdisciplinary minor;
6. Courses that have been specifically excluded from the P/F option;
7. Courses taken previously.
8. Minimum 12 graded credit hours required.
9. A graduating senior who has permission to take fewer than 12 credit hours on a graded basis may take one course on a P/F basis in addition to the courses required for graduation. If the student does not graduate at the end of that semester, the P grade is automatically converted to the grade actually earned.

Students may register for grading on a Pass/Fail basis until the close of the Change Period at the end of the second week of classes. Students may change from Pass/Fail to graded status until the deadline date for withdrawing from a course that is published in the Academic Calendar.

Those electing the Pass/Fail option must meet all course requirements (e.g., reports, papers, examinations, attendance, etc.) and are graded in the normal way. Instructors are not informed of the names of students enrolled on a Pass/Fail basis. At the end of the semester, a regular grade is submitted. The grade for a class will be converted from P to the recorded letter grade if a student later declares a major or minor toward which that class counts. The recorded letter grade will be included in both the overall and the major or minor grade point average.

Undergraduate Enrollment in Graduate Courses

In the 4-digit course numbering system initiated in Fall 2015, some courses may enroll undergraduate and graduate students simultaneously. Typically, there is a 3000- or 4000-level course for undergraduates and a matching 5000-level course for graduate students. Undergraduate students may enroll in the 3000- or 4000-level course of these pairs without special approval.

A qualified Vanderbilt University senior undergrad may enroll in courses approved for graduate credit (those numbered 5000 and higher) and receive credit that, upon the student’s admission to the Vanderbilt Graduate School, may be applicable toward a graduate degree. Vanderbilt cannot guarantee that another graduate school will grant credit for such courses. The principles governing this option are as follows:

1. Work taken under this option is limited to those courses approved for graduate credit (those numbered 5000 and higher) and listed as such in the Graduate School catalog, excluding thesis and dissertation research courses and similar individual research and readings courses. Courses approved for professional credit (i.e., many courses in the Divinity School, Law School, School of Medicine, School of Nursing, and Owen Graduate School of Management) may not be taken as part of this option.
2. The student must, at the time of registration, have a 3.00 average in all prior work to be counted toward the bachelor’s degree, or a 3.00 average in all prior work to be counted toward the undergraduate major, or a 3.00 average in the preceding two semesters.
3. The total course load, including both graduate and undergraduate courses, must not exceed 15 credit hours in any semester.
4. No undergraduate student may enroll in more than one graduate course in any semester.
5. A registration form for undergraduate Arts and Science students wishing to exercise this option is available in the College of Arts and Science Associate Deans’ Office. The interested student must use this form to obtain the written approval of the following:
   a) the academic adviser,
   b) the instructor of the course,
   c) and the director of graduate studies of the department or program.

Reserving Credit for Graduate School

1. Arts and Science students who are interested in reserving the credit earned in a graduate course (those numbered 5000 and higher) should consult with the Graduate School before attempting to register for graduate courses under this option.
2. The work must be in excess of that required for the bachelor’s degree.
3. All of the above criteria apply under this option.

4. Students must declare their intention to reserve this credit on the registration form.

5. Permission for Vanderbilt undergraduates to enroll in graduate courses does not constitute a commitment on the part of any department to accept the student as a graduate student in the future.

6. An undergraduate student exercising this option is treated as a graduate student with regard to class requirements and grading standards.

**Independent Study and Directed Study Courses**

Independent study and directed study courses are intended primarily for students in their junior and senior years. Students may not take an independent study or directed study course that duplicates a regular course being offered in the same semester. Juniors or seniors who wish to take independent study or directed study courses must use the following procedure:

1. Obtain permission to enroll from the instructor of their choice. Consult the instructor prior to the course request period of registration for the semester in which the study is to be undertaken.

2. Register for the course through the appropriate department.

3. Make a written study plan detailing the nature of the project and the amount of credit and have it approved by the instructor and the department chair (or the chair’s designee) by the tenth day after classes begin.

Students who have not met these requirements are reported on the tenth-day enrollment report as “registered but not attending” and are dropped from the course.

Students may not repeat independent study or directed study courses for grade replacement. Independent study courses in other schools approved by the College Curriculum Committee may be taken for credit if the project is approved by the Committee on Individual Programs.

**Duplication of Course Content**

It is the responsibility of the individual student to avoid duplication in whole or in part of the content of any course counting toward the degree. Such duplication may result in the withdrawal of credit.

**Repeated Courses**

Most courses offered in the College of Arts and Science may be repeated. If a course was failed the last time it was taken, credit is awarded when the course is repeated with a passing grade. If a course was previously passed, no new credit is earned. If a course previously passed is repeated and failed, credit originally earned for it is lost. In any case all grades earned are shown on the transcript. Under conditions explained below, the most recent grade in a course replaces the previous grade in determining credit, in computing the grade point average, and in verifying the completion of degree requirements and progress toward the degree.

The policy of grade replacement applies when all of the conditions below are met.

1. A previously passed course is repeated within one year or (for courses not offered within a year) the first time it is offered. Passed courses may be repeated only once. Failed courses may be repeated at any time and any number of times.

2. Exactly the same course (same department and course number) is completed. For First-Year Writing Seminars, it must be the same department and section number. In addition, a very small number of differently numbered courses as approved by the faculty may be substituted under this policy. These are designated in the departmental course listings.

3. The course is repeated on a regularly graded basis. This limitation applies even if the course was originally taken on a P/F basis.

4. The course is not one in independent study or directed study.

5. A non-W course is taken as repeat credit for a Writing version of the same course that was previously passed. The student loses credit for the writing requirement.

6. A W course is taken as repeat credit for a non-Writing version of the same course that was previously passed. The student earns credit for the writing requirement.

7. Certain courses (e.g., ensemble, performance instruction, and independent study) are designated as repeatable as they contain evolving or iteratively new content. These courses may be taken multiple times for credit. If a course can be repeated, the number of credit hours allowable per semester will be included in the course description.

In most instances, enrollment in a course similar to one already completed but with a different course number will result in the award of no credit for the second course and will have no effect on the grade point average.

Courses taken in the College of Arts and Science may not be repeated elsewhere for grade replacement; nor may courses taken elsewhere be repeated in the College of Arts and Science for grade replacement.

Students are cautioned that while repeating for grade replacement a course previously passed may improve their cumulative grade point average, it may also lead to a problem in meeting minimum credit hours requirements for class standing because no new credit is earned.

**The Registration Process**

A period is designated in each semester during which continuing students, after consultation with their advisers, register for work to be taken during the next term. The student’s primary adviser must release the advising hold in YES before the student can register.

Students are asked to plan their immediate and long-range educational programs with their faculty advisers before registering and to consult their advisers when they make changes in their registration.

Students not meeting specified tuition payment deadlines are not permitted to register. See the chapter on Financial Information for details.

Before registering, students should check their own records carefully with respect to the following items:

1. AXLE requirements;
2. Major requirements;
3. Requirements of any optional minor(s) sought;
4. Course prerequisites.
Period for Withdrawal or Change from P/F Status

After the Change Period, and extending to the end of the eighth week of classes, a student may withdraw from a course with approval from the student's adviser. Under certain conditions, withdrawal may also require approval from an associate dean in 311 Kirkland. During the same period students may change their status from P/F to regularly graded—but not vice versa—in a course.

These changes must be made with a Change of Course form, which is available online and which the student must submit to the Office of Academic Services in Arts and Science. After the end of the eighth week, withdrawal is possible only in the most extraordinary circumstances, such as illness or unusual personal or family problems. In every case the student, the student’s adviser, and an associate dean must agree that late withdrawal is justified by the circumstances. Cases in which agreement is not possible are decided by the Administrative Committee. After the end of the eighth week, change from P/F to regularly graded status is not permitted.

Students who withdraw from a course after the change period receive the grade W (withdrawal). This grade is not used in the computation of the grade point average or class rank. A student who defaults in a course without dropping or withdrawing from it receives the grade F.

Minimum Graded Credit Hours

A course may not be dropped without authorization of the Administrative Committee or an associate dean if the student is left with a course load of fewer than 12 credit hours on a regularly graded basis.

Mid-Semester Progress Reports

At the end of the seventh week of each semester, instructors assess the progress of all students in their classes and report those whose work at that point is deficient or whose work is being harmed by excessive absences. Grades to be reported are C−, D+, D, D−, F, and I (for incomplete, meaning that some work due by that point has not been submitted). Instructors may combine with one of these grades or assign separately a notation of excessive absences from a class. Reports of these deficiencies are posted to students’ Access to Academic Information online summary. Grades given at mid-semester do not become part of the permanent record but are intended to warn students about performance judged unsatisfactory.

Examinations

Each department establishes procedures for evaluating student performance, and normally the method of evaluation is the responsibility of the course instructor. At the beginning of the semester instructors should clearly state the evaluation procedures, including types of examinations, to be used in their courses. Students should have adequate opportunity during the semester to demonstrate their knowledge of the subject matter and should be given an indication of their progress in the course prior to the deadline for dropping courses. Instructors are cautioned against placing excessive weight on the final examination when determining a student’s grade in a course.

Dead Week

No examinations of any type—including quizzes, hour examinations, and portions of final examinations—are allowed during the last week of classes; papers and in-class presentations are permitted during dead week. The Administrative Committee may grant special permission to the instructor in charge of a course to give laboratory examinations during the last regular laboratory period of the last week of classes. The last week of classes is defined as the last seven calendar days preceding the end of classes. If, for example, classes end on Tuesday, then the “dead week” begins the preceding Wednesday and lasts through Tuesday. Students should notify the Office of the Associate Deans of any violation.

Final Examinations

The primary and alternate final examination schedules issued each semester allow two hours for a final examination in each course. Each in-class final examination must be given at the time indicated on the primary schedule. The alternate schedule is used only if the instructor decides to give an in-class examination at two times. The final examination period lasts for about a week and a half.

Alternatives to the standard in-class final examination are permitted at the instructor’s discretion. Some examples are take-home examinations, oral examinations, and term papers; these need not be a final examination if adequate evaluation procedures have been used during the term. A take-home or oral examination should make approximately the same demand on a student’s time as an in-class examination and should be conducted during the final examination period. A take-home examination must be distributed at the last regular class meeting and must be completed by either the primary or the alternate examination date, whichever is later.

All examinations are conducted under the Honor System. The instructor’s record of grades given during a course and any final examination papers not returned to students must be kept on file by the instructor for the first month of the semester following the conclusion of the course. For spring semester and summer session courses, this rule means the first month of the fall semester.

Monitoring these regulations is the responsibility of the departments, under the supervision of the Office of the Associate Deans. Variations from the regulations—such as changing the time of an in-class final examination for an entire class—are allowed only on approval of the Administrative Committee.

Comprehensive Examination

Any department or interdisciplinary program may require a comprehensive examination of its major students as a condition of graduation.

Senior Re-examination

A candidate for graduation who fails not more than one course in the final semester may be allowed one re-examination, provided the course failed prevents the student’s graduation, and provided the student could pass the course by passing a re-examination. Certain courses may be excluded from re-examination. The re-examination must be requested through the Office of the Associate Deans, and if approved, it is given immediately after the close of the last semester of the student’s senior year. A student who passes the re-examination will receive a D− in the course. The terms and administration of senior re-examination are the responsibility of the school that offers the course.
Credit by Examination
In certain circumstances, students may be awarded course credit by departmental examination. (This procedure is distinct from the award of credit through the College Board Advanced Placement Tests taken prior to the student’s first enrollment.)

Students who wish to earn credit by departmental examination should consult the Office of Academic Services in Arts and Science concerning procedures. To be eligible, students must be carrying a minimum of 12 credit hours and be in good standing.

Students must obtain the approval of the chair of the department that is to give the examination and the instructor designated by the chair. Students may earn up to 18 hours of credit by any combination of credit through advanced placement examinations and credit by departmental examination. Students may earn up to 8 hours of credit by examination in any one department. Students may attempt to obtain credit by examination no more than twice in one semester, and no more than twice in one course. Students may not repeat a course for grade replacement under the credit by examination procedures. Credits earned by credit by examination may not be counted toward AXLE.

Credit hours and grade are awarded on the basis of the grade earned on the examination, subject to the policy of the department awarding credit. Students have the option of refusing to accept the credit hours and grade after learning the results of the examination.

Students enrolled for at least 12 credit hours are not charged extra tuition for hours earned through credit by examination, so long as the amount of credit falls within the allowable limits of an 18-hour tuition load, including no-credit courses and courses dropped after the Change Period. Students in this category must pay a $50 fee for the cost of constructing, administering, and grading the examination. Since this cost has already been incurred, students who refuse the credit hours and grade are charged the $50 fee nevertheless.

Full-time students with a tuition load exceeding 18 credit hours pay tuition at the regular rate with no additional fee.

Grades and Credit

Grade Reports
Students have access to their grade reports on the Academic Record in YES. Notifications are sent to students in their last two semesters, showing total credit hours, grade point average, and degree requirements still to be met. Students should examine their Degree Audit reports carefully and discuss them with their faculty advisers. Any errors should be reported immediately to the Office of Academic Services in Arts and Science (see also Change of Grade).

Grading System

A: excellent
B: good
C: satisfactory
D: minimum pass work
F: failure

Under certain circumstances the following grades may be awarded:

W: withdrawal
P: (see P/F Course Provision)
M: absent from final examination

Defined Grades with Corresponding Grade Points Per Credit Hour

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<thead>
<tr>
<th>Grade</th>
<th>Credit Hours</th>
<th>Grade Points</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
<td>A-</td>
<td>3.7</td>
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<td>B+</td>
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<td>3.3</td>
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<td>B</td>
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<td>B-</td>
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Grade Point Average
A student’s grade point average is obtained by dividing the quality points earned by the credit hours for which the student has registered, excluding courses taken for no credit, those from which the student has officially withdrawn (see Withdrawal Period under Registration above), and those completed with the grade P.

In no case is the grade point average affected by transfer credit. No course at another institution in which a grade below C– was received, or which was taken on a Pass/Fail basis, is credited toward the degrees awarded by the College of Arts and Science.

Temporary Grades
Temporary grades are placeholders that are assigned under defined circumstances with a specified deadline by which they will be replaced by a permanent grade. Temporary grades are not calculated in the GPA, but a student who receives a temporary grade is ineligible for the Dean's List. Students cannot graduate with any temporary grades.

M: Missing a Final Examination
The grade M is given to a student who misses a final examination and is not known to have defaulted in the course, unless the student could not have passed the course even with the final examination, in which case the grade F is given. The course grade of a student known to have defaulted on a final examination is computed on the basis of a score of zero for the final examination. It is the responsibility of the student who misses a final examination to present an excuse to the associate dean immediately. If the excuse is considered adequate, the grade M is authorized.

A student who secures authorization for an absence at the proper time is obliged to take a makeup examination during the first full week after the Change Period of the next semester, provided the student is in residence. It is the student's responsibility to contact the Office of the Associate Deans (311 Kirkland Hall) before the second day of classes to schedule the makeup. If the student is not in residence, the grade M must be removed by a makeup examination given within a maximum period of one year from the date of the missed examination and during one of the regular makeup examination periods. If the student fails to take the makeup examination within the prescribed time, the M grade will be replaced by a default grade submitted by the instructor when the M is assigned.
I: Incomplete

The grade of I is given only under extenuating circumstances and only when a significant body of satisfactory work has been completed in a course. The I is not intended as a replacement for a failing grade, nor should it be assigned if a student simply misses the final examination. The grade of M is used for the latter purpose. The grade for a student who misses a final examination and whose work is also incomplete in other respects is reported as MI. The request for an I is generally initiated by the student but must be approved and assigned by the instructor. When assigning an Incomplete, the instructor specifies (a) a deadline by which the I must be resolved and replaced by a permanent grade and (b) a default course grade that counts the missing work as zero. The deadline may be no later than the end of the next regular semester. The Incomplete can be extended beyond the next semester only if an associate dean determines that an extension is warranted. If the required work is submitted by the deadline for removing the Incomplete, the I will be replaced by the grade earned. If the work is not completed by the deadline, the default grade will become the permanent grade for the course.

MI: Missing a Final Examination and Other Work

The grade for a student who misses a final examination and whose work is also incomplete in other respects is reported as MI. This grade may not be turned in without prior authorization by an associate dean. It is the student’s responsibility to contact the Office of the Associate Deans (311 Kirkland Hall) to request permission to take a makeup examination and to arrange for the submission of the missing work.

Makeup Examinations

For students who receive the authorized grade M, the Office of the Associate Deans will arrange makeup examinations during the next semester, but it is the responsibility of the student to schedule the makeup at the Office of the Associate Deans (311 Kirkland Hall) before the second day of classes. The makeup examination period is the first full week after the Change Period of each semester. The Administrative Committee may on occasion authorize a makeup examination at some time other than the makeup period for a particular student.

F: Failure

The grade F indicates failure. All F's are counted in the computation of grade point averages, except when a course is repeated and is subsequently passed. In this case the latest grade is used for computation of the grade point average (but the grade originally earned is not removed from the transcript). A course in which the grade F is received must be repeated as a regular course if credit is to be given. It may not be repeated as a course in independent or directed study, under the procedures for credit by examination, or on a P/F basis.

Change of Grade

A grade reported and recorded in the Office of the University Registrar may be changed only upon written request of the instructor with the approval of the Administrative Committee. The committee will approve such a change only on certification that the original report was in error.

Transfer Credit

It is the student’s responsibility to provide all of the information needed by the College of Arts and Science to assess the program for which transfer of credit is requested. Work presented for transfer must be from an accredited college and is subject to evaluation in light of the degree requirements of the College of Arts and Science. Students seeking transfer credit for work at nonaccredited institutions will be considered individually. Correspondence courses will not be considered for transfer credit.

Work transferred to Vanderbilt from another institution will not carry with it a grade point average. No course in which a grade below C- was received, or which was taken on a Pass/Fail basis, will be credited toward a degree offered by the College of Arts and Science. The question of credit in the College of Arts and Science for previous work done at another institution must be settled in advance of the student’s first registration. Credit for previous work will not be added to the student’s record after matriculation. Credit will not be awarded for internships.

Transfer students must spend at least four full semesters, including the last two semesters, enrolled in the College of Arts and Science. They must earn at least 60 credit hours and complete at least one writing course in fulfillment of the writing requirement while so enrolled.

Residence Requirement

A minimum of four normal semesters (at least 60 credit hours), including the last two semesters (at least 30 credit hours), must be spent in residence in the College of Arts and Science unless an exception is made by the Administrative Committee. Students transferring from other schools of the university must spend the last year (at least 30 credit hours) in residence in the College of Arts and Science.

Summer Work at Another Institution

Students enrolled in the College of Arts and Science may receive transfer credit for a maximum of two courses taken during summers at another four-year, fully accredited institution. To qualify for such credit, the student must be in good standing and must obtain authorization from an associate dean and the appropriate department in advance of taking the course. Such courses cannot fulfill AXLE requirements, count as part of the last 30 credit hours in residence, duplicate a course taken previously, or be taken on a Pass/Fail or similar basis. Credit will not be awarded for internships.

Semester Work at Another Institution

Students who wish to receive transfer credit for a semester of work at another institution must receive approval in advance from the Committee on Individual Programs. To qualify for such credit, the student must be in good standing and must present to the committee a plan that makes clear the educational rationale for such work, the ways in which it supplements the Vanderbilt curriculum, and the equivalence of standards to those at Vanderbilt. Approval of the overall plan by this committee must be followed by approval of specific courses by the student’s adviser, the appropriate department in the College of Arts and Science, and the Office of Academic Services in Arts and Science. Such courses cannot fulfill AXLE requirements, count as part of the last 30 credit hours in residence, duplicate a course taken previously, or be taken on a Pass/Fail or similar basis. Credit will not be awarded for internships.
A student who wishes to earn a baccalaureate degree in the College of Arts and Science in absentia must have (a) completed the AXLE requirements and all major requirements; (b) earned at least 105 credit hours and a grade point average of 2.000 with at least 60 credit hours earned in a minimum of four semesters of residence in the College of Arts and Science; (c) been accepted at a professional or graduate school where, during the first year, the remaining credit hours needed for graduation can be earned; and (d) obtained the approval of the major department and an associate dean of the College of Arts and Science. Students who have completed fewer than 105 credit hours may petition the Administrative Committee for special consideration.

The limitation on credit hours outside the College of Arts and Science applies to all bachelor of arts candidates. Students in the senior-in-absentia program pay a minimum semester tuition charge to the College of Arts and Science (see Financial Information).

**Student Leave of Absence**

A student desiring a leave of absence should obtain application forms and instructions from the Office of the Associate Deans of the College of Arts and Science. All students are eligible, provided they have not been dropped by the university and are not dropped at the end of the semester during which application is made. But students may take a leave no more than twice during their career in the College of Arts and Science.

Leaves are granted for one semester or for a year. Applications should be completed before the end of the fall semester for a leave of absence during the spring semester, and before August 15 for a leave of absence during the fall semester (or for the academic year). If the leave is approved, the student must keep the Office of the University Registrar informed of any change of address while on leave.

A student who takes a medical leave after mid-semester is expected to be on leave for the following regular semester as well. A student who plans to return from medical leave must submit proper documentation to the Offices of the Associate Deans of the College of Arts and Science and of Student Care and Community Support at least forty-five days before the first day of class.

A student who seeks to transfer to Vanderbilt credit earned elsewhere while on leave of absence must obtain permission in advance from the Committee on Individual Programs. Applications for leaves of this type must be filed with the committee at least one month before the close of the preceding semester.

Registration information is emailed to students on leave of absence. A student failing to register at the conclusion of the stated leave will be withdrawn from the university and must apply for readmission.

**Withdrawal from the University**

Students proposing to withdraw from the university during a regular term must report to the Office of the Associate Deans of the College of Arts and Science to initiate proper clearance procedures. If withdrawal from the university is officially authorized, the student will receive withdrawal grades on the same basis as a student withdrawing from a particular course or courses. (See the section on Period for Withdrawal under Registration above.)

**Change of Address**

Students are responsible for keeping the university informed of their correct mailing addresses, both school and home.
A student qualifies for sophomore standing upon completion of 24 credit hours of work with a grade point average of 1.800, completion of two regular semesters (fall or spring), and completion of the first-year writing requirement: successful completion of English 1100 if required and successful completion of a First-Year Writing Seminar (numbered 1111 in various disciplines). First-year students who fail to qualify for sophomore standing in two semesters are placed on probation and must have the permission of the Administrative Committee to register for a third semester. The third semester must be the summer semester at Vanderbilt. Normally, students who do not qualify for sophomore standing during this third semester are dropped from the university.

Senior Standing
A student qualifies for senior standing upon completion of 84 credit hours of work with a grade point average of 2.000 and completion of six regular semesters (fall or spring). Juniors who fail to qualify for senior standing within two semesters after qualifying for junior standing are placed on probation and must have the permission of the Administrative Committee to register for another semester. This additional semester must be the summer semester at Vanderbilt. Normally, students who do not qualify for senior standing in this additional semester are dropped from the university.

Petitions and Appeals
The Administrative Committee of the College of Arts and Science entertains petitions from currently enrolled students for exceptions to academic regulations. Any student subject to action by the Administrative Committee may appeal that action to the committee in writing. Further appeals from decisions of the committee follow standard university policies as described in the Student Handbook.

Returning to the College
Students on leave of absence return to the university at the end of the leave. If they do not return at that time and want to return later, they must apply to the Office of the University Registrar for readmission. Students who are advised to withdraw from the university determine whether or not to return in consultation with the Office of the Associate Deans. Students who have been dropped may apply to the Office of the University Registrar for readmission; in most cases readmission is not granted unless there has been an intervening period of at least a year. The Office of the University Registrar forwards all documents to the Administrative Committee, which considers each case on an individual basis. Readmission is competitive, and there is no assurance that it will be granted. Students readmitted after having been advised to withdraw or after having been dropped are automatically on final probation. If they fail to regain good standing and to maintain it until graduation, they are dropped again with little prospect for readmission. Application deadlines for readmission are as follows: July 15 for the fall semester, November 15 for the spring semester, and April 1 for the summer session.
College of Arts and Science Programs of Study

African American and Diaspora Studies

DIRECTOR Tracy D. Sharpley-Whiting
DIRECTOR OF UNDERGRADUATE STUDIES Tiffany R. Patterson
DIRECTOR OF GRADUATE STUDIES Gilman W. Whiting
PROFESSORS Victor Anderson, Houston Baker, Tracy D. Sharpley-Whiting
ASSOCIATE PROFESSORS Trica Keaton, Tiffany R. Patterson, Gilman W. Whiting
MELLON ASSISTANT PROFESSOR Alicia Monroe
WRITER IN RESIDENCE Alice Randall

The concentration in African American and Diaspora Studies requires 36 credit hours of course work. Approved courses taken at Fisk University may be counted as electives in the program. The course of study in the African American and Diaspora Studies program is divided into three areas: Area of Study I, Gender and Sexuality; Area of Study II, Literature, Theory, and Visual Culture; and Area of Study III, Social Sciences. Courses that satisfy each area are listed under “Areas of Study and Electives” below.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in African American and Diaspora Studies

Requirements for the major include at least 36 hours of credit as follows:

1. 3 credit hours from 1010, Introduction to African American and Diaspora Studies.
2. 6 credit hours from Area of Study I, Gender and Sexuality.
3. 6 credit hours from Area of Study II, Literature, Theory, and Visual Culture.
4. 6 credit hours from Area of Study III, Social Sciences.
5. 9 credit hours of electives chosen from Areas of Study I, II, and III, not used to satisfy requirements 2 through 4 above.

At least 6 credit hours of the minor must focus on the Americas (outside of the United States) and/or Africa. No more than 6 credit hours of the minor can be taken at the 1000 level (excluding 1010). Minors are encouraged, though not required, to take 4270 Research Methods in the first semester of their junior year.

Areas of Study

Courses with an asterisk in the lists below fulfill the Africa and Americas outside of the United States portion of the major and minor. Approved courses offered at Fisk may count toward elective requirements.

Area of Study I, Gender and Sexuality


Area of Study II, Literature, Theory, and Visual Culture


Area of Study III, Social Sciences

AADS: 1108* Making of the African Diaspora; 1408* Blacks in Latin America and the Caribbean; 2168* Black Migrations in the African Diaspora; 2178* Global Africa; 2208* Colonialism and After; 3198* Global Anti-Blackness

Honors Program

The only route to honors in the major is writing a 3 credit hour Senior Honors Thesis in AADS 498 (fall) or 499 (spring) and passing an oral examination. Admission to the Honors Program requires a student have a grade point average of at least 3.5 in all AADS courses and a cumulative GPA of 3.3. A committee of three faculty members (two of whom must be involved in undergraduate teaching in the African American and Diaspora Studies program) will evaluate the thesis. Students pursuing the Senior Honors Thesis may apply to the program for nominal funding to assist with research projects. The chair of the student's thesis committee and two readers must attend the oral examination. The oral defense will typically take place in the second semester of the student's senior year.

Minor in African American and Diaspora Studies

Requirements for completion of the minor include at least 21 credit hours as follows:

1. 3 credit hours in 1010, Introduction to African American and Diaspora Studies.
2. 3 credit hours from Area of Study I, Gender and Sexuality.
3. 3 credit hours from Area of Study II, Literature, Theory, and Visual Culture.
4. 3 credit hours from Area of Study III, Social Sciences.
5. 9 credit hours of electives chosen from Areas of Study I, II, and III, not used to satisfy requirements 2 through 4 above.
and Black Power"; 3208W Blacks in the Military; 3258 Black Issues in Education; 3278* Black Europe; 3458* Atlantic African Slave Trade; 4278 Research Methods.

**Other Electives**

Any course from the above three areas may serve as an elective if it is not already being used to satisfy an Area requirement. Please consult the director of undergraduate studies for periodic updates about electives including courses that can be taken at Fisk as electives for AADS.

AFRICAN AMERICAN AND DIASPORA STUDIES: 1111* First Year Writing Seminar.

ANTHROPOLOGY: 2105* Race in the Americas*; 2106* Culture and Power in Latin America*.


ENGLISH: 3654*3654W African American Literature; 3658* Latino-American Literature; 3674* Caribbean Literature; 3742* Feminist Theory.

FRENCH: 3232* Introduction to Francophone Literature*; 4023* The African Novel*.

HISTORY: 1270* Sub-Saharan Africa 1400–1800; 1280* Africa since 1800; 1410* U.S. 1877–1945, Reconstruction through World War II; 1440* African American History since 1877; 2450* Reform, Crisis, and Independence in Latin America, 1700–1820; 2490* Brazilian Civilization; 2570* Caribbean History 1492–1983; 2620* The Old South; 2630* The New South; 2680* Black New York; 2690* The Civil Rights Movement; 3040* Health and African American Experience; 3200 Poverty, Economy, Society in Sub-Saharan Africa; 3250W Blacks and Money.

HISTORY OF ART: 4960* Advanced Seminar in History of Art.


RELIGIOUS STUDIES: 1100* Introduction to African American Religious Traditions; 3119* Martin Luther King, Jr., and the Social Roles of Religion.

SOCIOLOGY: 3207* Popular Culture Dynamics; 3304* Race, Gender, and Health; 3702* Racial and Ethnic Minorities in the United States; 3711* Women, Gender, and Globalization; 3722* Gender in Society; 3723* Gender, Sexuality, and the Body.

SPANISH: 3835* Latino Immigration Experience*; 4750* Afro-Hispanic Literature*.

WOMEN’S AND GENDER STUDIES: 1150*/1150W* Sex and Gender in Everyday Life; 2240* Introduction to Women’s Health; 3250*/3250W Contemporary Women’s Movements.

**American Studies**

DIRECTOR Ifeoma Nwankwo

PROFESSORS Michael Kreyling (English), Leah Lowe (Theatre), Dana Nelson (English), Cecelia Tichi (English)

ASSOCIATE PROFESSORS Vanessa Beasley (Communication Studies), Teresa A. Goddu (English)

LECTURER Samuel Shaw

Affiliated Faculty

PROFESSORS Victor Anderson (Divinity), Houston Baker (English), Lewis V. Baldwin (Religious Studies), Richard Blackett (History), Mark Brandon (Law), William Collins (Economics), Daniel B. Cornfield (Sociology), Colin Dayan (English), Dennis C. Dickerson (History), Katharine Donato (Sociology), Bonnie Dow (Communication Studies), Tony Earley (English), Vivien G. Fryd (History of Art), Sam B. Girgis (English), Joni Hersch (Law), Michael Hodges (Philosophy), Larry W. Isaac (Sociology), Vera Kutzinski (English), John Lachs (Philosophy), Jane Landers (History), William Luis (Spanish), Holly McCann (Sociology), Jonathan Metzl (Medicine, Health, and Society), Bruce I. Oppenheimer (Political Science), Lucius Outlaw Jr. (Philosophy), Thomas A. Schwartz (History), Tracy Sharples-Whiting (African American and Diaspora Studies), John M. Slooo (Communication Studies), Hortense Spillers (English), Carol Swain (Political Science), Daniel H. Usner (History)

ASSOCIATE PROFESSORS Vanessa Beasley (Communication Studies), Karen E. Campbell (Sociology), David Lee Carlton (History), James Fraser (Human and Organizational Development), Jon W. Hallquist (Theatre), Jonathan Hiskey (Political Science), Shaul Kelner (Sociology/Jewish Studies), Kevin Leander (Education), Richard Lloyd (Sociology), Lorraine Lopez (English), Jim Lovensheimer (Music), Melanie Lowe (Music), Catherine Molineux (History), Tiffany Patterson (African American and Diaspora Studies), Nancy Reisman (English), Gilman Whiting (African American and Diaspora Studies)

ASSISTANT PROFESSOR Claire Sisco King (Communication Studies)

SENIOR LECTURER Susan Keva (French and Italian)

WRITER IN RESIDENCE Alice Randall (African American and Diaspora Studies)

THE Program in American Studies is an interdisciplinary program that enables students to explore the diversity of American culture from a variety of intellectual disciplines and perspectives. Through course offerings, colloquia, and research opportunities, program students and faculty engage the states of the nation in a post-9/11 era, examining anew the formation of social, legal, cultural, and economic identities within the borders of the United States. Compelling matters of class, race, ethnicity, sexuality, environmentalism, technology, the arts, region, and religion take their proper and vital place in the curriculum of study. As much of the United States becomes a bilingual nation, the program identifies itself within the larger geographic and geopolitical parameters of the Americas, including Canada, Mexico, the Caribbean, Central and South America. American studies, in addition, addresses itself to important distinctions within the concept of globalization, ranging from transnational corporate activities to those of nongovernmental organizations committed to such projects as public health, philanthropy, and nutrition. The American Studies program particularly encourages and provides opportunities for on- and off-campus research, internships, study abroad, and individualized and group projects under the guidance of participating faculty in the humanities, arts, and social sciences.

**NOTE:** New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

**Program of Concentration in American Studies**

The interdisciplinary major in American studies consists of 36 credit hours of course work, distributed as follows:

1. Core Requirements 6 credit hours
2. International Requirement 3 credit hours
3. Distribution Requirements 18 credit hours
4. Electives 9 credit hours

**Note:** No course may be counted twice in calculating the 36 credit hours. No more than 6 credit hours at the 1000 level can count toward the interdisciplinary major. Students seeking a second major may count a maximum of 6 credit hours of course work toward meeting requirements in both majors.
1. Core Requirements (6 credit hours)

Core Courses:
AMER 4000, The American Studies Workshop (3 credit hours)
AMER 4960, Senior Project (3 credit hours)

2. International Requirement (3 credit hours)

One of the following:

a) A semester abroad in a Vanderbilt-approved study abroad program and an additional 3-credit-hour elective
b) AMER 3200, Global Perspectives on the U.S. (3 credit hours)
c) One of the following:

ANTHROPOLOGY: 3161, Colonial Encounters in the Americas.
ASIAN STUDIES: 2560, Current Japan–U.S. Relations.
ECONOMICS: 4520W, Seminar on Globalization.
ENGLISH: 3674, Caribbean Literature; 3898, 3898W, Special Topics in English and American Literature.
HISTORY: 1370, Colonial Latin America; 1380, Independence in Latin America; 2450, Reform, Crisis, and Independence in Latin America, 1700–1820; 2460, Colonial Mexico; 2470, Revolutionary Mexico; 2480, Central America; 2510, Reform and Revolution in Latin America; 2535, Latin America and the United States; 2570, Caribbean History, 1492–1983; 2700, The U.S. and the World; 2710, The U.S. as a World Power; 3890, Selected Topics in History.
INTERDISCIPLINARY STUDIES: 3831, Global Citizenship and Service; 3832, Global Community Service; 3833, Seminar in Global Citizenship and Service.
JEWISH STUDIES: 2450, The Jewish Diaspora.
LATIN AMERICAN STUDIES: 2201, Introduction to Latin America; 2301, Music of Protest and Social Change in Latin America; 3891, Special Topics in Latin American Studies.
RELIGIOUS STUDIES: 4551, Islamic Mysticism.
SOCIOLOGY: 3231, Contemporary Latin America; 3232, Contemporary Mexican Society.
SPANISH: 3370, Spanish American Civilization; 3375, Film and Culture in Latin America; 4740, Spanish-American Literature of the Boom Era; 4741, Spanish-American Literature of the Post-Boom Era.

3. Distribution Requirements (18 credit hours)

6 credit hours from at least two different departments or programs in each of the following three areas:

b) Social Sciences: Anthropology, Economics, History, Political Science, Sociology.
c) Interdisciplinary Programs: African American and Diaspora Studies; American Studies; Cinema and Media Arts; Earth and Environmental Sciences; Jewish Studies; Latin American Studies; Medicine, Health, and Society; Women’s and Gender Studies.

Note: See below for a list of approved courses in each of these areas.

4. Electives (9 credit hours)

Three courses taken from the approved list of courses. Students should choose these courses in consultation with their adviser to form a study of concentration.

Minor in American Studies

The interdisciplinary minor in American studies consists of 18 credit hours of course work, distributed as follows:

1. Core Requirements 3 credit hours
2. International Requirement 3 credit hours
3. Distribution Requirements 9 credit hours
4. Electives 3 credit hours

Note: No course may be counted twice in calculating 18 credit hours. No more than 6 credit hours at the 1000 level can count toward the interdisciplinary minor. Students seeking a minor may count a maximum of 3 credit hours of course work toward meeting requirements in both their major and minor.

1. Core Requirements (3 credit hours)
Core Course: AMER 4000, The American Studies Workshop (3 credit hours)

2. International Requirement (3 credit hours)
One of the following:

a) A semester abroad in a Vanderbilt-approved study abroad program and an additional 3-credit-hour elective
b) AMER 3200, Global Perspectives on the U.S. (3 credit hours)
c) One course from the list of courses under the International Requirement, part C, of the major.

3. Distribution Requirements (9 credit hours)

3 credit hours in each of the following three areas:

a) Humanities: Classical Studies, Communication Studies, English, History of Art, Music, Philosophy, Religious Studies, Spanish and Portuguese, Theatre
b) Social Sciences: Anthropology, Economics, History, Political Science, Sociology, Psychology
c) Interdisciplinary Programs: African American and Diaspora Studies; American Studies; Cinema and Media Arts; Earth and Environmental Sciences; Jewish Studies; Latin American Studies; Medicine, Health, and Society; Women’s and Gender Studies

Note: See below for a list of approved courses in each of these areas.

4. Electives (3 credit hours)

One to two courses taken from the approved list of courses. Students should choose this course in consultation with their adviser to form a study of concentration.

Honors Program

The Honors Program in American Studies offers superior students a more intensive concentration within their major field. The program requires:

1. Completion of the requirements of the major.
2. A 3.3 cumulative grade point average.
3. A 3.5 cumulative grade point average in American studies.
4. 6 credit hours in the fall and spring semesters of the senior year in AMER 4998/4999 devoted to a major research project leading to an honors thesis. 4999 counts as the Senior Project (4960), and 4998 counts as elective credit for the requirements of the major.

5. An Honors thesis to be completed by the spring of the senior year.

6. Successful completion of an oral examination focusing on the topic of the thesis.

Exceptional achievement on the thesis will earn highest honors. Applications are accepted in March of the junior year. Additional information is available from the director of the American Studies program.

General Advice for Majors and Minors

We encourage students to enter the major through a number of avenues: a first-year seminar, our introductory course to the major, AMER 1002/1002W, or an introductory course in a particular discipline or program. While we do not require a set path into the major, up to 6 credit hours of introductory courses can count toward the major.

Once having declared a major or minor, students should work closely with their adviser to develop a coherent plan of study. We encourage students to concentrate on a theme or topic of special interest, either by choosing courses with a topical coherence each semester or by choosing a single topic to focus their major around. We also highly encourage our majors to seek opportunities for study abroad or internship possibilities. Students should plan on taking the American Studies Workshop during their junior year and our capstone course, the Senior Project, during their senior year. Distributional requirements and electives should be decided in conjunction with the student's adviser.

We also encourage our students to participate in American Studies programming that occurs outside the classroom, such as visiting speakers and our Road Trip Series.

Please consult the American Studies program website for detailed descriptions of courses. For all 111, special topic, and independent study courses, the course must be on an American topic, as approved by the director of the American Studies program. Note: 111 in all departments receives credit when an American topic is offered.

Approved List of Courses

AREA A: HUMANITIES

ART: 1099, Maymester Contemporary Art Blitz (when U.S. city/art).

CLASSICAL STUDIES: 3000, Classical Tradition in America.


ENGLISH: 2316, 2316W, Representative American Writers; 2320, Southern Literature; 3624W, Literature of the American Civil War; 3710–3711, Literature and Intellectual History (when an American topic is offered); 3644–3645, Twentieth-Century American Novel; 3640, Modern British and American Poetry: Yeats to Auden; 3646, Poetry since World War II; 3622, Nineteenth-Century American Women Writers; 3654, 3654W, African American Literature; 3642, Film and Modernism; 3620, Nineteenth-Century American Literature; 3692, Desire in America: Literature, Cinema, and History; 3694, America on Film: Art and Ideology; 3695, America on Film: Performance and Culture; 3899, Special Topics in Film; 3674, Caribbean Literature; 3890, 3890W, Movements in Literature (when an American topic is offered); 3892, 3892W, Problems in Literature (when an American topic is offered); 3894, 3894W, Major Figures in Literature; 3658, Latino-American Literature; 3662, 3662W, Asian American Literature; 3650, 3650W, Ethnic American Literature; 3746, Workshop in English and History; 3644, Jewish American Literature; 3680–3681, Twentieth-Century Drama; 3896, Special Topics in Investigative Writing in America; 3898, 3898W, Special Topics in English and American Literature (when an American topic is offered).

HISTORY OF ART: 2720, Modern Architecture; 3735, History of Photography; 2660, American Art to 1865; 2760, Early American Modernism, 1865–1945; 2765, Art since 1945; 4960, Advanced Seminar (when an American topic is offered).

MUSIC LITERATURE AND HISTORY: 1610, Musical Theatre in America: A Cultural History; 2600, American Music; 1620, Survey of Jazz; 1600, American Popular Music; 1630, The Blues; 1640, Country Music; 1650, History of Rock Music; 2150, Music, Identity, and Diversity; 2610, Music of the South; 2320, Exploring the Film Soundtrack.

OTHER MUSIC COURSES: 1300, Music and the Fall of Segregation.

PHILOSOPHY: 2110, Contemporary Philosophy; 3008, American Philosophy; 2104, Nineteenth-Century Philosophy; 3603, Philosophy of Education; 3623, Modern Philosophies of Law.

RELIGIOUS STUDIES: 1100, Introduction to African American Religious Traditions; 1190W, Introduction to Southern Religion and Culture; 3304W, Evangelical Protestantism and the Culture Wars; 3119, Martin Luther King, Jr., and the Social Roles of Religion; 3142, Slave Thought and Culture in the American South.

SPANISH AND PORTUGUESE: 3375, Film and Culture in Latin America; 3835, Latino Immigration Experience; 4750, Afro-Hispanic Literature.

THEATRE: 1811, Marshals, Mobsters, Monsters, Magnums, and Musicals: American Movie Genres; 2204, Histories of Theatre and Drama III: The U.S. Stage.

AREA B: SOCIAL SCIENCES

ANTHROPOLOGY: 2105, Race in the Americas.

ECONOMICS: 2100, Labor Economics; 2150, Economic History of the United States; 2890, Special Topics; 3100, Wages, Employment, and Labor Markets; 3150, Topics in the Economic History of the U.S.

HISTORY: 1390, America to 1776: Discovery to Revolution; 1400, U.S. 1776–1877: Revolution to Civil War and Reconstruction; 1410, U.S. 1877–1945: Reconstruction through World War II; 1420, U.S. Post-1945: Cold War to the Present; 1440, African American History since 1877; 1650, The Foreign Expansion of American Banking; 1660, American Enterprise; 1690, Sea Power in History; 1730, The U.S. and the Cold War; 1740, The U.S. and the Vietnam War; 2840, Sexuality and Gender in the Western Tradition since 1700; 3010, Pornography and Prostitution in History; 2535, Latin America and the United States; 2580, American Indian History before 1850; 2590, American Indian History since 1850; 2610, The Founding Generation; 2620, The Old South; 2630, The New South; 2640, Appalachia; 2690, The Civil Rights Movement; 2700, The U.S. and the World; 2710, The U.S. as a World Power; 2721, Globalizing American History, 1877–1929; 2730, American Masculinities; 2750, American Intellectual History since 1865; 2800, Modern Medicine; 2810, Women, Health, and Sexuality; 3040, Health and the African American Experience; 3080, U.S. and Caribbean Encounters; 3140, History of New Orleans; 3160, Immigration, Race, and Nationality: The American Experience; 3170, The Federalist Papers; 3250W, Blacks and Money; 3746, Workshop in English and History; 3890, Selected Topics in History (when an American topic is offered); 4960, Majors Seminar (when an American topic is offered).

SOCIOLGY: 3601, Self, Society, and Social Change; 3602, Change and Social Movements in the Sixties; 3204, Tourism, Culture, and Place; 3611, Women and the Law; 3603, Women and Social Activism; 3201, Cultural Consumption and Audiences; 3221, The Family; 3621, Criminology; 3622, Delinquency and Juvenile Justice; 3624, Prison Life; 3233, Contemporary American Society; 3301, Society and Medicine; 3222, Sociology of Religion; 3207, Popular Culture Dynamics; 3604, American Social Movements; 3722, Gender in Society; 3616, Women and Public Policy in America; 3223, Schools and Society: The Sociology of Education; 3702, Racial and Ethnic Minorities in the United States; 3724, Gender Identities, Interactions, and Relationships; 3322, Immigration in America; 4961, Seminars in Selected Topics (when an American topic is offered).

AREA C: INTERDISCIPLINARY PROGRAMS

AFRICAN AMERICAN AND DIASPORA STUDIES: 1010, Introduction to African American and Diaspora Studies; 1016, Race Matters; 3206, Mystery, Murder, and Mayhem in Black Detective Fiction; 3104W, Soul Food as Text in Text: An Examination of African American Foodways; 3214, Black Masculinity: Social Imagery and Public Policy; 3258, Black Issues in Education.

AMERICAN STUDIES: 1002, 1002W, Introduction to American Studies; 1111, First-Year Writing Seminar; 3200, Global Perspectives on the U.S.; 3890, Topics in American Studies; 3891, Internship Readings and Research; 3851, Independent Readings and Research; 3852, Independent Readings and Research; 4000, The American Studies Workshop; 4100, Undergraduate Seminar in American Studies; 4960, Senior Project; 4998, Senior Honors Research; 4999, Senior Honors Thesis.

CINEMA AND MEDIA ARTS: 1600, Introduction to Film and Media Studies.

JEWISH STUDIES: 2280/2280W, Jewish Humor; 2400, American Jewish Life; 2560, Social Movements in Modern Jewish Life; 3830, Contemporary Jewish Issues.


WOMEN’S AND GENDER STUDIES: 2243, Sociologies of Men and Masculinity; 3246W, Women’s Rights, Women’s Wrongs; 2248, Humor and Cultural Critique in Fannie Flagg’s Novels; 2249, Women and Humor in the Age of Television; 2325W, Contemporary Women’s Movements; 2259/2259W, Reading and Writing Lives; 2268, Gender, Race, Justice, and the Environment; 3271, Feminist Legal Theory; 3891, Special Topics: Topics in Gender, Culture, and Representation; 3893, Selected Topics (when an American topic is offered).

Course descriptions begin on page 136.

Anthropology

CHAIR Beth A. Conklin
DIRECTOR OF UNDERGRADUATE STUDIES Steven A. Wernke
DIRECTOR OF GRADUATE STUDIES Tiffany A. Tung
PROFESSORS EMERITI Thomas A. Gregor, Ronald Spores
PROFESSORS Arthur A. Demarest, Tom D. Dillehay, Edward F. Fischer, Lesley Gill
ASSOCIATE PROFESSORS Beth A. Conklin, William R. Fowler Jr., John W. Janusek, Norbert Ross, Tiffany A. Tung, Steven A. Wernke
ASSISTANT PROFESSORS Carwil Bjork-James, Markus Eberl
SENIOR LECTURERS Mareike Sattler, Jeffrey Shenton, Anna Catesby Yant
LECTURERS Sophie Bjork-James, Kasia Szmetski

ANTHROPOLOGY is the study of human diversity in all times and places. It brings together perspectives from the sciences and humanities, and from non-Western as well as Western societies, to illuminate different aspects of the human past, the human body, and contemporary social life. Global perspectives, fieldwork and experiential learning, and concerns with ethics, justice, and social well-being are hallmarks of anthropology. Vanderbilt’s program has a strong research focus on Latin America and historically marginalized groups, especially indigenous people.

Students majoring in anthropology take courses in several subfields, each of which looks at humanity from a different perspective. Cultural anthropology examines the relationships, beliefs, values, and political-economic practices that shape individual behavior and community life. Archaeology studies past cultures through their material remains. Linguistics explores relations between language and culture. Biological anthropology examines topics such as human evolution, genetics, and human biology. Courses cluster around themes of cross-cultural health, biology, food, and medical systems; inequality, power, and social-political relations; material culture, human-environment relations, and spatial analysis; religion and politics; and worldviews, language, and cognition. Unless indicated otherwise in the course description, anthropology courses have no prerequisites and are open to all majors and non-majors.

Knowledge of the diversity of human histories and lifeways is vital to imagining alternative paths to a better society. Anthropology develops this knowledge through experiential learning that challenges students to go beyond the familiar, to see, understand, and create in new ways. This preparation is useful in all professional careers that involve understanding human behavior, working with people from different backgrounds, analyzing complex information, and thinking holistically.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Anthropology

The major in anthropology requires completion of at least 30 credit hours of course work, as follows:

1. At least three 1000-level surveys (chosen from Anthropology 1101, 1201, 1301, 1601) covering the four subfields of anthropology: cultural anthropology, biological anthropology, archaeology, and linguistic anthropology.
2. A minimum of three credit hours from each of the groups below:

   **Group I—Comparative Anthropology and Anthropological Theory**: 2105, 3900, 4154, 3121, 3160, 3133, 3132, 3140, 3122, 4153, 3143, 3145, 3141, 4155, 3142, 3150, 3150W, 2370, 2220, 2220W, 3262, 3901, 4152

   **Group II—Archaeology and Biological Anthropology**: 2211, 3240, 3242, 3202, 3200, 3620, 3620W, 3161, 3162, 3343, 2342, 3371, 3130, 2231, 3201, 2230, 3250, 3372, 3344, 4345, 4373, 3260, 3261, 3243, 3243W, 3866

   **Group III—Ethnography, Ethnohistory, and Linguistics**: 2601, 2602, 2250, 2109, 2106, 2223, 2603, 3134, 3161, 3144, 3130, 3241, 2108, 3622, 3120, 2614, 3614

3. A seminar on anthropological theory (3900 or 3901). The seminar may not also be used to count toward Group I credit above.

4. At least 18 credit hours must be at the 2000 level or higher.

5. The remainder of the credit hours must be chosen from ANTH courses not already used to satisfy the requirements listed above.

6. With the approval of the student’s major adviser, a maximum of 3 credit hours for a course taken in another department or program may be counted toward the major requirement. A variety of courses are possible, including but not limited to those listed below. In each case, the course must be relevant to the student’s program and the student must receive the approval of the director of undergraduate studies.

   - African American and Diaspora Studies 2178, 3178; Biological Sciences 2205; History 1270, 2490; History of Art 2210; Latin American Studies 2301, 2601; Mathematics 1010, 1011; Medicine, Health, and Society 1930, 2130, 2240, 2250, 2420, 2430, 3010, 3020, 3110, 3140, 3150, 3210, 3212, 3220, 3250; Music Literature 1100, 1105, 2110; Religious Studies 4554; Sociology 3001, 3221, 3232, 3311, 3313, 3314; Spanish 3360.

   **Honors Program**

   The Honors Program in Anthropology is designed to afford superior students the opportunity to pursue more intensive work within the major field. Students who want to do honors work in anthropology should contact the director of the Honors Program in the fall of their junior year. The completion of the Honors Program requires: a) 4–5 credit hours in Anthropology 4998 (Honors Research), evaluated by honors thesis adviser, b) 4–5 credit hours in Anthropology 4999 (Honors Thesis), evaluated by honors thesis adviser, c) submission of a written thesis, evaluated by the student’s honors committee, d) an oral presentation of the thesis (15–20 minutes), evaluated by the student’s honors committee, e) an oral examination of the thesis, administered by the student’s honors committee. The Honors Research- and Honors Thesis-hours are expected to be in excess of the 30 credit hours required for the anthropology major.

   **Minor in Anthropology**

   The minor in anthropology requires 18 credit hours of course work that includes any two of the introductory courses: ANTH 1101, 1301, 1201, 1601; one course listed in Group I in the major; and three additional courses from any combination of the courses listed in Group I, II, and III in the major.

   **Course descriptions begin on page 137.**

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**Arabic**

SENIOR LECTURERS M. Issam Eido, Bushra Hamad

Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.

**Course descriptions begin on page 140.**

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**Art**

CHAIR Mel Ziegler
DIRECTORS OF UNDERGRADUATE STUDIES Mark Hosford and Marilyn Murphy
PROFESSORS Michael L. Aurbach, Marilyn L. Murphy, Mel Ziegler
ASSOCIATE PROFESSOR Mark Hosford
ASSISTANT PROFESSORS Vasna Pavlovic, Jonathan Rattner
PRINCIPAL SENIOR LECTURER Susan DeMay
SENIOR LECTURERS Farrar Hood Cusomato, Jana Harper, Tom Williams
LECTURER John Warren

Affiliated Faculty
PROFESSOR David Wood (Philosophy)

COURSES in art are offered in a variety of media, which provide wide-ranging methods and perspectives. Our courses emphasize creative and critical approaches to learning.

Many students will use the program in art as a foundation for careers in which creativity and the visual are especially valued, as the basis for advanced training in professional schools (such as art, architecture, museum studies), and for employment in galleries, museums, commercial art, or design-related fields. An important goal of the department is to help students become readers of the rich visual environment in our culture throughout their lives, as well as to encourage creative approaches to learning in all disciplines.

The Department of Art offers several opportunities for extracurricular activities in the arts. Recently a student-run art gallery opened. A new art club called Viral Student Group has begun. BLUEprint is an organization for students interested in entering the field of architecture. Our Space 204 arts laboratory has exhibitions and workshops all year long. Studio VU lecture series brings some of the most important artists working today to campus for lectures and one-on-one studio visits with students.

There are several campus organizations in the arts. The Sarratt Visual Arts Committee allows students to have a hand
in curating and hanging exhibitions, as well as hosting art openings at the Sarratt Gallery. VISION sponsors lectures and discussions about the history of art as well as a roundtable of alumni majors, who discuss their current careers and how they arrived at them.

Since 1984 the department has supervised the awarding of the Margaret Stonewall Wooldridge Hamblet Award to an eligible senior student. The Hamblet Award provides the means for travel and independent art activity for one year, culminating in a one-person exhibition at Vanderbilt. Students wanting to participate in the spring competition must be graduating seniors who are studio art majors.

The Allan P. Deloach Memorial Prize in Photography was established in 2000 in memory of Allan Deloach (B.A. 1963) by two of his colleagues at IBM. This cash award is open to any student who has taken a studio class in any discipline at Vanderbilt. Midsouth Ceramics awards are given to the top three ceramic projects in the annual open house, and the recently established Plaza Artists Materials award is given to four students each year. All competitions are judged by outside professional artists.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Art

The art major requires 36 credit hours and presents our students the opportunity to explore their ideas conceptually, as well as to learn the technical skills involved in the creation of art. The program offers a wide range of classes and media. Students are given the opportunity to explore traditional and contemporary processes including drawing, painting, ceramics, sculpture, video, performance, digital photographic media, installation, and social interactive art practice. Our diverse faculty of artist/educators represents a wide range of teaching styles and aesthetic philosophies. We consider how ideas have been developed through the centuries as well as how specific techniques have been used to enrich the expression of the idea. In addition to modern art history offerings, art majors are encouraged to take courses in pre-Renaissance, non-Western art history, philosophy of aesthetics, and film. ARTS 1099, Maymester Contemporary Art Blitz, offers an opportunity to study contemporary art in a concentrated manner. Students pursuing an art degree are trained to be skillful, creative thinkers and artists, able to succeed in any creative environment.

Related Requirement (9 credit hours), which must include one course (3 credit hours) each of the following:
- Either HART 1100 or 1105 (suggested for entry into 2000-level ARTS courses)
- 2000-level HART course or one course from the following: ARTS 1099, 3891, CMA 1600, 2300, PHIL 3014
- ARTS 1800

Directed Study (6 credit hours)
- 3970, Directed Study: Senior Show and Contemporary Practices
- 3971, Independent Research: Senior Show

Majors are required to complete the Independent Research course, ARTS 3971, their senior year. This course is designed specifically to help prepare majors for their Senior Show, and is typically taken in the second semester of the senior year. No other independent research/study course may be counted toward the major.

Honors Program in Art

The Honors Program in the Department of Art offers excelling art majors the opportunity to pursue their interest at a higher level. To be admitted to the Honors Program in Art, students must have:
- At least a 3.5 GPA in courses that count toward the major in art.
- Completed the sophomore year.
- Either HART 1100 or 1105 (suggested for entry into 2000-level ARTS courses)
- 2000-level HART course or one course from the following: ARTS 1099, 3891, CMA 1600, 2300, PHIL 3014
- ARTS 1800

Students interested in pursuing the honors program should contact the director of undergraduate studies. Application materials must be submitted to the director of undergraduate studies in the applicant's junior year; applications may be submitted electronically. Applications must include ten digital images of recent work with written explanations of each image. Applicants will be notified in writing of the department's decision.

Each honors student shall have a committee consisting of one faculty member appointed by the department chair, the student's selected honors adviser, and the director of undergraduate studies.

Requirements for graduation with honors in art:
1. Successful completion of the requirements for the major in art.
2. During the senior year the student is required to register for ARTS 4998 (3 credit hours) in the first semester and 4999 (3 credit hours) in the second semester in order to complete a written thesis, expanding concepts explored in the senior exhibition.
3. Successful oral defense of the thesis and senior exhibition during the final semester of undergraduate study.
4. At least a final 3.30 cumulative GPA.
5. At least a final 3.5 GPA in courses that count toward the major in art.

Minor in Art

The minor in art requires 18 credit hours of course work, including the following:
- HART 1105 or ARTS 1800;
ARTS 1102 (Drawing and Composition I); and four other ARTS courses, with at least one at the 2000 level.

Course descriptions begin on page 148.

Asian Studies

DIRECTOR Gerald Figal
PROFESSOR Robert Campany
ASSISTANT PROFESSORS Ben Tran, Guojun Wang
SENIOR LECTURERS Xianmin Liu, Michiru Lowe, Keiko Nakajima
LECTURERS Jing Liu, Qing Wei, Guoyong Wu

Affiliated Faculty
PROFESSORS Gerald Figal (History), Tony K. Stewart (Religious Studies)
ASSOCIATE PROFESSORS Brett Benson (Political Science), Yoshihumi Igarashi (History), Tracy Miller (History of Art), Ruth Rogaski (History), Samira Sheikh (History)
ASSISTANT PROFESSORS Nancy Lin (Religious Studies), Peter Lorge (History), Bryan Lowe (Religious Studies), Haerin Shin (English), Lijun Song (Sociology and Medicine, Health, and Society), Anand V. Taneja (Religious Studies)
SENIOR LECTURER EMERITUS James Auer (Center for U.S.–Japan Studies)

THE Asian Studies program provides students with a foundation in the languages and cultures of Asia. Our curriculum prepares interested individuals to pursue a career within the rapidly developing marketplace that is Asia or to go on to graduate study in an Asia-related subject. The program currently offers a wide variety of courses in the areas of East Asia, South Asia, and Southeast Asia. Through their teaching and research, the affiliated faculty members promote a better understanding of the Asian experience and Asia’s relationship with the rest of the world, past and present.

The major in Asian studies requires a minimum of 36 credit hours of course work designed to ensure that graduates have both depth and breadth in their understanding of Asia. Based in the intensive study of a modern Asian language, the program is expanded through courses in the economics, history, politics, religion, sociology, and visual culture of Asia. Students are also required to complete two courses that emphasize the region of Asia outside of the primary language area to acquire a multifaceted perspective on Asian culture. We strongly recommend that students study in Asia for at least one semester in a Vanderbilt-approved study abroad program.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

The Asian studies major is divided into programs that emphasize a specific region. Course work is distributed as follows:

1. One of the following concentrations centered on the study of a modern language.
   Language course work must accomplish proficiency through the first semester of third year in at least one Asian language. We encourage students to take more advanced language classes and study abroad; however, the required first semester third year language course (or above) and the six credit hours of specialization courses must be taken at Vanderbilt.

   Program A. China
   i. Language (18 credit hours)
   Required Courses: CHINESE 3301 Advanced Chinese I (or above; one advanced language course (3301 or above) must be taken at Vanderbilt)
   Elective Courses: CHINESE 1102, 1231, 2201–2202, 2211–2212, 3302, 3851–3852, 4401–4402, 4403–4404, 4405, 4406
   ii. Specialization (6 credit hours from the following, must be taken at Vanderbilt)
   ASIAN STUDIES: 2630, 2633
   HISTORY: 1060, 1070, 2100, 2105, 3110
   HISTORY OF ART: 2110, 3112
   MEDICINE, HEALTH, AND SOCIETY: 2310
   POLITICAL SCIENCE: 2216
   RELIGIOUS STUDIES: 1637, 1700, 3669, 3747, 3775

   Program B. Japan
   i. Language (18 credit hours)
   Required courses: JAPANESE 3301, Third-Year Japanese I (or above; one advanced language course (3301 or above) must be taken at Vanderbilt)
   Elective courses: JAPANESE 1102, 2201, 2202, 2232, 3302, 3891, 3851–3852
   ii. Specialization (6 credit hours from the following, must be taken at Vanderbilt)
   ASIAN STUDIES: 2511, 2512, 2513W, 2560
   HISTORY: 1080, 1090, 1881, 2115, 2120
   HISTORY OF ART: 2130, 2150
   RELIGIOUS STUDIES: 1710, 3749, 4774
   Other Asia-related writing seminars (including First-Year Writing Seminars), selected topics, and advanced seminars may fulfill this category with permission of the director of the Asian Studies program.

   2. Perspectives (6 credit hours)
   Two Asian Studies approved courses that emphasize Asia as a region. The courses currently offered that satisfy this requirement are:
   ASIAN STUDIES: 1201, 2100W, 3151
   HISTORY: 1050, 2110, 2111, 2150
   HISTORY OF ART: 1200, 1220, 1250, 2150, 2170, 3164W
   HUMAN AND ORGANIZATIONAL DEVELOPMENT: 3260, 3650 (or 3890)
   RELIGIOUS STUDIES: 1500, 2644, 2670W, 3733, 3749, 3753, 4666

   3. Electives (6 credit hours)
   Two courses selected from the list of approved courses for the Asian studies major. Other Asia-related courses not listed below—such as those in study abroad programs, First-Year Writing Seminars, Selected Topics, Senior Seminars, and Independent Studies—may be applied toward the major upon approval by the director of the Asian Studies program.

   Approved courses by subject area are as follows:
   ASIAN STUDIES: 1111, First-Year Writing Seminar; 1201, Writing Southeast Asia; 2100W, Fashioning the Self: Coming of Age and Asian Modernity; 2210W, Hollywood Hanoi; 2511, Popular Culture in Modern Japan; 2512, Explorations of Japanese Animation; 2513W, Media Monsters in Contemporary Japan; 2630, Chinese Medicine; 2560, Current Japan–U.S.

HISTORY OF ART: 1111, First-Year Writing Seminar (with appropriate topic); 1200, Arts of East Asia; 1220, History of Asian Architecture; 2110, Arts of Japan; 2130, Arts of Japan; 2150, East Asian Architecture and Gardens; 3112, The Arts of China during the Liao-Song Period; 3164W, Art of Buddhist Relic and Reliquary.

HISTORY OF ASIA: 1050, East Asia since 1800; 1060, Premodern China; 1070, China from Empire to the People's Republic; 1080, Premodern Japan; 1090, Modern Japan; 1160, Modern South Asia; 1881, The Body in Modern Japanese Culture; 2100, Themes in Modern Chinese History, 1966–1989; 2105, Chinese Thought; 2110, Crisis Simulation in East Asia; 2115, Play and Pleasure in Early Modern Japan; 2119, The Pacific War in Cinematic Memory; 2120, Post-WWII Japan; 2140, The Mughal World; 2150, India and the Indian Ocean; 3110, Christianity in China; 3220, Images of India.

HISTORICAL STUDIES: 1111, First-Year Writing Seminar (with appropriate topic); 1200, Arts of East Asia; 1220, History of Asian Architecture; 2110, Arts of Japan; 2130, Arts of Japan; 2150, East Asian Architecture and Gardens; 3112, The Arts of China during the Liao-Song Period; 3164W, Art of Buddhist Relic and Reliquary.

MINOR IN CHINESE LANGUAGE AND CULTURE

The minor in Chinese language and culture requires a minimum of 18 credit hours of course work, anchored by a firm foundation in language study that is complemented by electives in art, history, literature, film, politics, and religion. Chinese 1011–1012 and 1091–1092 do not count toward the minor. Students electing two or more minors in Asian studies must present at least 15 credit hours in each minor not being counted toward any other minor or major.

1. Required courses (6 credit hours):
   - History 1050 or 1060 or 1070 and History 1080 or 1090.

2. Elective courses (at least 13 credit hours):
   - Students must fulfill the remaining credit hours with courses from the following list, selecting at least one from each of A, B, and C.

   **Group A:** Asian Studies 2630, 2560; History 1050, 1060, 1070, 1080, 1090, 1160, 2100, 2110, 2150, 2120, 3110, 3110, 3164W, Political Science 2216.

   **Group B:** Asian Studies 1201, 2100W, 2210W, 2511, 2512, 2513W, 3151; History 2105, 3220; History of Art 1220, 2110, 2130, 2150, 3164W; Religious Studies 1700, 1710, 3747, 3749, 3775.

   **Group C:** Chinese 2201 (5 credit hours), 2202 (5 credit hours), 2211, 2212, 3301, 3302, 4401, 4402, 4403, 4404, 4405, 4406; Japanese 2201 (5 credit hours), 2202 (5 credit hours), 2322, 3301, 3302, 3891.

   Other Asian-related courses not listed here—such as those in study abroad programs, First-Year Writing Seminars, Selected Topics, Senior Seminars, and Independent Studies—may be applied toward the minor upon approval by the director of the Asian Studies program.

**Minor in Chinese Language and Culture**

The minor in Chinese language and culture requires a minimum of 18 credit hours of course work, anchored by a firm foundation in language study that is complemented by electives in art, history, literature, film, politics, and religion. Chinese 1011–1012 and 1101–1102 do not count toward the minor. Students electing two or more minors in Asian studies must present at least 15 credit hours in each minor not being counted toward any other minor or major.

1. Required courses (6 credit hours):
   - History 1050 or 1060 or 1070 and History 1080 or 1090.

2. Elective courses (at least 13 credit hours):
   - Students must fulfill the remaining credit hours with courses from the following list, selecting at least one from each of A, B, and C.

   **Group A:** Asian Studies 2630, 2560; History 1050, 1060, 1070, 1080, 1090, 1160, 2100, 2110, 2150, 2120, 3110, 3110, 3164W, Political Science 2216.

   **Group B:** Asian Studies 1201, 2100W, 2210W, 2511, 2512, 2513W, 3151; History 2105, 3220; History of Art 1220, 2110, 2130, 2150, 3164W; Religious Studies 1700, 1710, 3747, 3749, 3775.

   **Group C:** Chinese 2201 (5 credit hours), 2202 (5 credit hours), 2211, 2212, 3301, 3302, 4401, 4402, 4403, 4404, 4405, 4406; Japanese 2201 (5 credit hours), 2202 (5 credit hours), 2322, 3301, 3302, 3891.

   Other Asian-related courses not listed here—such as those in study abroad programs, First-Year Writing Seminars, Selected Topics, Senior Seminars, and Independent Studies—may be applied toward the minor upon approval by the director of the Asian Studies program.

**Minor in Chinese Language and Culture**

The minor in Chinese language and culture requires a minimum of 18 credit hours of course work, anchored by a firm foundation in language study that is complemented by electives in art, history, literature, film, politics, and religion. Chinese 1011–1012 and 1101–1102 do not count toward the minor. Students electing two or more minors in Asian studies must present at least 15 credit hours in each minor not being counted toward any other minor or major.

1. Required courses (6 credit hours):
   - History 1050 or 1060 or 1070 and History 1080 or 1090.

2. Elective courses (at least 13 credit hours):
   - Students must fulfill the remaining credit hours with courses from the following list, selecting at least one from each of A, B, and C.

   **Group A:** Asian Studies 2630, 2560; History 1050, 1060, 1070, 1080, 1090, 1160, 2100, 2110, 2150, 2120, 3110, 3110, 3164W, Political Science 2216.

   **Group B:** Asian Studies 1201, 2100W, 2210W, 2511, 2512, 2513W, 3151; History 2105, 3220; History of Art 1220, 2110, 2130, 2150, 3164W; Religious Studies 1700, 1710, 3747, 3749, 3775.

   **Group C:** Chinese 2201 (5 credit hours), 2202 (5 credit hours), 2211, 2212, 3301, 3302, 4401, 4402, 4403, 4404, 4405, 4406; Japanese 2201 (5 credit hours), 2202 (5 credit hours), 2322, 3301, 3302, 3891.

   Other Asian-related courses not listed here—such as those in study abroad programs, First-Year Writing Seminars, Selected Topics, Senior Seminars, and Independent Studies—may be applied toward the minor upon approval by the director of the Asian Studies program.
1. **Required courses:**
   Either CHINESE 2201, 2202, and 3301 (or above; one advanced language course 3301 or above must be taken at Vanderbilt) (13 credit hours) or CHINESE 2211, 2212, and 3301 (or above; one advanced language course (3301 or above) must be taken at Vanderbilt) (9 credit hours)

2. **Elective courses (minimum 6 credit hours):**
   ASIAN STUDIES 2100W, 2630, 3633
   HISTORY 1050, 1060, 1070, 2100, 2105, 2110, 3110
   HISTORY OF ART 1200, 1220, 2110, 2150, 3112, 3164W
   MEDICINE, HEALTH, AND SOCIETY 2310
   POLITICAL SCIENCE 2216
   RELIGIOUS STUDIES 1637, 1700, 3669, 3747, 3753, 3775
   Other China-related courses not listed here—such as those in study abroad programs, First-Year Writing Seminars, Selected Topics, Senior Seminars, and Independent Studies—may be applied toward the minor upon approval by the director of the Asian Studies program.

**Minor in Japanese Language and Culture**

The minor in Japanese language and culture requires a minimum of 19 credit hours of course work, anchored by a firm foundation in language study that is complemented by electives in art, history, literature, film, politics, and religion. Japanese 1101 and 1102 do not count toward the minor. Students pursuing two or more minors in Asian studies must present at least 15 credit hours in each minor not being counted toward any other minor or major.

1. **Required courses (13 credit hours):**
   JAPANESE 2201, 2202, and 3301 (or above; one advanced language course (3301 or above) must be taken at Vanderbilt)

2. **Elective courses (minimum 6 credit hours):**
   ASIAN STUDIES 2100W, 2511, 2512, 2513W, 2560
   HISTORY 1050, 1080, 1090, 1881, 2115, 2120
   HISTORY OF ART 1200, 1220, 2130, 2150
   RELIGIOUS STUDIES 1710, 3749, 3753, 4774
   Other Japan-related courses not listed here—such as those in study abroad programs, First-Year Writing Seminars, Selected Topics, Senior Seminars, and Independent Studies—may be applied toward the minor upon approval by the director of the Asian Studies program.

**Asian Studies**

**Japanese**

*Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.*

**Course descriptions begin on page 174.**

**Biological Sciences**

**CHAIR** Douglas G. McMahon
**DIRECTOR OF UNDERGRADUATE STUDIES** Charles K. Singleton
**DIRECTOR OF GRADUATE STUDIES** Donna J. Webb
**RESEARCH PROFESSOR** Hans-Willi Honegger
**ASSOCIATE PROFESSORS** D. Kilpatrick Abbot, Seth R. Bordenstein, Brandt F. Eichman, Katherine L. Friedman, Daniel J. Funk, Julian F. Hillyer, Donna J. Webb
**ASSISTANT PROFESSORS** John Anthony Capra, Lauren Parker Jackson, Jared T. Nordman, Maulik R. Patel
**SENIOR LECTURERS** Steve J. Baskauf, Amanda R. Benson, Cynthia T. Brame, A. Denise Due-Goodwin, Mark A. Woelfle

THE biological sciences encompass the study of living organisms and life processes at all levels: ecosystems, populations, individual organisms, tissues, cells, subcellular structures, and molecules. The Department of Biological Sciences offers courses that address all of these levels and programs of study for undergraduates and for graduate students seeking the Ph.D.

For undergraduates, the department offers three majors and a minor. All three majors have honors tracks. The Biological Sciences (BioSci) major is designed for the student seeking a broad base in the biological sciences, though it is a highly flexible program that allows a certain amount of specialization in upper-level courses. The Molecular and Cellular Biology (MCB) major is designed for students with an interest in developing an in-depth understanding of how living systems function at the molecular and cellular levels, with upper-level course options ranging in content from biophysics and biochemistry to developmental biology, and to molecular aspects of evolution and of toxicology. The Ecology, Evolution, and Organismal Biology (EEOB) major is designed for students with an interest in the areas of biology that span genomics, ecology, evolutionary biology, comparative genomics, organismal biology, and conservation biology. The department also offers a minor in biological sciences for students majoring in other disciplines. Interested students should consult the appropriate director of undergraduate studies.

The department offers undergraduates opportunities for engaging in faculty-led research projects for course credit. Students may receive an introduction to the workings of a
scientific laboratory through an internship, or a more intensive, hands-on experience in directed or independent laboratory research. Students on the honors track of any of the three majors carry out a major honors research project and write an honors thesis. More information about the majors and minor offered by the department, the honors track of each major, and research opportunities open to undergraduates is available at our website: as.vanderbilt.edu/biosci.

**General Requirements**

All students in programs of concentration offered by the Department of Biological Sciences must take two semesters of general chemistry and lab (Chemistry 1601–1602 and 1601L–1602L) and two semesters of organic chemistry and lab (Chemistry 2221–2222 and 2221L–2222L). It is strongly recommended that students in all three majors take one year of calculus or calculus/statistics and one year of physics. A total of 30 hours of Biological Sciences courses, including the 8 hours of 1510–1511 and 1510L, and either 1511L or 1512L, are required in all majors. All Biological Sciences courses count toward the major except 1100, 1105, and 1111. Below is a listing of the required courses for the Biological Sciences (BioSci) major, for the Molecular and Cellular Biology (MCB) major, and for the Ecology, Evolution, and Organismal Biology (EEOB) major. Students with specialized interests within either of the specialized majors may substitute one of the intermediate courses with an upper-level course with the permission of the director of undergraduate studies and the Biological Sciences Curriculum Committee. (Intermediate Biological Sciences courses: 2201, 2201L, 2205, 2210, 2210L, 2218, 2219, 2238, 2238L, 2520).

Students may declare only one of the majors offered by the Department of Biological Sciences; double or triple majors within the department are not permitted.

For honors in all three majors, additional requirements must be met: (a) normally a minimum GPA of 3.30 in courses that count toward the major; (b) at least 10 of the 30 hours of Biological Sciences course work must be directed/independent research with a minimum of 8 hours being honors research (BSCI 4999); (c) an honors thesis and oral defense. For students in the MCB major, 4265 or 4266 must be taken for 3 credit hours; an alternate advanced course may be substituted with the permission of the director of undergraduate studies. For students in the EEOB major, one of the following courses must be taken for 3 credit hours: 3230, 3234, 3236, 3243, 3245, 3247, 3252, 3254, 3256, 3270, 3272, 4265, 4266.

**NOTE:** New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

**Program of Concentration in Biological Sciences (BioSci)**

At least 30 credit hours satisfying the general requirements above, and including the following:

1. **Introductory Courses:** 1510/1510L and 1511/1511L or 1512L
2. **Intermediate Courses:**
   a. 2205, 2210
   b. one additional intermediate course: 2201, 2218, 2219, 2238, or 2520
3. **Laboratory:** Two laboratory courses (2201L, 2210L, 2218, 2219, or 2238L, or one lab course and two semesters of directed and/or independent research (BSCI 3861, 3961, 4999).
4. **Seminar/Independent Studies:** A minimum of 2 credit hours of 3850, 3861, 3961, 3965a–3965b, or 4999 is required. Only one seminar course (3965) may count toward the major. A total of no more than 6 credit hours of 3850, 3861, and 3961 may be counted toward the major.

For students intending to perform honors research, at least two lecture courses must be from the following: 3230, 3233, 3234, 3236, 3243, 3245, 3247, 3252, 3254, 3256, 3270, 3272, 4265, 4266.

**Program of Concentration in Molecular and Cellular Biology (MCB)**

At least 30 credit hours satisfying the general requirements above, and including the following:

1. **Introductory Courses:** 1510/1510L, 1511/1511L or 1512L
2. **Intermediate Courses:** 2201, 2210, 2520 and either 2201L or 2210L
3. **Laboratory:** One additional laboratory course (2201L, 2210L, 2218, 2219, or 2238L), or two semesters of directed and/or independent research (BSCI 3861, 3961, 4999).
4. **Seminar/Independent Studies:** A minimum of 2 credit hours of 3850, 3861, 3961, 3965, or 4999 is required. Only one seminar course (3965a–3965b) may count toward the major. A total of no more than 6 credit hours of 3850, 3861, and 3961 may be counted toward the major.

Of the remaining courses, at least two must be from the following: 2205, 2243, 3230, 3234, 3236, 3245, 3247, 3252, 3256, 3270, 3272, 4265, 4299.

For students intending to perform honors research in the MCB major, 4265 or 4266 must be taken; an alternate advanced lecture course may be substituted with the permission of the director of undergraduate studies.

**Program of Concentration in Ecology, Evolution, and Organismal Biology (EEOB)**

At least 30 credit hours satisfying the general requirements above, and including the following:

1. **Introductory Courses:** 1510/1510L and 1511/1511L or 1512L
2. **Intermediate Courses:** 2205 and 2210; and either 2201L or 2210L
3. **Laboratory:** One additional laboratory course (2201L, 2210L, 2218, 2219, or 2238L), or two semesters of directed and/or independent research (BSCI 3861, 3961, 4999).
4. **Seminar/Independent Studies:** A minimum of 2 credit hours of 3850, 3861, 3961, 3965, or 4999 is required. Only one seminar course (3965a–3965b) may count toward the major. A total of no more than 6 credit hours of 3850, 3861, and 3961 may be counted toward the major.

Of the remaining courses, at least two must be from the following: 2205, 2243, 3230, 3234, 3236, 3245, 3247, 3252, 3256, 3270, 3272, 4265, 4299.

For students intending to perform honors research in the MCB major, 4265 or 4266 must be taken; an alternate advanced lecture course may be substituted with the permission of the director of undergraduate studies.
For students intending to perform honors research in the EEOB major, one of the following courses must be taken: 3230, 3234, 3236, 3247, 3270, 3272.

**Minor in Biological Sciences**

A minor in biological sciences requires a minimum of 18 hours that include BSCI 1510–1511b; 1510L and either 1511L or 1512L; 2210; and one other intermediate course. No more than two credit hours of 3860, 3861, 3850, and 3961 may be counted toward the minor.

**Course descriptions begin on page 144.**

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**Chemistry**

**CHAIR** David W. Wright

**DIRECTOR OF UNDERGRADUATE STUDIES** Adam K. List

**DIRECTOR OF GRADUATE STUDIES** Carmelo J. Rizzo

**PROFESSORS EMERITI** Robert V. Ditts, Larry C. Hall, Thomas M. Harris, David M. Hercules, Melvin D. Joesten, Mark M. Jones, Joel Tellinghuisen, David L. Tuleen, David J. Wilson


**ASSOCIATE PROFESSORS** Brian O. Bachmann, Eva M. Harth, H. Charles Manning, Jens Meiler

**ADJUNCT ASSOCIATE PROFESSOR** Norma K. Dunlap

**ASSISTANT PROFESSORS** Janet E. Macdonald, Nathan D. Schley, Steven D. Townsend

**PRINCIPAL SENIOR LECTURERS** Adam K. List, Michelle M. Sulikowski

**SENIOR LECTURERS** Shawn T. Phillips, Tara D. Todd

**LECTURER** Alissa Hare

THE Department of Chemistry seeks to provide a sound education in the fundamentals of modern chemistry as well as exposure to cutting-edge research and contemporary instrumentation in the field. This is accomplished by providing students with a solid background in the disciplines of organic, analytical, inorganic, biological, and physical chemistry. The core courses in these areas, which are supported by a variety of practical experimental experiences in the laboratory, provide students with the skills needed to think critically about chemistry. After these core courses, students delve deeper into an area of their choice. Recognizing the importance of research, which integrates and makes sense of our collective body of knowledge, we encourage students to participate in undergraduate research. The chemistry major at Vanderbilt University meets the guidelines for the American Chemical Society approved program of study in chemistry.

**NOTE:** New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

**Program of Concentration in Chemistry**

The chemistry program is organized into four parts. The first part is a general chemistry course sequence (CHEM 1601–1602 and 1601L–1602L or AP credit) to serve as an entry point into the major. The second part consists of foundation courses in the five major disciplines of chemistry: analytical (2100), biochemistry (BSCI 2520), inorganic (3010), organic (2221–2222 or 2211–2212), and physical (3300 or 3310). The third part of the chemistry major consists of completing 8 credit hours of laboratory past 1601L–1602L. Four credit hours are from laboratory courses (2221L–2222L, 2100L, and 3315) associated with foundation courses. There are also 6 credit hours of a capstone laboratory (4965–4966) designed to provide advanced laboratory experience. The fourth part of the major consists of completing a minimum of 6 credit hours of in-depth chemistry courses. These in-depth courses build upon the content of foundation courses or integrate concepts from these foundational disciplines.

**Concentration in Chemistry**

**Required Non-chemistry Courses**

- One year of calculus (MATH 1300–1301 is preferred)
- PHYS: Both 1501–1502 and 1501L–1502L, or both 1601–1602 and 1601L–1602L, or 1901–1902

**Required Chemistry Courses**

- Chem 1601–1602 & 1601L–1602L or AP credit: 0
- Chem 2221–2222 (or 2211–2212) & 2221L–2222L: 8
- Chem 2100 & 2100L: 4
- Chem 3300 or 3310: 3
- Chem 3315: 1
- BSCI 2520: 3
- Chem 3010: 3
- *Two in-depth chemistry courses*: 6
- Chem 4965–4966: 6

**Minimum Credit Hours for Chemistry Major**: 34

* In-depth chemistry courses include all 2000-level chemistry and higher courses not explicitly required, except for CHEM 3600 and 3980–4980–4999. Other in-depth chemistry courses are Chemical and Biomolecular Engineering 3200 and 3250, and Earth and Environmental Sciences 4600, and any 5000-level chemistry lecture courses. (Qualified seniors interested in graduate-level courses must obtain approval from the course instructor, their adviser, and the director of graduate studies in chemistry. Further details are found in the Academic Policies for the College of Arts and Science.) A maximum of 3 credit hours of chemistry research (3860) may be counted as in-depth chemistry course hours.

Additional math courses, such as Math 2300 and Math 2820, are highly recommended for the chemistry major.

**Options for Concentration in Chemistry**

In-depth chemistry courses can be chosen so as to define a focus area within chemistry. Students should consult with their major adviser about focus area options, or to formulate an individualized focus area option. Further descriptions of these options and other recommended courses can be found in the chemistry major handbook on the chemistry department homepage.

**Chemical Biology Focus.** The role of chemical processes in biological systems is fundamental to chemical biology. The journal *Nature Chemical Biology* defines chemical biology as “the use of chemistry to advance a molecular understanding of biology and the harnessing of biology to advance chemistry.”
Chemical biology builds upon the disciplines of medicinal chemistry, biochemistry, pharmacology, genetics, bioorganic and organic chemistry. Suggested in-depth chemistry electives: 3020, 3710, 3860, 4210, 4720.

Chemical Sciences Focus. This option provides a broad foundation of chemistry, permitting flexibility in future career pathways and providing an excellent preparation for positions in chemical industry and for graduate programs in chemistry. Suggested in-depth chemistry electives: 3120, 3300, 3310, 3860.

Environmental Chemistry Focus. Environmental chemistry concerns the chemical phenomena that occur in nature. Environmental chemistry spans atmospheric, aquatic, and soil chemistry with a reliance on analytical chemistry for methods of analysis. Environmental chemistry can be applied to the understanding of issues such as ground water pollution, wastewater treatment, ozone depletion, and greenhouse gas emissions. Suggested in-depth chemistry electives: 3120, 3300, 3310, 3860, EES 4600.

Materials Chemistry Focus. Materials chemistry is concerned with designing and synthesizing new materials with specific useful properties and determining the relationships between physical properties and the composition and structure of these new materials. Materials chemistry encompasses all size regimes from bulk to nanoscale. Synthetic chemistry (inorganic and organic), physical chemistry, and analytical chemistry are all important components of this field. Suggested in-depth chemistry electives: 3120, 3310, 3860, 3980, 4980, 4999—each is 2 credit hours.

Minor in Chemistry

The minor in chemistry requires 18 credit hours of course work, including 4 credit hours from 1601 and 1601L or AP credit, and 14 credit hours selected from any of the courses acceptable for the major in chemistry.

Honors in Chemistry

Students with an overall GPA of at least 3.3 and a GPA of at least 3.4 in chemistry courses at the start of their junior year wishing to do honors will register for the honors research courses (CHEM 3980, 4980, 4999—each is 2 credit hours) beginning spring semester junior year. The CHEM 4965 and 4966 requirements are waived in lieu of the CHEM 3980, 4980, and 4999 registrations. Honors candidates must present a thesis on the research done under CHEM 4980, 4980, and 4999 and pass an oral examination. Additional information may be found in the chapter on Special Programs in the College.

Licensure for Teaching

Candidates for teacher licensure in chemistry at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog. One semester of the CHEM 4965–4966 sequence will be considered fulfilled by completing the Peabody student teaching requirements.

Introductory Courses

Introductory chemistry is offered in two different sequences, each with its own laboratory. Only one set of these courses may be taken for credit.

1. Chemistry 1010, 1010L. Intended for liberal arts students who are not planning to take any additional chemistry courses. It treats chemistry in a nonmathematical fashion, with some historical and philosophical features. Not for science and engineering students.

2. Chemistry 1601–1602. Designed for engineering, science, and premedical students. This course, which must be taken simultaneously with 1601L–1602L, serves as preparation for students intending to major in chemistry, biology, physics, or earth and environmental sciences. It is a more rigorous, mathematical approach to chemistry and a prerequisite for organic and other chemistry courses. It is not intended for liberal arts students taking a science course only to fulfill AXLE requirements.

Course descriptions begin on page 146.

Cinema and Media Arts

DIRECTOR Scott Juengel
PROFESSORS Jay Clayton, Lutz Koepnick
ASSOCIATE PROFESSORS Jennifer Fay, Andrea Mirabile
ASSISTANT PROFESSORS Claire Sisco King, James McFarland, Jonathan Rattner, Haerin Shin
SENIOR LECTURER Jonathan Waters

Affiliated Faculty

PROFESSORS Joy Calico (Music), Gerald Figal (History), Sam B. Girkus (English), Daniel Levin (Psychology, Peabody), Kelly Oliver (Philosophy), T. Sharpley-Whiting (African American and Diaspora Studies and French), Bengnio Trigo (Spanish), Mark A. Wollaeger (English)

ASSOCIATE PROFESSORS Vanessa Beasley (Communication Studies), Phillip Franck (Theatre), Jay Geller (Divinity School), Jon Halquist (Theatre), Terry Hallquist (Theatre), Yoshikuni Igarashi (History), Trica Keaton (African American and Diaspora Studies), Stanley Link (Music), Letizia Modena (French and Italian), Emanuelle Oliveira (Portuguese), Lynn T. Ramey (French)

ASSISTANT PROFESSORS Peter Lorge (History), Vesna Pavlovic (Art), Margaret Sejje-Eilers (Germanic and Slavic Languages), Anand Taneja (Religious Studies)

CINEMA and Media Arts is an interdisciplinary major and minor that combines the practice of filmmaking with the study of film and media theory and history. Emphasizing cinema as both a modern aesthetic form and a hands-on cultural practice, the program trains students for careers in film and media production, communications, academic media studies, and community and social relations. While the program encourages new ways of thinking, looking, and making, it also develops the traditional learning skills of a liberal education. A core curriculum in film and media theory, history, and filmmaking is supplemented with classes in the related arts, disciplines, and ethnic and non-U.S. national cinemas. The major concludes with a senior seminar.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Major in Cinema and Media Arts

The CMA major consists of 36 credit hours. The requirements are as follows:

CORE REQUIREMENTS

1. CMA 1500 (Fundamentals of Film and Video Production).
2. CMA 1600 (Introduction to Film and Media Studies).

Major in Chemistry and Media Arts
4. CMA 2200 (Intermediate Filmmaking: The Fiction Film).
5. CMA 2300 (Film and Media Theory).
6. CMA 2400 (History of World Cinema).
7. Senior Seminar—CMA 4961 or 4962.
8. Two CMA electives: 1111 (First-Year Writing Seminar); 2500W (Screenwriting); 3891 (Special Topics in Film and Video Production); 3892 (Special Topics in the Study of Film). Please note that 2100 and 2200 do not count for elective credit.
9. One course in ethnic or non-U.S. national cinemas: African American and Diaspora Studies 1506 (Reel to Real: Film Aesthetics and Representation), Asian Studies 2512 (Explorations of Japanese Animation), French 3320 (French and Francophone Cinema), German 2442 (War on Screen), German 2444 (German Fairy Tales: From Brothers Grimm to Walt Disney), German 2443 (German Cinema: Vampires, Victims, and Vamps), German 2445 (Nazi Cinema: The Manipulation of Mass Culture), Italian 3640 (Classic Italian Cinema), Jewish Studies 2290W (Imagining the Alien: Jewish Science Fiction), Portuguese 3302 (Brazilian Pop Culture), Spanish 3355 (Advanced Conversation through Cultural Issues in Film), Spanish 3365 (Film and Recent Cultural Trends in Spain), Spanish 2990 (Images of the Feminine in Spanish Cinema).
10. One course in film and the other arts: Art Studio 1200 (Photography I), Art Studio 1202 (Digital Imaging I), Art Studio 1700 (Video Art), Art Studio 1702 (Interactive Portable Media and Cell Phone Art), Art Studio 2200 (Photography II), 2202 (Digital Imaging II), 2700 (Video Art II), 2702 (Interactive Portable Media and Cell Phone Art II), History of Art 2680 (British Art: Tudor to Victorian), History of Art 2710 (Twentieth-Century European Art), Music Literature 1300 (Music, The Arts, and Ideas), Music Literature 2320 (Exploring the Film Soundtrack), Theatre 1711 (Introduction to Theatrical Production), Theatre 1811 (Marshals, Mobsters, Monsters, Magnums, and Musicals: American Movie Genres), Theatre 3721 (Elements of Basic Design: Scenery and Properties), Theatre 3761 (Elements of Basic Design: Lighting and Sound), Theatre 3741 (Elements of Basic Design: Costuming and Makeup).
11. One course in film and other disciplines: Communication Studies 3720 (Communicating Gender), Communication Studies 2950 (Rhetoric of Mass Media), Communication Studies 3710 (Cultural Rhetoric of Film), Communication Studies 3890 (Selected Topics in Communication Studies, when a film topic is offered), English 3642 (Film and Modernism), English 3694 (America on Film: Art and Ideology), English 3899 (Special Topics in Film), Philosophy 3013 (History of Aesthetics), Philosophy 3615 (Philosophy of Film), Religious Studies 3229 (The Holocaust: Its Meanings and Implications), Religious Studies 4552 (Islam in the Modern World), Women's and Gender Studies 1272 (Feminism and Film).

Other courses in film and media studies also may be counted toward the major, subject to the approval of the program director.

Honors Program
The Honors Program in Cinema and Media Arts offers excelling students the opportunity to pursue their interests at a higher level. For admission to the Honors Program, students must have and maintain until graduation an overall grade point average of 3.3 and an average of 3.5 in courses counting toward the major. The student must submit an application to the program director outlining the thesis topic. In addition to completing the major requirements listed above, during the senior year the student is required to register for Cinema and Media Arts 4998 (3 credit hours) and 4999 (3 credit hours) in order to complete the thesis. An oral examination on the thesis and its area is to be completed during the final semester of undergraduate study.

Minor in Cinema and Media Arts
The minor consists of 18 credit hours. The requirements are as follows:
1. CMA 1500 (Fundamentals of Film and Video Production).
2. CMA 1600 (Introduction to Film and Media Studies).
4. One CMA course in intermediate cinema studies: 2300 (Film and Media Theory); 2400 (History of World Cinema).
5. Two CMA electives: 1111 (First-Year Writing Seminar); 2500W (Screenwriting); 3891 (Special Topics in Film and Video Production); 3892 (Special Topics in the Study of Film).

Other courses related to film and media studies may also be counted as electives, subject to the approval of the program director.

Course descriptions begin on page 148.

Classical Studies
CHAIR Gary F. Jansen
DIRECTOR OF UNDERGRADUATE STUDIES Daniel P. Solomon
DIRECTOR OF GRADUATE STUDIES Barbara Tsakirgis
PROFESSORS EMERITI Robert Drews, F. Carter Philips, Jack M. Sasson, Susan Ford Wiltshire
PROFESSORS Thomas A. J. McGinn, David J. Wasserstein
ASSOCIATE PROFESSORS Kathy L. Gaca, Joseph L. Rife, Betssey Robinson, Barbara Tsakirgis
ASSISTANT PROFESSORS Scott F. Akin, Mireille Lee, David A. Michelson
SENIOR LECTURERS G. Edward Gaffney, Max L. Goldman, Daniel P. Solomon

CLASSICAL studies have always been at the heart of a liberal education because they afford unmatched perspectives from which to understand our own time. Courses are offered in the history, religion, art, philosophy, social and cultural issues, literature, and mythology of the ancient world. The curriculum covers 3,500 years of human experience in the ancient Near East, Greece, and Roman Europe, from the beginnings of Western civilization through the Christianization of Europe.
Three major programs are available. Students may declare only one of the majors offered by the Department of Classical Studies; double or triple majors within the department are not permitted. Students majoring in classical languages approach the ancient world primarily through its literature, read in the original language. Students majoring in classics integrate the ancient texts with other kinds of evidence (sociology, religion, art, etc.), in order to compare the words of Greeks and Romans to their actions; they may apply any number of courses in Greek and/or Latin toward this major, as long as two language courses are at the advanced level. Students majoring in classical civilization receive the broadest introduction to the ancient world, and they read the primary sources in translation.

Majors in classical languages or classics are encouraged to spend a semester at the Intercollegiate Center for Classical Studies in Rome. A summer program at the American School of Classical Studies in Athens is also available.

The Classics Society functions as the department’s extracurricular organization. Eta Sigma Phi is the national honorary society for classics.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Classical Languages
Students complete at least 30 credit hours in Greek and Latin, including at least two courses of each language. Only one elementary sequence (either Greek 1101–1102 or Latin 1101–1102 or Latin 1103) may count toward the 30 credit hours required for the major.

Program of Concentration in Classics
Students complete at least 30 credit hours in classics, Greek, Latin, or other eligible courses (see below), at least 6 credit hours of which must be in Greek or Latin courses numbered 3010 or higher.

Program of Concentration in Classical Civilization
Students complete at least 30 credit hours in classics, Greek, Latin, or other eligible courses (see below). Relevant courses in religion will be allowed at the discretion of the director of undergraduate studies. No more than 11 credit hours may be taken in courses numbered 2050 or below.

The following courses may be counted toward a major in classics or classical civilization: History of Art 1111-09, 2220, 3240W, 3228W, 3224, 3252, and 2210; Jewish Studies 1200; Philosophy 2100 and 2101; Political Science 2202. Other courses may be counted with the approval of the director of undergraduate studies, but a minimum of 12 credit hours must be in courses from classics, Greek, and/or Latin.

Honors Program in Classics
Admission requirements are: completion of junior year and completion of at least 6 credit hours of work in advanced Greek or Latin courses (above Greek 3010 or Latin 3010 or higher), and an overall GPA of 3.4, with 3.5 in courses within the department (including hours earned at the ICCS in Rome) that count toward the major. Candidates should signal their interest to the director of undergraduate studies by the beginning of the second semester of their junior year. Candidates must submit a thesis proposal for approval by the departmental faculty before they can be admitted to the Honors Program.

In addition to maintaining the stated GPA through the senior year, a student must satisfy the following requirements in order to graduate:
1. Complete 12 credit hours in advanced Greek and/or Latin courses (Greek 3010 or Latin 3010 or higher).
2. Complete Classics 4998 and 4999 for 6 credit hours in addition to the 30 credit hours required by the major, culminating in a written senior thesis defended orally before the department.

Honors Program in Classical Languages
Admission requirements are: completion of junior year and completion of at least 6 credit hours of work in advanced Greek or Latin courses (Greek 3010 or Latin 3010 or higher), and an overall GPA of 3.4, with 3.5 in courses that count toward the major. Candidates should signal their interest to the director of undergraduate studies by the beginning of the second semester of their junior year. Candidates must submit a thesis proposal for approval by the departmental faculty before they can be admitted to the Honors Program.

In addition to maintaining the stated GPA through the senior year, a student must satisfy the following requirements in order to graduate:
1. Complete 18 credit hours in advanced Greek and/or Latin courses (Greek 3010 or Latin 3010 or higher).
2. Complete Classics 4998 and 4999 for 6 credit hours in addition to the 30 credit hours required by the major, culminating in a written senior thesis defended orally before the department.

There is no Honors Program in the classical civilization concentration.

Minor in Classics
Students are required to complete Greek 2202 or Latin 2202 or a higher-level language course plus an additional 15 credit hours in courses that count toward the concentration in classics, of which at least 9 must be numbered 2060 or above. Other courses may be counted with the approval of the director of undergraduate studies, but a minimum of 12 credit hours must be in courses from classics, Greek, and/or Latin.

Minor in Classical Civilization
Students are required to complete 18 credit hours in courses that count toward the concentration in classical civilization, of which at least 12 must be numbered 2060 or above. Other courses may be counted with the approval of the director of undergraduate studies, but a minimum of 12 credit hours must be in courses from classics, Greek, and/or Latin.

Licensure for Teaching
Candidates for teacher licensure in Latin at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.
Communication of Science and Technology

DIRECTOR David A. Weintraub

Affiliated Faculty
PROFESSORS Jay Clayton (English), David J. Ernst (Physics and Astronomy), Richard F. Haglund Jr. (Physics and Astronomy), Jeffrey D. Schall (Psychology), David A. Weintraub (Physics and Astronomy)
ASSOCIATE PROFESSOR Jonathan M. Gilligan (Earth and Environmental Sciences)
ASSISTANT PROFESSOR Ole Molvig (History)
ASSISTANT PROFESSOR OF THE PRACTICE OF ENGINEERING Christopher Rowe (General Engineering)
LECTURER Stephen Ornes

THE study of the communication of science and technology is an interdisciplinary enterprise that draws upon the scientific, engineering, and communication, both oral and written, resources of Vanderbilt University. The program is designed for students who have an interest in science and technology and also are interested in how science and technology are communicated to the larger world outside science, engineering, and medicine.

Interested students should contact the director of the program, David A. Weintraub, Department of Physics and Astronomy.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Communication of Science and Technology

Students majoring in the communication of science and technology will be expected to complete a core of courses that are essential to understanding communication, as well as a coherent program of courses that provide scientific and engineering background. The major consists of either 38 or 39 credit hours.

A student may count as many as 6 credit hours as part of both this interdisciplinary major and a second major. A student may only include a maximum of 15 credit hours of 1000-level course work.

1) Written and Oral Communications courses (9 credit hours from 3 courses)
   Three courses, with a minimum 3 credit hours per course, as follows:
   a. CSET 2100 (Science Communication Tools and Techniques) or CSET 3850 (Special Topics). If neither course is offered for two consecutive years, majors may, with approval of the program director, substitute a course from category ‘sc.’
   b. One advanced public-speaking course: CMST 2110 (Persuasion) or 2120 (Organizational and Managerial Communication)
   c. One advanced (2000-level or higher) “W” course from any of the following:
      i. any 2000-level or higher “W” course from any Natural Science program (as used here, “Natural Science” includes all courses identified as “MNS” courses in AXLE except MATH and PHIL courses),
      ii. any 2000-level or higher “W” course from any Engineering program,
      iii. any 2000-level or higher “W” course from MHS, ENGL 3210 (Intermediate Nonfiction Writing), 3220 (Advanced Nonfiction Writing), ENGL 3728/3728W (Science Fiction), or ENGL 3720/3720W (Literature, Science, and Technology).

2) Natural Science and Engineering courses (15 credit hours from five courses)
   Five courses (minimum 3 credit hours per course), at least three of which must be 2000-level or higher Natural Science courses. (As used here, “Natural Science” includes all courses identified as MNS courses in AXLE except MATH and PHIL courses.) The other two courses may be 2000-level or higher Natural Science courses or courses taken at any level from the School of Engineering. Students will count 15 credit hours of Natural Science and/or Engineering courses toward this part of 38- or 39-credit-hour requirement, even if they choose to take five 4-credit-hour courses. Engineering "research," "project," "design," "seminar," "independent study," and introductory programming courses (e.g., BME 3860, 3861, 4950, 4951, 4959, ChBE 4950W, 4951W, 3860, 3861, 4959; CE 3841, 3842, 3843, 4950, 4951, 4990; CS 1101, 1103, 3860, 3861; ECE 3850, 3851, 4950, 4951, 4959; ENGM 3850, 3851, 4951; ES 1115, 0703, 3860;
MSE 3850, 3851; ME 3841, 3842, 3860, 4951, 4959; SC 3841, 3842, 3843, 3851, 3852, 3853) do not count toward this requirement. Students may count the three 1-credit-hour courses ES 1401, 1402, and 1403 as equivalent to a single 3-credit-hour course if they earn credit for all three courses.

3) Statistics (3 credit hours) selected from:
   BSCI 2370 (Statistical Methods in Biology)
   ECON 3500 (Economic Statistics), 3510 (Intensive Economic Statistics)
   MATH 1011 (Probability and Statistical Inference), 2810 (Probability and Statistics for Engineering), 2820 (Introduction to Probability and Mathematical Statistics)
   PSY 2100 (Quantitative Methods)
   PSY-PC 2110 (Introduction to Statistical Analysis)
   PSY-PC 2120 (Statistical Analysis)
   BME 3200 (Analysis of Biomedical Data)
   SOC 2100 (Statistics for Social Scientists)

4) One course bridging science, engineering, or medicine and health with non-science content and issues, including public policy courses and environmental courses (3 credit hours):
   ANTH 2109 (Food Politics in America), 3143 (Medical Anthropology), 3343 (Biology and Culture of Race), 3141 (Anthropology of Healing), 3142 (Medicine, Culture, and the Body), 3372 (Human Osteology), 4373 (Health and Disease in Ancient Populations)
   ASIA 2630 (Chinese Medicine)
   ASTR 2130 (Theories of the Universe)
   ECON 2350 (Health Care Policy)
   EES 2150 (Science, Risk, and Policy)
   ENGL 3730 (Literature and the Environment)
   HIST 1480 (The Darwinian Revolution), 1500 (History of Modern Sciences and Society), 1510 (The Scientific Revolution), 2800 (Modern Medicine), 2810 (Women, Health, and Sexuality), 2830 (Medicine, Culture, and the Body), 3030 (Epidemics in History), 3040 (Health and the African American Experience), 3045W (US Eugenics 1865–present), 3070W (Science, Technology, and Modernity)
   MHS — any course except 1111, with the exception of special topics internship, service learning, research, seminar, independent study and honors classes
   PHIL 3616 (Philosophy and the Natural Sciences)
   PSCI 2353 (Ethics and Public Policy), 2255 (Public Policy Problems), 2256 (Politics of Public Policy)
   PSY 3705 (Human Sexuality)
   RLST 3921 (Ethics and Ecology), 3941 (Religion, Science, and Evolution)
   SOC 3311 (Climate Change and Society), 3312 (Environment and Development), 3314 (Environmental Inequality and Justice), 3301 (Society and Medicine)
   WGS 2240 (Introduction to Women’s Health), 2268 (Gender, Race, Justice, and the Environment), 2270 (Ecofeminism: Theory, Politics, and Action)

5) Electives (8 or 9 credit hours) chosen from:
   a. CMA 1500 (Fundamentals of Film and Video Production), 1600 (Introduction to Film and Media Studies), 2100 (Intermediate Filmmaking: Alternate Forms), 2200 (Intermediate Filmmaking: The Fiction Film), 2500W (Screenwriting), 2600W (Advanced Screenwriting), (no more than 2 courses)
   b. category 1c (no more than 2 courses)
   c. category 2 (no more than 2 courses)
   d. category 4 (no more than 2 courses)
   e. A combination of at least one hour of CSET 3840 (Directed Study) and at least one hour of CSET 3841 (Project in Science Writing and Communicating) may be counted together as a single elective course. No more than 3 credit hours of CSET 3840 and 3841 may count toward the major.

Internships

Students are encouraged to pursue off-campus summer internships in such places as national parks, NASA, the National Institutes of Health, or public television stations. If an internship requires course credit, credit can be earned through Interdisciplinary Studies (INDS) 3881 and 3884 (1 credit hour each); they must be taken as P/F hours, and do not count toward the major.

Honors Program

CSET Honors is a selective program of individual undergraduate work, supervised by faculty advisers. Honors candidates propose, research, and write a thesis that demonstrates the ability to communicate science, in depth, to a nonscientific audience.

Requirements for Admission

To be admitted to the Honors Program in CSET, a student must
1) be a CSET major;
2) have completed at least 30 of the required hours for the CSET major;
3) have completed one semester of CSET 3840 (1–3 credit hours) and one semester of CSET 3841 (1–3 credit hours). With permission of the program director, students may substitute research experience taken for credit within a scientific or engineering program for CSET 3840;
4) have a GPA of at least 3.30 in all work previously taken for credit;
5) have a GPA of at least 3.40 in all courses taken that count toward completion of the CSET major.

Requirements for Completion (minimum 39 credit hours)

To earn Honors or Highest Honors in CSET, a student must
1) complete the CSET major (minimum 38 credit hours);
2) complete at least one semester of CSET 4998 (1–3 credit hours);
3) present an oral defense of the written CSET 4998 thesis before a faculty examination committee;
4) have a GPA of at least 3.30 in all work taken for credit and 3.40 in all courses that count toward the CSET major.

Course of Study

Interested students may apply in the spring of their junior year or the fall of the senior year. Applicants must have completed CSET 3840 (or the equivalent) and must have completed or be enrolled in CSET 3841. The application includes a one-to-two page proposal of the planned thesis and the signature of the faculty member who will be the thesis adviser.
Students in the Honors Program sign up for CSET 4998 (Honors Thesis). Students may enroll in CSET 4998 for one or two semesters, for up to 3 credit hours per semester.

The final thesis must be submitted no later than two weeks before the end of classes in the semester of graduation.

The oral defense of the thesis will take place one to two weeks after the final thesis is submitted. The examination committee is composed of the thesis supervisor and two additional faculty members, at least one of whom must be a faculty member affiliated with the CSET program. The oral defense is public and should take approximately one hour, including time for questions from members of the committee. The faculty examination committee will determine by majority vote whether the student has earned Honors and whether said student should receive Honors or Highest Honors. Highest Honors is reserved for students with GPAs in the CSET major and overall above 3.50, whose theses are of near-publication quality, and whose oral defenses are at the highest level.

Minor in Communication of Science and Technology

The minor in the Communication of Science and Technology consists of seven courses, totaling a minimum of 21 credit hours, distributed as follows:

1) Written and Oral Communications courses (3 courses):
   a. CSET 2100 or CSET 3890. If neither course is offered for two consecutive years, minors may, with approval of the program director, substitute a course from category "ic."
   b. One advanced public-speaking course: CMST 2110 or 2120
   c. One advanced (2000-level or higher) "W" course as defined in the rules for the CSET major

2) Natural Science and Engineering courses (4 courses):
   a. One course bridging science, engineering, or medicine and health with non-science content and issues, including public policy courses and environmental courses (selected from list of courses for majors)
   b. Three courses (minimum 3 credit hours per course) from engineering and/or the natural sciences, at least two of which must be 2000-level or higher Natural Science courses (as defined for the major). The other course may be a 2000-level or higher Natural Science course or a course taken at any level from the School of Engineering. Students may count 9 credit hours of Natural Science and/or Engineering courses toward this part of 21-credit-hour requirement, even if they choose to take three 4-credit-hour courses. Students may count the 1-credit-hour courses ES 1401, 1402, and 1403 as equivalent to a single 3-credit-hour course if they earn credit for all three courses.

Course descriptions begin on page 150.

Communication Studies

CHAIR Bonnie J. Dow
DIRECTOR OF UNDERGRADUATE STUDIES Paul H. Stob
PROFESSOR EMERITUS Kassian A. Kovalcheck
PROFESSORS Bonnie J. Dow, John M. Sloop
ASSOCIATE PROFESSORS Vanessa B. Beasley, Jeffrey A. Bennett, Isaac West
ASSISTANT PROFESSORS Claire Sisco King, Paul H. Stob
SENIOR LECTURERS Neil Butt, John H. English, M. L. Sandoz, Dustin A. Wood
LECTURER Courtney C. Travers

THE Department of Communication Studies offers a major and a minor that include courses in the following areas: historical and theoretical foundations of communication study, argumentation and oral advocacy, the historical and critical study of public discourse and deliberation, and the analysis of mass media and culture.

The Vanderbilt University Varsity Debate Team competes at national and regional levels. A full program of intercollegiate debate is available for students who choose to participate in forensics.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Communication Studies

Communication studies explores purposive human communication. The Department of Communication Studies is particularly devoted to an understanding of public discourse in the broadest sense, with an emphasis on the role of persuasion in civil society. To that end the subjects of study range from political discourse to commercial advertisement, from the history of rhetoric to the impact of mass media, from criticism of American public oratory to issues of freedom of speech. The department offers courses involving practice, criticism, and theoretical analysis. Education in these areas has traditionally produced citizen advocates who enter public life in business, law, journalism, and communication.

A major in communication studies requires 30 credit hours of course work. The requirements and options for the major are as follows:

1. Two courses (6 credit hours) in Foundations: 1002 and 1500.
2. One course (3 credit hours) in Argumentation and Advocacy: 2100, 2110, 2120.
3. Three courses (9 credit hours) in Public Discourse and Deliberation: 3000, 3001, 3002, 3110, 3120, 3600, 3700; one of which must be 3000, 3001, or 3002.
4. Three courses (9 credit hours) in Culture, Theory, and Critique: 2800, 2950, 3100, 3620, 3620W, 3710, 3720.
5. One elective course (3 credit hours), selected from the courses listed in requirements 2 through 4, which has not been counted toward those requirements.

1111, 3840, 3850, 3890, 4960, and 4961 may be counted toward the major in the category corresponding to the topic of the course, with the permission of the director of undergraduate studies.
Minor in Communication Studies

A minor in communication studies requires completion of 18 credit hours from the following requirements and options:

1. Two courses (6 credit hours) in Foundations: 1002 and 1500.
2. One course (3 credit hours) in Argumentation and Advocacy: 2100, 2110, 2120.
3. Three courses (9 credit hours) from requirements 3 and 4 in the major; one of which must be 3000, 3001, or 3002.

1111, 3840, 3850, 3890, 4960, and 4961 may not be counted toward the minor.

Course descriptions begin on page 151.

Earth and Environmental Sciences

CHAIR Steven L. Goodbred
DIRECTOR OF UNDERGRADUATE STUDIES Daniel J. Morgan
DIRECTOR OF GRADUATE STUDIES Guilherme Gualda
PROFESSORS EMERITI Leonard P. Alberstadt, Molly Fritz Miller, Arthur L. Reesman, William G. Siesser, Richard G. Stearns
PROFESSORS John C. Ayers, Ralf Bennartz, James H. Clarke, David J. Furbish, Steven L. Goodbred, George M. Hornberger, Calvin F. Miller
ASSOCIATE PROFESSORS Jonathan M. Gilligan, Guilherme Gualda
ASSISTANT PROFESSORS Simon A. F. Darroch, Larisa R. G. DeSantis, Maria Luisa Jorge, Jessica L. Oster
SENIOR LECTURERS Lily L. Claiborne, Daniel J. Morgan

THE earth and environmental sciences are aimed at interpreting Earth’s dynamic history—its age and origin as recorded in rocks and the landscape—and at understanding how geological processes affect modern environmental and ecological systems. Among the natural sciences, ours is the quintessential interdisciplinary science, providing vital perspective on how Earth’s physical and geochemical template simultaneously sustains and threatens life, and influences human interactions with Earth.

The Department of Earth and Environmental Sciences (EES) offers an undergraduate major leading to the B.A. degree. Students majoring in EES participate in field and laboratory work. The comparatively small size of the faculty and student body allows many opportunities for faculty-student interaction. Students use the major as preparation for graduate study, for careers in environmental studies and resource exploration (petroleum, minerals), or for related careers in such fields as land use planning, teaching, law, or engineering.

Research programs in the department, which in many cases involve students, employ field, analytical, and experimental methods. A wide variety of earth processes are investigated, ranging from the migration of fluids and generation of magmas in Earth’s crust, to the evolution of rivers and landscapes, to the evolution of sedimentary and biological environments, to geological processes in the human environment. Study areas, in addition to Middle Tennessee, include the southwestern United States, the Pacific northwest, the southern Appalachians, Antarctica, South Asia, Brazil, and New Zealand.

For students with primary interests in environmental issues, there are three degree options. A student may major in EES or may construct an individualized interdisciplinary major.

Alternatively, a student may major in another conventional discipline and augment that with an earth and environmental science minor.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Earth and Environmental Sciences

Three options are available within the EES major. All provide a solid grounding in the earth and environmental sciences. The differences are in requirements for supporting sciences and mathematics and for research. Option I provides a background for careers or post-graduate work in related fields such as teaching, law, or business and for some graduate programs and employment opportunities in earth and environmental sciences. Option II prepares students well for graduate work and careers in the earth and environmental sciences. Option III (Honors) is designed for excellent, highly motivated students who want to pursue research as undergraduates.

Required EES courses 32 credit hours toward major for all options

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EES 1510/1510L</td>
<td>4</td>
</tr>
<tr>
<td>EES 2510 (or 1010 prior to fall 2011)</td>
<td>4</td>
</tr>
<tr>
<td>EES 3220 (or 3220W prior to fall 2012)</td>
<td>4</td>
</tr>
<tr>
<td>EES 3250</td>
<td>4</td>
</tr>
<tr>
<td>EES 3260</td>
<td>4</td>
</tr>
<tr>
<td>EES 3330</td>
<td>4</td>
</tr>
<tr>
<td>EES 3340</td>
<td>4</td>
</tr>
<tr>
<td>EES 4961</td>
<td>1</td>
</tr>
<tr>
<td>One additional course selected from the following: EES 2110, 4420, 4550, 4600, 4820, 4830, 6200, 6891</td>
<td>3</td>
</tr>
</tbody>
</table>

Option I. Provides students with a comprehensive background in geoscience. In addition to the courses listed above, students are required to take one course each from two of the following groups.

Group A: Physical World
- Physics I (Physics 1601/1601L 4 hr or Physics 1901 5 hr)
- Chemistry I (Chemistry 1601/1601L 4 hr)
- Astronomy (2110 3 hr)

Group B: Earth Life
- Biological Sciences (1100/1100L 4 hr or 1510/1510L 4 hr or 1103 4 hr or 2218 4 hr or 2219 4 hr or 2238/2238L 4 hr)

Group C: Quantitative Skills
- Calculus I (Math 1100 4 hr or 1200 3 hr or 1300 4 hr)
- Statistics (Math 1010 3 hr)

Total credit hours: 38–41

Option II. Provides students with most course work needed for a career or graduate studies in geoscience. Students take the required EES courses and complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics I (1601/1601L 4 hr)</td>
<td></td>
</tr>
<tr>
<td>Chemistry I (1601/1601L 4 hr)</td>
<td></td>
</tr>
</tbody>
</table>
Calculus I (Math 1200 3 hr or 1300 4 hr)

Total credit hours: 43–44

In addition, the second semesters of Chemistry, Physics, and Calculus as well as one or more courses in Biological Sciences are highly recommended to complete courses commonly required for graduate school or employment. Recommended selections include:

Physics II (1602/1602L 4 hr) or Chemistry II (1602/1602L 4 hr) or Calculus II (Math 1201 3 hr or 1301 4 hr)
Biological Sciences (1100/1100L 4hr or 1510/1510L 4 hr or 1103 or 2218 4 hr or 2219 4 hr or 2238/2238L 4 hr) or Astronomy (2110 3 hr)

Option III. Honors. Provides research experience as well as course work preparation for a career or graduate studies in earth or environmental sciences. Course work is the same as for Option II with the addition of EES 4998 and 4999 (4 credit hours).

Total credit hours: 47–48

Interested students should apply to the undergraduate adviser for entry into the Honors program before the end of fall semester, junior year. A minimum of a 3.3 grade point average both overall and in the major is required for entry into the Honors program.

Working closely with a faculty adviser, students in the Honors program complete a research project of interest to both the student and faculty member during the senior year. In order to graduate with honors in EES, a student must: (1) maintain a 3.3 average; (2) complete the required courses for Option II plus EES 4998 and 4999; (3) satisfactorily present the results of his/her research in written form as a senior thesis to two members of the faculty and orally to students and faculty of the department.

Minor in Earth and Environmental Sciences

The minor in EES provides students with a broad background in earth processes, systems, and history, and an introduction to environmental issues. This background is highly relevant to many different fields of endeavor. The minor does not, however, fully prepare students for graduate studies or employment as earth scientists. Students should consult with the director of undergraduate studies about how the minor in EES fits with their career or graduate school interests.

The minor consists of at least five courses (at least 17 credit hours; EES 1510/1510L and 1030/1030L each count as one course; EES 2150 does not count toward the minor). Although EES 1510 (with 1510L) and 1030 (with 1030L) are highly recommended, students are encouraged to choose courses based on their interests and career plans and to discuss course selection with the director of undergraduate studies. No more than two 1000-level courses count toward the minor. Two courses with labs are required; one must be numbered above 2000. No credit toward the minor is given for EES 3841–3842 or 3851–3852.

Minor in Environmental Science

The interdisciplinary minor in environmental science requires a minimum of 15 credit hours. Environmental science is the study of how the earth's natural environmental processes work, how they have been or can be modified by humans and society, and how such modifications impact on the biosphere, at the levels of individuals through ecosystems. An environmental science minor provides students the opportunity to expand their education to include a coherent program in the scientific aspects of how we interact with and modify the earth's environment.

Students who want to minor in environmental science must take a minimum of five courses chosen from the courses listed below and approved by an adviser. Two must be from the core environmental science list (A), and at least two others must be from either the environmental science list (C) or the core environmental science list (A). No more than one 1000-level course may be counted toward the minor. Not more than two courses can come from the student's major department, recognizing that such courses cannot be counted simultaneously for both a major and a minor.


D) ENVIRONMENTAL STUDIES: Philosophy: 3616, Philosophy and the Natural Sciences; 3611, Environmental Philosophy.

Licensure for Teaching

Candidates for teacher licensure in earth and space science at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

Course descriptions begin on page 152.
## Economics

### Chair

**Kamal Saggi**

**Vice Chair**

Eric W. Bond

### Director of Undergraduate Studies

Malcolm Getz

### Director of Graduate Studies

Jennifer F. Reinganum

### Professors Emeriti


### Professors

Kathryn H. Anderson, Eric W. Bond, Christopher (Kitt) Carpenter, William J. Collins, John Conley, Mario Crucini, William W. Damon, Andrew F. Daugherty, Robert A. Driskill, Benjamin Eden, Kevin X. D. Huang, Gregory Huffman, Atsushi Inoue, Tong Li, Jennifer F. Reinganum, Peter L. Rousseau, Kamal Saggi, Mototsugu Shintani, John A. Weymark, Myrna Wooders

### Associate Professors

Malcolm Getz, Andrea Moro

### Assistant Professors

Andrew Dustan, Federico H. Gutierrez, Eun Jeong Hae, Dong-Hyuk Kim, Gregory Leo, Alejandro Molnar, Hyunseung Oh, Claudia Rei, Joel Rodrigue, Pedro Sant’Anna, Peter Saveliev, Diana N. Weymark

### Senior Lecturers

Ana Regina Andrade, Stephen G. Buckles, Hojjatallah Ghandi, Patricia Kelly, Christina H. Rennhoff, Rupinder Saggi, Stephanie So, John Vrooman

### THE Department of Economics

The Department of Economics offers an undergraduate major and minor in economics. Qualified economics majors may also elect to take graduate courses or participate in honors work.

The department participates with the Department of History in a concentration in economics and history. Other economics-related minors are discussed under Managerial Studies.

Economics 1010 and 1020 are prerequisites to all courses numbered above 2000, except Economics 2220 which only requires Economics 1010.

### Program of Concentration in Economics and History

This is an interdisciplinary program split between Economics and History that provides a more focused program of study while requiring fewer credit hours than a double major in the two fields. The program consists of 45 credit hours of course work of which 9 credit hours are from a common economic history core and the remaining 36 credit hours are evenly divided between Economics and History. Students are expected to observe course-specific requirements in each department. The details are spelled out below under Economics and History.

### Licensure for Teaching

Candidates for teacher licensure in economics at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

### Course descriptions begin on page 153.

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### Minor in Economics

The minor in economics requires 21 credit hours, including 1010, 1020, 1500, or 1510 (or Math 2820 and Math 2820L), 3010, and 9 credit hours of electives. At least one elective must be numbered 3050 or above. One semester of calculus is prerequisite to 1500, 1510, and 3010. Financial Economics courses may not be taken for credit in the minor in economics.

### Honors Program

An honors program is available in economics. This program is designed for highly motivated students interested in doing independent research. Honors candidates must take two semesters of calculus and 36 credit hours of work in economics, including all 15 credit hours of courses required for the Economics major.

The following Honors Core requirements must be met in order for Honors in Economics to be awarded:

1. Economics 3050, Introduction to Econometrics (3 credit hours);
2. Economics 3698, thesis proposal development as Independent Study (1 credit hour minimum);
3. Economics 3851–3852, Senior Thesis (6 credit hours);
4. Economics 4981–4982, Honors Seminar (2 credit hours);
5. 9 credit hours of electives including 3 credit hours in an Economics course above 3050.

Students who are not sure whether they want to complete the Honors Program are urged to take an additional 3-credit-hour elective. Honors candidates are also required to write a senior thesis and to defend it in an oral examination. On satisfactory completion of this program, a student will graduate with honors or with highest honors in economics. Interested students who meet the College of Arts and Science’s requirements for honors candidacy as set forth elsewhere in this catalog should consult the director of undergraduate studies no later than the fall term of their junior year.

### Program of Concentration in Economics

The requirements for the major include completion of at least 33 credit hours in economics courses, including 1010, 1020, 1500 or 1510 (or Math 2820 and Math 2820L), 3010, 3020. Students who complete Economics 3050 with Math 2820 and 2820L as a prerequisite need not take Economics 1500 or 1510. At least 9 credit hours must be in courses numbered 3050 or above. Courses in Financial Economics do not carry credit in the economics major. Economics 1111 may be counted as an elective. No more than 3 credit hours of independent study may be included in the minimum 33 credit hours required for the major.

### Mathematics Prerequisite

Two semesters of calculus are strongly recommended for majors and minors in the department. Calculus is a prerequisite for Economics 1500, 1510, 3010, and 3020, courses that are required in the economics major and minor. At least one semester of calculus is required for all our programs.
Economics and History

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

The joint major in economics and history makes an important contribution to liberal education at Vanderbilt by helping students understand the origins and organization of modern society. It also provides a unique preparation for careers in business, the professions, and other fields by combining all the analytical tools of the regular economics major with history’s emphasis on clear and effective writing and on developing skills in gathering, assessing, and synthesizing information.

The program consists of 45 credit hours of course work: 9 credit hours in an economic history core, and an additional 18 credit hours in economics and 18 in history. Students declare their major through the Department of History office.

Note: All students must have at least one semester of calculus; two are strongly recommended for the economics component. Calculus is a prerequisite for ECON 1500, 1510, 3010, and 3020, which are required for the major. It is also a prerequisite for all economics courses numbered above 3000.

Course work for the major is distributed as follows:

Economic History Core (9 credit hours)

Three of the following courses, one of which must be an economics course above 3000:
HIST 1600, 1640, 1650, 1660, 2660, 3075, 3190, 3200, ECON 2150, 3150, 3160. Note: ECON 3010 is a prerequisite for ECON 3150, and 3160.

Economics (18 credit hours)

ECON 1010, 1020, 1500 or 1510, 3010, 3020; one ECON course above 3000 not included in the economic history core.

Note: The following course sequences may be substituted for ECON 1500 or 1510:
(1) MATH 2820, 2820L, and 2821 or
(2) MATH 2820, 2820L, and ECON 3050. ECON 3050 will also count as an elective.

History (18 credit hours)

No more than 3 credit hours of AP or IB credit in history courses may count toward this total.

(1) History 3000W or 3980; must be taken by the end of the junior year. 3980 is limited to second-semester juniors who have been admitted to the Honors Program. Students entering the Honors Program who have already earned credit for 3000W will receive elective credit for that course.

(2) History 4960 (prerequisite: History 3000W), or History 4980–4981 (available only to students in the honors program). Note: At the discretion of the director of honors and the director of undergraduate studies in history, a student who has earned credit for 4980 but does not take 4981 may be considered to have fulfilled the capstone requirement for the major.

(3) Four other history courses not included in the economic history core. These electives may also include any of the following: AADS 2106, 2654, 4256; ASIA 2630; CLAS 2100, 2110, 2120, 2150, 2160, 2180, 3010; EUS 2201, 2220; DIV 6730, 6740; GER 2442; HOD 1115; JS 1111.09, 1200, 1220, 1240, 2450, 2540, 2560, 2600, 2620, 3000, 3100, 3210, 3892; MHS 2110; PHIL 2100; RLST 3306, 3316.

Honors Program (9 more credit hours)

Students apply to the Honors Program in History in the first semester of the junior year.

54 credit hours: students will take the four-course honors sequence, HIST 3980, 4980–4981, 4990. Because HIST 4980–4981 satisfies the capstone requirement, honors students will not be required to take HIST 4960, though they may enroll for 4960 as an elective. Students will write an interdisciplinary thesis under the direction of an adviser from each department.

English

CHAIR Dana Nelson
DIRECTOR OF UNDERGRADUATE STUDIES Julia Fesmire
DIRECTOR OF GRADUATE STUDIES Mark A. Wollaeger
DIRECTOR OF CREATIVE WRITING PROGRAM Kate Daniels

The Department of English offers three distinct programs that allow students to individualize their studies while acquiring the breadth of knowledge and skills of the traditional English major. The curriculum provides courses in the history of British and American literature, in Anglophone literatures of other countries, in literary theory, and in expository as well as creative writing. These diverse courses reflect the interests of students and faculty and the expanding area of English literary study. Students use the concentration in English as a foundation for a variety of careers where the analytic, reading, and writing skills gained are especially valued, and as preparation for postgraduate work in literature. The department also regards its goals as helping students become readers of literature and culture throughout their lives.

Programs in England, Scotland, Australia, and around the world offer opportunities for study and travel that enrich a student’s education. The Gertrude Vanderbilt and Harold S. Vanderbilt Visiting Writers series annually sponsors public lectures, readings, and other occasions where English majors hear and meet celebrated poets, novelists, and critics. Many majors write for and serve on the editorial boards of various campus publications including the Hustler paper and the Vanderbilt Review, a distinguished collection of creative writing. An English majors listserv alerts students to employment opportunities, internships, and study abroad programs in addition to those offered through Vanderbilt University.
NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in English and American Literature

Program I: Literary Studies (30 credit hours)

Students pursue a broad range of interests through a flexible approach to the study of literature. 30 total credit hours including:

1. English 2200, Foundations of Literary Studies (3 credit hours)
2. 6 credit hours in History (literature before 1800)
3. 6 credit hours of Diverse Perspectives (ethnic American or Anglophone literature)
4. 3 credit hours in Approach
5. 9 additional credit hours of electives in English, chosen from the courses that count toward the major
6. English 4960, Senior Capstone Seminar (3 credit hours)

A course cannot be used to satisfy more than one requirement in the major.

Courses that fulfill the requirement in numbers 2, 3, 4, and 5 above are described below under General Requirements and Advice for Majors and Minors in All Programs.

Program II: Creative Writing (30 credit hours)

Students develop their creative writing while acquiring an overview of English literature. 30 total credit hours including:

1. English 2200, Foundations of Literary Studies (3 credit hours)
2. 12 credit hours of 3000-level creative writing workshops in at least two different genres (from among: Nonfiction 3210, 3220; Fiction 3230, 3240; Poetry 3250, 3260). Admission to these courses is by consent of instructor.
3. 3 credit hours in History (literature before 1800)
4. 3 credit hours in Diverse Perspectives (ethnic American or Anglophone literature)
5. 9 credit hours from courses above 2000-level (except 2200) courses that count toward the English major, which may include one additional creative writing workshop (beyond the four required in number 2, above) or one course in another discipline (with approval of the director of undergraduate studies)

A course cannot be used to satisfy more than one requirement in the major.

Courses that fulfill the requirement in numbers 2, 3, 4, and 5 above are described below under General Requirements and Advice for Majors and Minors in All Programs.

Program III: Specialized Critical Studies (36 credit hours)

Students design their own specialized course of study with a descriptive name and develop a contract of courses for it. 36 total credit hours including:

1. English 2200, Foundations of Literary Studies (3 credit hours)
2. 12 credit hours of course work concentrated in a particular period (e.g., nineteenth-century American), genre, or movement (e.g., the novel), an aspect of intellectual history (e.g., law and literature, literary theory), or other area of special interest. Up to 9 credit hours may be taken in courses from other departments relevant to the concentration. In consultation with a major adviser, each student selects specific courses, which are listed in a contract that is filed after the student has formally declared the major.
3. 6 credit hours in History (literature before 1800)
4. 6 credit hours in Diverse Perspectives (ethnic American or Anglophone literature)
5. 3 credit hours in Approach
6. English 4960, Senior Capstone Seminar, or 4998, Honors Colloquium (3 credit hours)
7. 3 credit hours of any English course above 2000, except 2200

A course cannot be used to satisfy more than one requirement in the major.

Courses that fulfill the requirement in numbers 3, 4, and 5 above are described below under General Requirements and Advice for Majors and Minors in All Programs.

Minor in English

At least 18 credit hours of course work in English are required. These courses must include English 2200, 3 credit hours from History (literature before 1800), and 3 credit hours of Diverse Perspectives (ethnic American or Anglophone literature).

A course cannot be used to satisfy more than one requirement in the minor.

General Requirements and Advice for Majors and Minors in All Programs

Students must take English 2200 for the major, ideally during the freshman or sophomore year, or as soon as possible after declaring the major. All courses above 2050 (except 4999) count toward the major. English 3890, 3890W, 3892, 3892W, 3894, 3894W, and 3898 may be repeated for credit when the topics are different. The survey courses, 2310, 2311, 2316, and 2316W, are recommended for sophomores to provide a background for advanced courses. Students considering Program II (Creative Writing) may wish to take 1280 or 1290 as preparation during their freshman or sophomore year, although those courses will not count toward the major.

Note: A course cannot be used to satisfy more than one requirement in the major.

Courses that fulfill the History requirement (literature before 1800) include 2310, 3335, 3336, 3340, 3340W, 3310, 3314, 3316, 3364, 2318, 2318W, 3318, 3330, 3346, 3332, 3348, 3360, 3361, 3670, 3670W, 3370.

Courses that fulfill the Diverse Perspectives requirement (ethnic American or Anglophone literature) include 3654, 3654W, 3674, 3678, 3662, 3662W, 3670, 3670W, 3650, 3650W, and appropriate courses from other departments as approved by the director of undergraduate studies.
Courses that fulfill the Approach requirement include 3710, 3711, 3748, 3270, 3270W, 3748, 3740, 3730, 3742, 3744, 3726, 3734, 3734W, 3746.

Courses that fulfill the Program II creative writing workshop requirement include 3210, 3220, 3230, 3240, 3250, 3260.

In addition, suitable sections of 3890, 3890W, 3892, 3892W, 3894, 3894W, 3746, 3898, 3898W, 4998, 4999, (as appropriate) and other courses may fulfill the categories listed. Detailed course descriptions appear on the Department of English website for the upcoming semester and are available in the department. Majors are required to consult with their advisers during registration to identify what specific requirements the courses offered in that semester might fulfill.

One course from another department, appropriate to the student's course of study, may be counted toward the requirements of any program with permission of the director of undergraduate studies; for Program III, this course may be in addition to the 9 credit hours already allowed from other departments.

Honors Program
To graduate with honors in English, students must (a) complete all the requirements of the English major, with at least 6 credit hours in honors sections (an appropriate graduate seminar or seminar in a study abroad program may be substituted for one honors seminar); (b) 3 credit hours of 4998; (c) maintain at least a 3.4 grade point average overall and 3.6 in the major; (d) be admitted to the Honors Program in the spring of the junior year; (e) write a thesis (4999) and pass an oral examination about its subject in the spring of the senior year. For secondary education double-majors, EDUC 9700 can be substituted for 4999 with the consent of the director of undergraduate studies.

To comply with all requirements, every honors student will complete 33 credit hours. Exceptional achievement on the thesis will earn highest honors. Majors who wish to apply to the Honors Program must be within 6 credit hours of completing all AXLE requirements, must have made reasonable progress toward the major, and must have at least a 3.4 grade point average overall and 3.6 in the major. Applications are accepted in April of the junior year. Additional information is available from the director of undergraduate studies. Students need not be enrolled in the Honors Program to take honors sections. Honors sections are seminars open to any student beyond the freshman year who has completed the sophomore writing requirement of AXLE and has earned at least a 3.4 grade point average. Students are encouraged to enroll in honors sections prior to applying to the program.

Licensure for Teaching
Candidates for teacher licensure in English at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

Course descriptions begin on page 155.

Environmental and Sustainability Studies

DIRECTOR David Hess

HUMAN beings and their societies necessarily interact with and alter Earth's natural environment. The environmental and sustainability studies minor allows the student to examine human interaction with the environment from the perspectives of the humanities and social sciences with some exposure to the environmental sciences and/or environmental engineering.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Minor in Environmental and Sustainability Studies

Students who want to minor in environmental and sustainability studies must take a minimum of six courses (18 credit hours total) chosen from the courses listed below; additional relevant courses may be counted with approval of the director of the program. Courses must be distributed as follows: one science- and technology-intensive course (A); two humanities courses (B); two social-behavioral and policy-intensive courses (C); and a capstone course. No more than two courses may be at the 1000 level. In addition, no more than 3 credit hours may be counted simultaneously toward both the environmental and sustainability studies minor and any other major or minor. Topics courses may count toward the minor with approval of the director.

A) Natural Science- and Technology-Intensive Courses: BSCI 1103, BSCI 2238, BSCI 2238L, BSCI 3233, EES 1030, EES 1070, EES 1080, EES 1111*, EES 1510, EES 1510L, EES 2110, EES 2150, EES 3220, EES 3220W, EES 4680, EES 4750, EES 4820, ENVE 3610, ENVE 3611, ENVE 3612, ENVE 4615, ENVE 4700, ENVE 1115*

B) Humanities Courses: AMER 1111*, AMER 4000*, AMER 4100*, ENGL 2316/2316W*, ENGL 3720/3720W*, ENGL 3730, ENGL 3898/3898W*, HART 3240W, HART 2782, HIST 1470, HIST 1480, PHIL 1111*, PHIL 3611, PHIL 3611, PHIL 3612, RLST 2472, RLST 3921, WGS 2268, WGS 2270

C) Social-Behavioral Sciences and Policy Intensive Courses: ANTH 1111*, ANTH 2109, ANTH 3261, ANTH 4514, ECON 2170, HOD 3212, HOD 3890*, PSCI 2353*, PSY 111*, SOC 1020/1020W*, SOC 1111*, SOC 3311, SOC 3312, SOC 3313, SOC 3314, SOC 3315, SOC 3316, SOC 3321, WGS 1111*

D) Capstone: ENVS 4101 for minors only

*Special topic and First-Year Writing Seminar sections require the approval of the director of the environmental and sustainability studies minor to count in the minor.

Course descriptions begin on page 159.
**European Studies**

DIRECTOR Joy Calico
PROFESSORS Michael D. Bess, Joy Calico
MAX KADE VISITING PROFESSOR Maria Hristova
ASSOCIATE PROFESSORS Meike Werner, Christoph Zeller
ASSISTANT PROFESSORS Alexander Joskowicz, Nina Warnke

**Affiliated Faculty**
PROFESSORS EMERITI M. Donald Hancock (Political Science and European Studies), John A. McCarthy (German and Comparative Literature and European Studies)
PROFESSORS Celia Applepage (History), David Blackbourn (History), James Booth (Political Science), William Caferro (History), Katherine B. Crawford (History), Cynthia Cyrus (Musicology and European Studies), Robert Driskill (Economics), Lynn E. Enteine (English), James A. Epstein (History), Edward F. Fischer (Anthropology), Leonard Folgarait (History of Art), William P. Franke (Comparative Literature and Italian), Edward H. Friedman (Spanish and Comparative Literature and European Studies), Marc Froment-Meurice (French), Lenn E. Goodman (Philosophy), Roy K. Gottfried (English), Barbara Hahn (German), Joel F. Harrington (History), Mark Jarman (English), Christopher M. S. Johns (History of Art), Lutz Koenig (German), John Lachs (Philosophy), Leah S. Marcus (English), Thomas A. J. McGinn (Classical Studies), Kelly Oliver (Philosophy and Women's Studies), John F. Plummer III (English), Philip D. Rasic (Spanish and Catalan), Mark Schoenfield (English), Thomas A. Schwartz (History and European Studies), Kathryn Schwarz (English), Virginia M. Scott (French), Helmut W. Smith (History and European Studies), Holly A. Tucker (French and Medicine, Health, and Society), Mark A. Wallaeger (English), David C. Wood (Philosophy and European Studies)
ASSOCIATE PROFESSORS George Becker (Sociology), Victoria Burrus (Spanish), Julia Cohen (Jewish Studies and History), Nathalie Debrauwere-Miller (French), Ildi Dobbs-Weinstein (Philosophy), Jay Geller (Divinity School), Lisa Guenther (Philosophy), Trica D. Keaton (African American and Diaspora Studies), Shaul Kelner (Sociology and Jewish Studies), Richard Lloyd (Sociology), Andrea Minibelli (Italian), Anthère Nzabatsinda (French), Lynn Ramey (French), Michael A. Rose (Composition), Allison Schachter (Jewish Studies and English), Jeffrey S. Tlumak (Philosophy), Barbara Tsakirgis (Classical Studies and History of Art), Francis W. Wcislo (History), Julian Wuerth (Philosophy), Andrés Zamora (Spanish and European Studies)
ASSISTANT PROFESSORS Lauren Clay (History), James McFarland (German), Elizabeth J. Moodley (History of Art), Claudia Rei (Economics), William F. Robinson (History), Margaret Setje-Eilers (German)
SENIOR LECTURERS Elena Olazagasti-Segovia (Spanish), Sheri F. Shanefelt (History of Art)
LECTURERS David Johnson (Russian), Jason Studler (Russian)

**NOTE:** New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

**Program of Concentration in European Studies**

Designed for students who seek to broaden their awareness of the European experience and to prepare for international careers or advanced study, the Program in European Studies (EUS) offers disciplinary breadth as well as expertise in a specialty of students’ choosing. Most EUS majors also participate in one of the Vanderbilt study abroad programs in Europe and/or reside in the International House on campus.

The interdisciplinary major consists of 42 credit hours of course work, to be distributed among various disciplines as indicated below. Emphasis is on political, cultural, economic, and related trends or events especially since the early modern period.

Advising is crucial to the successful completion of the major in EUS. In consultation with an adviser in European Studies, students choose a thematic focus and specific courses that will fulfill the requirements for the major. This focus can consist of a thematic or comparative topic (such as culture and society during a particular epoch), a regional or sub-regional topic (such as European integration, the Iberian Peninsula, the Baltic region), or the culture and society of a particular nation (such as France, Germany, Italy, Poland, Spain). In addition to the core requirements, majors take relevant courses in history, social sciences, and the humanities, as well as a foreign language of the student’s choice.

The Program in European Studies sponsors special activities including a visiting lecture series, international symposia, and informal faculty-student luncheon seminars. Both academic scholars and public figures are invited to campus to address European and transatlantic affairs.

**Required Core Courses (21 credit hours)**
- EUS 2201, European Society and Culture (3 credit hours).
- EUS 2203, The Idea of Europe (3 credit hours).
- EUS 4960, Senior Tutorial (3 credit hours).
- 6 credit hours in Political Science, PSCI 2210, West European Politics, and PSCI 3211, The European Union, or appropriate substitute(s) with the approval of the EUS adviser.
- 6 credit hours in European history in the student’s special interest area, to be selected from the list below and in consultation with the major adviser.

**Foreign Language Requirement (6 credit hours)**
The foreign language requirement is to be satisfied in one of the following ways:
- 6 credit hours of course work beyond the intermediate level in one European language;
- course work through the intermediate level in two European languages;
- demonstration of proficiency equivalent to either of the preceding options; or
- participation in one of the Vanderbilt study programs in Europe (students participating in the Vanderbilt in England program must complete course work through the intermediate level in one European language, or demonstrate equivalent proficiency).

**Electives (15 credit hours)**
The remainder of the 42 credit hours required for the major may be selected from the list of courses below or from among approved courses taken abroad. Students majoring in EUS are advised to select courses from the social sciences and humanities that complement their areas of special interest and their thematic focus. They should be distributed as follows:
- 3 additional credit hours in history
- 3 additional credit hours from other social science fields
- 9 credit hours from the humanities

**Other Issues Relating to the Major**

Normally, no more than 6 credit hours of work in 1000-level courses may be counted toward the major; however, students with two languages through the intermediate level may also count toward the major the intermediate-level courses in one of those languages.

Independent study and research courses and selected topics courses should have topics appropriate to the student’s course of study.
Students seeking a second major may count a maximum of 6 credit hours of course work to meet requirements in both majors.

Joint Major Option
The Program in European Studies collaborates with several departments to create joint majors in French and European studies, German and European studies, Italian and European studies, Russian and European studies, Spanish and European studies, and Spanish, Portuguese, and European studies. These options are offered as collaborations between the Program in European Studies and the Departments of French and Italian, Germanic and Slavic Languages, and Spanish and Portuguese. Please see the detailed information on the joint major options under the departmental headings in this catalog. Students selecting one of these options will be advised by their major adviser in the language department as well as their adviser in the Program in European Studies.

Honors Program
The Program in European Studies offers qualified majors the option of completing a portion of their major requirements in an Honors Program. Students engage in interdisciplinary reading, consultations with faculty, and research on the overarching theme of their program of concentration. To be admitted to the program students must have attained a minimum cumulative grade point average of 3.300 and a minimum grade point average of 3.300 in all courses that count toward the EUS major; identify an adviser for the thesis; submit a detailed description of their proposed program of study for approval of the director of EUS; complete 3 credit hours of independent research (normally EUS 4998); complete 3 credit hours of credit in EUS 4960, Senior Tutorial, that involves researching and writing a senior honors thesis of approximately fifty pages and that reveals an interdisciplinary perspective; successfully defend the honors thesis before a committee normally consisting of the adviser, the director of EUS, and another EUS faculty member.

Information concerning the Honors Program is available from the director of EUS. College regulations governing honors programs may be found in this catalog under Honors Programs, Special Programs for Arts and Science.

The Minor in European Studies
The EUS minor is a logical complement to a major in anthropology, history, economics, literary studies, philosophy, and political science. It involves 18 credit hours of course work with concentration and distribution requirements similar to those for the major, but on a reduced scale. A background in a modern foreign language is highly recommended. Students choose a thematic focus and take approved European content courses distributed as follows:

- **EUS 2201, European Society and Culture**
- **EUS 2203, The Idea of Europe**
- 3 additional credit hours selected from EUS-labeled courses (or approved substitute)
- a minimum of 3 credit hours of modern European history
- a minimum of 3 credit hours of relevant work in social science
- a minimum of 3 credit hours of relevant work in humanities

The minimum number of credit hours required for the minor is 18.

List of Approved Courses with European Content
Because the curricular offerings are constantly changing, prospective majors and minors should consult with the director about appropriate substitutes for courses listed below.

European History
EUROPEAN STUDIES: 2208, Conspiracy Theories and Rumors in European and U.S. History; 2220, Religion and Politics in Modern Europe, 1648–Present; 2240, Topics in European Studies; 2260, European Cities.

HISTORY: 1111-08, European Imperialism: Colonizer and Colonized in the Modern World; 1350, Western Civilization to 1700; 1360, Western Civilization since 1700; 1390, America to 1776: Discovery to Revolution; 1480, The Darwinian Revolution; 1500, History of Modern Sciences and Society; 1510, The Scientific Revolution; 1580, Crime and Punishment in Early Modern Europe 1400–1800 CE; 1600, European Economic History, 1600–1700; 1700, Western Military History to 1815; 1730, The U.S. and the Cold War; 1760, History of Christian Traditions; 2130, Russia: Old Regime to Revolution; 2135, Russia: The U.S.S.R. and Afterward; 2220, Medieval and Renaissance Italy, 1000–1700; 2230, Medieval Europe, 1000–1350; 2250, Reformation Europe; 2260, Revolutionary Europe, 1789–1815; 2270, Nineteenth-Century Europe; 2280, Europe, 1900–1945; 2290, Europe since 1945; 2300, Twentieth-Century Germany; 2310, France: Renaissance to Revolution; 2340, Modern France; 2380, Shakespeare’s Histories and History; 2382, The Rise of the Tudors; 2383, A Monarchy Dissolved? From Good Queen Bess to the English Civil War; 2385, The Real Tudors; 2410, Victorian England; 2450, Reform, Crisis, and Independence in Latin America, 1700–1820; 2595W, The English Atlantic World, 1500–1688; 2720, World War II; 2800, Modern Medicine; 2835, Sexuality and Gender in the Western Tradition to 1700; 2840, Sexuality and Gender in the Western Tradition since 1700; 3010, Pornography and Prostitution in History; 3120, Weimar Germany: Modernism and Modernity, 1918–1933; 3150, Cities of Europe and the Middle East; 3180, Making of Modern Paris; 3230, The Art of Empire; 3260, Revolutionary England, 1603–1710; 3270, Religion and the Occult in Early Modern Europe; 3275, Religion and Popular Culture in Nineteenth-Century Europe.

JEWISH STUDIES: 1002, Introduction to Jewish Studies; 1002W, Introduction to Jewish Studies; 1200, Classical Judaism: Jews in Antiquity; 1220, Jews in the Medieval World; 1240, Perspectives in Modern Jewish History; 3100, The Holocaust.

Social Sciences
ANTHROPOLOGY: 3371, Social and Health Consequences of Pandemics.

ECONOMICS: 2240, Russia in the World Economy; 3160, Economic History of Europe; 3180, History of Economic Thought; 3600, International Trade; 3610, International Finance.

EUROPEAN STUDIES: 2240, Topics in European Studies; 2800, Pursuing Utopia: Social Justice & Romanticism in the Alps.

POLITICAL SCIENCE: 1101, Introduction to Comparative Politics; 1102, Introduction to International Politics; 1103, Justice; 2202, Ancient Political Thought; 2203, History of Modern Political Philosophy; 2210, West European Politics; 2220, Crisis Diplomacy; 2221, Causes of War; 2223, European Political Economy and Economic Institutions; 2225, International Political Economy; 2226, International Law and Organization; 2274, Nature of War; 4238, Comparative Political Parties; 4211, The European Union.

SOCIOLGY: 3851, Independent Research and Writing (with appropriate topic); 4961, Seminars in Selected Topics (with appropriate topic).
**Humanities**

CLASSICS: 3120, Humor, Ancient to Modern.

COMMUNICATION STUDIES: 3600, The Rhetorical Tradition.

ENGLISH: 1111, First-Year Writing Seminar (with appropriate topic); 2310, British Writers to 1660; 2311, British Writers 1660–Present; 3310, Anglo-Saxon Language and Literature; 3314, Chaucer; 3316, Medieval Literature; 3330, Sixteenth Century; 3332, English Renaissance: The Drama; 3336, Shakespeare: Comedy and Histories; 3337, Shakespeare: Tragedy and Romance; 3340, Shakespeare: Representative Selections; 3340W, Shake- speare: Representative Selections; 3346, Seventeenth-Century Literature; 3348, Milton; 3360, Restoration and the Eighteenth Century Early; 3361, Restoration and Eighteenth Century Late; 3364, The Eighteenth-Century English Novel; 3370, The Bible in Literature; 3371, The Romantic Period; 3611, The Romantic Period; 3614, The Victorian Period; 3618, The Nineteenth-Century English Novel; 3630, The Modern British Novel; 3634, Modern Irish Literature; 3640, Modern British and American Poetry: Yeats to Auden; 3681, Twentieth-Century British and World Drama; 3683, Contemporary British Literature; 3740, Critical Theory; 3890, Movements in Literature (with appropriate topic); 3892W, Problems in Literature (with appropriate topic); 3896W, Special Topics in English and American Literature (with appropriate topic); 3898W, Special Topics In English and American Literature (with appropriate topic).

EUROPEAN STUDIES: 2240, Topics in European Studies; 2260, European Cities; 2800, Pursuing Utopias: Social Justice & Romanticism in the Alps.

FRENCH: 2501W, French Composition and Grammar; 2614, Advanced Conversational French; 3101, Texts and Contexts: Middle Ages to the Enlightenment; 3102, Texts and Contexts: Revolution to the Present; 3111, French for Business; 3113, Advanced French Grammar; 3160, La Provence; 3181, Contemporary France; 3188, The Contemporary Press and Media; 3222, The Early Modern Novel; 3223, The Querelles des femmes; 3224, Medieval French Literature; 3230, French and Francophone Cinema; 3281, Provence and the French Novel; 3286, Cultural Study Tour; 3280, Age of Louis XIV; 3621, Enlightenment and Revolution; 3622, From Romanticism to Symbolism; 3623, The Twentieth-Century Novel; 4025, From Carnival to the “Carnivalesque”; 4027, Emile Zola: From Naturalist Novels to Social Activism; 4029, Twentieth-Century French Literature; 4030, French and German Lyric Poetry—Form and Function; 4563, The Age of Goethe-Weimer 1775 to 1805: Five Poets, Pleasures, and Perils in Nineteenth-Century Theatre; 4565, Revolutions in Twentieth-Century Theatre; 4566, Nineteenth-Century Prose; 4567, The German Novel from Kafka to Grass; 4569, Writing under Censorship; 4574, Who Am I? German Autobiographies; 4576, Tales of Travel in Modern German Culture.

GERMAN: 1111, First-Year Writing Seminar; 1482, Borders and Crossings: German Literature and Culture from Romanticism to the Present; 2216, Business German; 2310W, Introduction to German Studies; 2320, Conversation and Composition; Current Events; 2321, Conversation and Composition: Contemporary Culture; 2341, German Culture and Literature; 2342, German Culture and Literature; 2441, Great German Works in English; 2442, War on Screen; 2443, German Cinema: Vampires, Victims, and Vamps; 2444, German Fairy Tales from Brothers Grimm to Walt Disney; 2445, Nazi Cinema: The Manipulation of Mass Culture; 3323, From Language to Literature; 3343, The Aesthetics of Violence: Terror, Crime, and Dread in German Literature; 3344, Women at the Margins: German-Jewish Women Writers; 3345, Love and Friendship; 3375, Art and Rebellion: Literary Experiment in the 1960s and 1970s; 3378, Dreams in Literature; 4535, German Romanticism; 4537, Women and Modernity; 4548, German Lyric Poetry—Form and Function; 4563, The Age of Goethe-Weimer 1775 to 1805: Five Poets, Pleasures, and Perils in Nineteenth-Century Theatre; 4565, Revolutions in Twentieth-Century Theatre; 4566, Nineteenth-Century Prose; 4567, The German Novel from Kafka to Grass; 4569, Writing under Censorship; 4574, Who Am I? German Autobiographies; 4576, Tales of Travel in Modern German Culture.

HISTORY OF ART: 1100, History of Western Art I; 1110, History of Western Art II; 1111, First-Year Writing Seminar (with appropriate topic); 2220, Greek Art and Architecture; 2270, Early Christian and Byzantine Art; 2285, Medieval Art; 2310, Italian Art to 1500; 2390, Italian Renaissance Art after...
THE Department of French and Italian offers a program of 4670, Spanish Realism; 4690, Alterity and Migration in Spain; 4415, Spanish Literature from 1900 to the Present; 4400, The Origins of Spanish Literature; 4405, Literature of the Spanish Golden Age; 4410, Spanish Literature from the Enlightenment to 1900; 4415, Spanish Literature from 1900 to the Present; 4440, Development of Drama; 4465, Theory and Practice of Drama; 4470, Development of Lyric Poetry; 4475, Contemporary Lyric Poetry; 4620, Love and Honor in Medieval and Golden Age Literature; 4640, Don Quixote; 4670, Spanish Realism; 4690, Alterity and Migration in Spain.

WOMEN’S AND GENDER STUDIES: 1272, Feminism and Film.

Course descriptions begin on page 159.

Film Studies

See Cinema and Media Arts

French and Italian

CHAIR Robert Barsky
DIRECTOR OF UNDERGRADUATE STUDIES IN FRENCH Susan Kevra
DIRECTOR OF UNDERGRADUATE STUDIES IN ITALIAN Letizia Modena
DIRECTOR OF GRADUATE STUDIES Nathalie Debrauwere-Miller
PROFESSORS EMERITI Barbara C. Bowen, Dan Church, Patricia A. Ward, Ruth G. Zibart
PROFESSORS Robert Barsky, William Franke, Marc Froment-Meurice, Virginia M. Scott, Tracy Sharpley-Whiting, Holly A. Tucker
ASSOCIATE PROFESSORS Nathalie Debrauwere-Miller, Andrea Mirabile, Letizia Modena, Anthère Nzabatsinda, Lynn Ramey
ASSISTANT PROFESSORS Elsa Filosa, Paul B. Miller, Hanna Roman
SENIOR LECTURERS Nathalie Dieu-Porter, Susan Kevra
LECTURERS Eva Dessein, Jessica Greenfield, Rebecca Peterson, Daniel Ridge

THE Department of French and Italian offers a program of concentration in French. Students may use courses in both French and Italian to satisfy some requirements of AXLE. Most language, literature, and culture courses are taught in French or Italian. Activities organized by the department include films, symposia, and lectures by visiting professors.

Many students participate in the Vanderbilt in France or the Vanderbilt in Italy program. Students are also encouraged to apply to live in McTyeire International House.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in French

Students who choose to major in French are expected to achieve advanced proficiency in oral and written French (Communications), to demonstrate a general understanding of the history of French and Francophone literatures and cultures (Traditions), and to develop an awareness of the ways French and Francophone studies intersect with other disciplines (Intersections). Of the 36 credit hours required for the major, 30 credit hours must be taken in French; 6 credit hours may be taken in a relevant area outside the department with adviser approval and may satisfy the requirement in Intersections. No more than 6 credit hours of AP or IB credit may count toward this total (3 credit hours for 2501W and 3 credit hours of “no equivalent” credit).

All majors are strongly urged to spend a semester or a year studying at Vanderbilt in France.

Course work for the major is distributed as follows:

- Required courses (9 credit hours): 2501W, 3101, 3102
- Two courses from Communications (6 credit hours): 2611, 2614, 3111, 3112, 3113
- Three courses from Traditions (9 credit hours): 3180, 3181, 3222, 3223, 3224, 3281, 3620, 3621, 3622, 3623, 3891, 4023, 4025, 4027, 4029, 4221, 4320, 4322
- Four courses from Intersections (12 credit hours): 3188, 3230, 3232, 3234, 3788, 3789, 3881, 3892, 4030, 4232, 4284, 4285, 4430, 4432 (Two courses in related fields will count in this category.)

All majors are expected to consult their advisers about their choice of major courses each semester.

Honors Program in French

In addition to requirements set by the College of Arts and Science, the following requirements must be met:

1. All the requirements for the 36-credit-hour major in French.
2. One graduate-level French course during the senior year for at least 4 credit hours; this course may substitute for one 3000- or 4000-level course required for the major.
3. A minimum of one semester of study (or the summer session) at Vanderbilt in France or at an approved substitute program in a French-speaking country.
4. 3.5 grade point average in French.
5. Completion of a senior honors thesis, under the direction of a faculty adviser.
6. 6 credit hours of thesis credit under French 4998 and 4999 (Senior Honors Thesis).
7. An oral examination on the thesis and its area in the last semester of the senior year.

A three-member Honors Committee will administer the program. Students must submit the name of the faculty adviser and the proposed thesis topic to this committee for approval during the second semester of the junior year. The committee will set guidelines for the thesis topic proposal, publish deadlines each year, and administer the oral examination.

Program of Concentration in French and European Studies

Students may elect this interdisciplinary major, which requires a minimum of 42 credit hours of course work. A semester of study at Vanderbilt in France or at an affiliated program in Paris...
is required. Course work for the joint major is distributed as follows (all courses for the French side must be in French):

**French (24 credit hours)**

- **French Language, Literature, and Culture (9 credit hours):**
  - 2501W, 3101, 3102
  - **Communications (6 credit hours):** 2611, 2614, 3111, 3112, or 3113
  - **Traditions (6 credit hours):** 3180, 3181, 3222, 3223, 3224, 3281, 3620, 3621, 3622, 3623, 3891, 4023, 4025, 4027, 4029, 4221, 4320, or 4322
- **Intersections (3 credit hours):** 3188, 3230, 3232, 3234, 3730, 3788, 3789, 3881, 3892, 4030, 4232, 4284, 4285, 4430, or 4432

**European Studies (18 credit hours)**

- **European Studies core courses (9 credit hours):** EUS 2201, 2203, 4960 (requires thesis)
- **Social Science (6 credit hours):** PSCI 3897 when offered in Aix, approved alternative course at IEP at Aix as approved by the director of undergraduate studies in French (course must be in French), PSCI 2210, PSCI 3211, or appropriate substitute from any other social studies discipline with approval of the director of European Studies
- **European History (3 credit hours):** HIST 2230, 2250, 2260, 2270, 2280, 2290, 2310, 2340, or approved course in consultation with the director of European Studies

**Minor in French**

The minor in French requires 18 credit hours of 2000- or higher-level course work, including 2501W, 3101, and 3102. All minors are expected to consult their advisers about their choice of courses. No course taught in English may count toward the minor. Students are encouraged to participate in the Vanderbilt in France program.

**Minor in Italian Studies**

Students who minor in Italian studies are expected to achieve intermediate proficiency in oral and written Italian, to demonstrate a general understanding of the history of Italian literatures and cultures, and to develop an awareness of the ways Italian studies intersects with other disciplines. The minor in Italian studies requires 15 credit hours of course work, including:

- **Required courses (6 credit hours):**
  - ITALIAN: 2203, Italian Journeys (prerequisite ITA 1102; ITA 1103, or equivalent); either 2501W, Grammar and Composition (prerequisite ITA 2203 or equivalent), or 2614, Conversation (prerequisite ITA 2203 or equivalent). ITA 1101, 1102, 1103 do not count toward the minor.
- **Elective courses (9 credit hours):** Only 3 of these elective credit hours may be selected from courses in subject areas other than Italian, such as Classical Studies, History, History of Art, Music Literature, and History:
  - ITALIAN: 2501W, Grammar and Composition (if not used as a required course); 2614, Conversation (if not used as a required course); 3000, Introduction to Italian Literature; 3041, Italian Civilization; 3100, Literature from the Middle Ages to the Renaissance; 3240, Dante’s Divine Comedy; 3340, Famous Women by Boccaccio; 3500, Baroque, Illuminato, and Romanticism in Italy; 3600, Twentieth-Century Literature: Beauty and Chaos; 3640, Classic Italian Cinema; 3641, Contemporary Italian Cinema; 3701, City Fictions; 3702, Topics in Contemporary Italian Civilization; 3740, Gangsters, Lovers, Madonnas, and Mistresses; 3802, Contemporary Italian Society and Culture; 3890, Special Topics in Italian Literature; CLASICAL STUDIES: LAT 3100, Roman Comedy; LAT 3110, Catullus; LAT 3120, Lucretius: De Rerum Natura; LAT 3130, Vergil: The Aeneid; LAT 3160, Ovid.
  - HISTORY: 2220, Medieval and Renaissance Italy, 1000-1700.
  - HISTORY OF ART: 2310, Italian Art to 1500; 2330, Italian Renaissance Art after 1500; 3320, 3320W, Early Renaissance Florence; 3332, Raphael and the Renaissance; 3334, 3334W, Michelangelo’s Life and Works.
  - MUSIC LITERATURE: 3220, Opera in the 17th and 18th Centuries; 3221, Opera in the 19th Century.

Other Italy-related courses not listed here—such as those in study abroad programs—may be approved towards the minor upon approval by the director of undergraduate studies in Italian. Students are encouraged to attend Vanderbilt in Italy.

**Program of Concentration in Italian and European Studies**

The joint major in Italian and European Studies acknowledges the cultural, political, and strategic importance of Italy within the community of European nations. It requires 42 credit hours of course work; a semester of study in Italy is recommended. Prospective majors should consult with the director of undergraduate studies in Italian and with the director of the European Studies program. Course work for the joint major is distributed as follows:

**Italian (24 credit hours)**

- **Italian language and literature — 12 credit hours from the following courses:** ITA 2203 (requires ITA 1102 or 1103), 2501W, 3000, 3100, 3240, 3340, or 3500. 2501W is prerequisite for 3000, 3100, and 3500. (Note: 1000-level Italian language courses do not count toward the major.)
- **Modern cultural intersections — 12 credit hours from the following courses, of which at least 6 credit hours must be taken in Italian:** ITA 2614, 3041, 3600, 3640, 3641, 3701, 3702, 3740, or 3802.

**European Studies (18 credit hours)**

- **European Studies core courses — 9 credit hours:** EUS 2201, 2203, and 4960 (requires thesis).
- **Social Science — 3 credit hours from the following courses:** PSCI 2210, 3211, or appropriate substitute with the approval of the director of the European Studies program.
- **History — 3 credit hours from the following courses:** HIST 2260, 2270, 2280, or 2290.
- **Humanities — 3 credit hours from the following courses:** EUS 2240, 2260; HART 2310 or 2330.

**Licensure for Teaching**

Candidates for teacher licensure in French at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

**French**

Students who have not studied French in high school should begin their studies at Vanderbilt in French 1101. Students with high school French on their records must present a College Board achievement test score in French to be placed correctly. Students should consult their advisers or the Department of French and Italian for advice on placement.
Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.

Course descriptions begin on page 160.

Italian
Students who have not studied Italian in high school should begin their studies at Vanderbilt in Italian 1101.

Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.

Course descriptions begin on page 174.

Germanic and Slavic Languages

CHAIR Meike G. Werner
DIRECTOR OF UNDERGRADUATE STUDIES IN GERMAN James McFarland
DIRECTOR OF UNDERGRADUATE STUDIES IN RUSSIAN Tatiana Filimonova
DIRECTOR OF GRADUATE STUDIES Lutz Koepnick
DIRECTOR OF GRADUATE STUDIES IN RUSSIAN Tatiana Filimonova

The Department of Germanic and Slavic Languages offers a broad array of courses taught in German, Russian, or English on a wide variety of topics related to these languages, cultures, histories, and societies. For students who want to engage with German or Russian culture in a more substantive way, the department offers programs of concentration in German and in Russian.

The department sponsors lectures on topics related to German and Russian society and culture, films, symposia, and other German- and Russian-themed activities. Students are encouraged to apply for living space in McTyeire International House in the German and Russian sections, and German majors with sufficient academic qualifications are invited to join Delta Phi Alpha, the National German Honor Society.

Many students majoring in German enroll in study abroad programs in Germany or Austria, and/or the Vanderbilt in Berlin Program in conjunction with the Free University in Berlin. Less formal activities, such as a weekly Kaffeestunde, Mahlzeit (lunchtime conversations) or the Stammtisch at a local pizza parlor, are also open to undergraduates. For further information, please see as.vanderbilt.edu/german/.

The Russian program has a special commitment to undergraduate training in all aspects of Russian culture and language. Thus, students are able to pursue their particular interests within the Russian program while simultaneously being held to a measurable standard. For further information, please see as.vanderbilt.edu/russian/.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in German (Track I)
Students majoring in German demonstrate advanced proficiency in oral and written German, as well as detailed understanding of significant aspects of German-speaking cultures, histories, and societies by the successful completion of at least two courses above GER 2441 taught in German. Students are required to complete a total of 30 credit hours of course work beyond GER 1102, including the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core course: 2441</td>
<td>3</td>
</tr>
<tr>
<td>German language in context: 6 credit hours of 2201, 2202, 2281, 2282, 2320, 2321</td>
<td>6</td>
</tr>
<tr>
<td>German culture and history: 6 credit hours of 2310W, 2341, 2342</td>
<td>6</td>
</tr>
<tr>
<td>Electives: No fewer than 15 additional credit hours of course work in the GER subject area or approved by the DUS in German; no more than 6 credit hours of which may be in courses taught in English; at least 9 credit hours above 2441</td>
<td>15</td>
</tr>
</tbody>
</table>

Total hours: 30

Students are permitted to count a maximum of 6 credit hours of instruction in courses outside the GER subject area toward the major, with the approval of the DUS of German. First-Year Writing Seminars offered in the GER subject area or approved by the DUS count toward electives in the major, and toward the 6 credit hour total of instruction in English. Up to 6 credit hours either earned through AP exams or transferred from other institutions may count toward the major.

German Language Proficiency
In addition, students majoring in German will be tested for language proficiency their junior year and will be required to write a senior paper due the semester prior to graduation. The director of undergraduate studies in German should be consulted for precise details on these special learning outcome assessments.

Honors Program (Track II)
Candidates for honors in German who meet College of Arts and Science and departmental requirements must complete all requirements for the concentration in German. In addition, students...
• must study a minimum of one semester at a German-speaking university (or gain the equivalent experience);
• complete 6 credit hours of 5000-level (graduate) courses beyond the basic course requirement;
• maintain at least a 3.30 cumulative GPA in courses that count toward the German major and a 3.30 cumulative GPA;
• write an honors thesis and pass an oral examination during their final semester.

Vanderbilt in Berlin
The seven-week, 7-credit-hour Vanderbilt in Berlin summer program offers students an opportunity to study German, improve German-language skills, and take courses in English and German. This program is also open to students with no prior knowledge of German. Students participate in a week-long orientation course on the history and culture of Berlin (1 credit hour), then take two six-week courses (6 credit hours) or one intensive language course (6 credit hours). All courses include regular excursions to course-related locations. A limited number of scholarships are available.

Minor in German
A minor in German documents a student’s basic competence in the German language as well as familiarity with German-speaking culture. Students can fulfill the requirements of a minor concentration in German by taking GER 2441, and 15 credit hours in the GER subject area, of which 6 credit hours must be earned in courses taught in the German language, for a total of 18 credit hours.

Goethe-Institut Certificate in Business German
Students completing GER 2216 may take an examination at a Goethe-Institut to obtain the Bulats Deutsch-Test für den Beruf, a certificate in business German recognized by businesses worldwide. Further information is available on the Goethe-Institut website: goethe.de/en/spr/kup/prf/prf/bul.html.

Program of Concentration in German and European Studies
Students pursuing the interdisciplinary major in German and European studies combine their focus on German language and literature with a study of modern Europe in its political, economic, and cultural diversity. The German and European studies joint major consists of a minimum of 42 credit hours of course work. A semester of study abroad in the Vanderbilt in Germany program is recommended. Course work for the major is distributed as follows:

German (24 credit hours)

  Introduction to German Studies (3 credit hours): GER 2301W
  German language and culture (3 credit hours): GER 2320 or 2321
  German civilization (6 credit hours): GER 2341, 2342
  German literature and culture (12 credit hours): GER 3323, 4535, 3343, 4548, 4563, 4564, 4565, 4566, 4569, 4574, 3375, 3378, or appropriate substitute approved by the director of undergraduate studies in German

European Studies (18 credit hours)

  European Studies core courses (9 credit hours): EUS 2201, 2203, and 4960 (requires thesis)
  Social Science (3 credit hours): PSCI 2210, 3211 or appropriate substitute with the approval of the EUS adviser
  History (3 credit hours): HIST 2720, 2260, 2270, 2280, 2290, 2300, or other appropriate course selected in consultation with the EUS adviser
  Humanities (3 credit hours): EUS 3890, 2260 (Berlin or Vienna) or other appropriate course selected in consultation with the EUS adviser

Program of Concentration in Russian
Requirements for a concentration in Russian include a minimum of 30 credit hours of course work. Required courses are RUSS 1101–1102, RUSS 2201–2202 (18 credit hours), and one English-language course with the RUSS subject code (3 credit hours; see the list of qualifying courses below). The remaining 9 credit hours may be earned either from Russian- and English-language courses with the RUSS subject code (see the list of qualifying courses below) or from other relevant courses that will be approved by the director of undergraduate studies on a case-by-case basis. A maximum of 6 credit hours toward the concentration in Russian may be earned from courses taken from other U.S. institutions or through study abroad programs. AP and IB exam credit will not count toward credit hours required for the concentration, but placement exams will be offered for RUSS 1101 and/or 1102. Students concentrating in Russian will be expected to take an “assessment exam” via colloquium prior to graduation.

Minor in Russian
Requirements for a minor in Russian include a minimum of 19 credit hours of course work. Required courses are RUSS 1101–1102 and one English-language course with the RUSS subject code (3 credit hours; see the list of qualifying courses below). The remaining 6 credit hours may be earned either from Russian- and English-language courses with the RUSS subject code (see the list of qualifying courses below) or from other relevant courses that will be approved by the director of undergraduate studies on a case-by-case basis. A maximum of 6 credit hours toward the Russian minor may be earned from courses taken from other U.S. institutions or through study abroad programs. AP and IB exam credit will not count toward credit hours required for the minor, but placement exams will be offered for RUSS 1101 and/or 1102.

  English-language courses with the RUSS subject code that qualify for the 3 credit hour requirement of the concentration and minor in Russian: RUSS 1111, 1874, 2230, 2273, 2310, 2311, 2434, 2435, 2438, 2485, 2537, 2639 and 2745.

  Russian- and English-language courses with the RUSS subject code that qualify for the remaining credit hours required for the concentration and minor in Russian: RUSS 1111, 1874, 2201–2202 [only in the case of the minor], 2210, 2230, 2273, 2310, 2311, 2434, 2435, 2438, 2485, 2537, 2639, 2745, 3303, 3305, 3850–3851, and 3890-3891.
Licensure for Teaching
Candidates for teacher licensure in German at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

German
Students with some experience in German should consult the department for placement.

Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.

Course descriptions begin on page 162.

Russian
Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.

Course descriptions begin on page 197.

Hebrew
DIRECTOR OF UNDERGRADUATE STUDIES Michael Bess
SENIOR LECTURER Orit Yeret

Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.

Course descriptions begin on page 164.

History
CHAIR Joel F. Harrington
VICE CHAIR Celia Applegate
DIRECTOR OF UNDERGRADUATE STUDIES Edward Wright-Rios
DIRECTOR OF GRADUATE STUDIES Catherine Molineux
PROFESSORS EMERITI Paul K. Conkin, Jimmie L. Franklin, Samuel T. McSeveney, Matthew Ramsey, V. Jacques Voegeli, Donald L. Winters
ASSISTANT PROFESSORS Celso Castilho, Lauren Clay, Peter Lorge, Ole Molvig, Claudia Rei, Frank Robinson, Alistair Sponsel
SENIOR LECTURERS Yollette T. Jones, Kevin Y. Kim
LECTURERS Miriam Martin, Angela Sutton

MORE than one hundred courses in the Department of History are available to Vanderbilt undergraduates. Some focus on a particular historical period, others on a particular region of the world, and still others on topics that may cross traditional chronological and geographical boundaries. The department is committed to the principle that in a changing world, the way we learn about the past must also change. It will continue to develop new courses for the twenty-first century, with an emphasis on those that recognize the interconnections among the various civilizations and regions of the globe.

Unless indicated otherwise in the course description, history courses have no prerequisite. Except for History 3980, 4960, 4980–4981, and 4999, courses numbered below 5000 are open to all majors and nonmajors. History 4960 is limited to seniors and juniors who have previously taken History 3000W. History 3980, 4980–4981, and 4999 are limited to students who have been admitted to the History Honors Program.

Students will find that the study of history offers not only a strong foundation for a liberal education but also a means of understanding the contemporary world. The skills developed in gathering, assessing, and synthesizing information have wide application in many careers, including business and the professions.

The Department of History offers a major and minor in history and, in cooperation with the Department of Economics, a joint major in economics and history, which is described in this catalog under Economics and History.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in History
The major program requires a minimum of 30 credit hours in history; no more than 3 credit hours of AP or IB credit may count toward this total. Note: AP and IB credit will not count toward the 15 credit hours for the concentration.

Course work is distributed as follows:

1. 3000W or 3980 (3 credit hours)
Note: 3000W should be taken as soon as possible and must be taken no later than the second semester of the junior year. 3000W is a prerequisite for the 4960 capstone course. 3980 is limited to second-semester juniors who have been admitted to the Honors Program. Students entering the Honors Program who have already taken 3000W will receive elective credit for that course.

2. Five courses in one of the following concentrations (15 credit hours):
   A. Asia
   B. Latin America
   C. Europe
   D. Early America and the United States
   E. Middle East and Africa
   F. Global and Transnational
   G. Science, Medicine, and Technology
   H. Comparative History/Special Topics

   See below for a list of courses that count for Concentrations A, B, C, D, E, F, and G. Students choosing concentration H must have the approval of their adviser and the director of undergraduate studies for a specific program of study. First-Year Writing Seminars (1111) in history may be used to satisfy the relevant program concentration with approval of the director of undergraduate studies.

   **Program A. Asia**
   1050, 1060, 1070, 1080, 1090, 1160, 1200, 1881, 2100, 2105, 2110, 2111, 2115, 2119, 2120, 2140, 2145, 2150, 2160, 2180, 3090, 3110, 3190, 3220, 3230, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, 4999; ASIA 2630; MHS 2310.

   **Program B. Latin America**
   1370, 1380, 1650, 2450, 2457, 2460, 2470, 2480, 2490, 2510, 2530, 2535, 2540, 2570, 2680, 3080, 3100, 3230, 3280, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, and 4999; AADS 4256.

   **Program C. Europe**
   1200, 1350, 1360, 1470, 1480, 1500, 1510, 1520, 1580, 1600, 1700, 1760, 2130, 2135, 2140, 2160, 2170, 2190, 2220, 2230, 2250, 2260, 2270, 2280, 2290, 2300, 2310, 2340, 2380, 2382, 2383, 2385, 2410, 2450, 2595W, 2660, 2800, 2830, 2835, 2840, 3010, 3030, 3050, 3070W, 3100, 3110, 3150, 3180, 3190, 3210, 3230, 3240, 3260, 3270, 3275, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, and 4999; Classics 2180, 3010; Jewish Studies 1111.09, 1220, 1240, 2450, 2540, 2660, 2680, 2800, 2830, 3030, 3040, 3045W, 3050, 3070W, 3110, 3230, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 4960, 4980–4981, and 4999; Anthropology 4373; Asian Studies 2630; Astronomy 2130; English 3720 or 3720W; Mathematics 3000; Medicine, Health, and Society 2110, 2310, 2320, 2430; and other courses, as appropriate, with approval of the director of undergraduate studies.

3. Capstone course (3–6 credit hours)

   One of the following, to be taken in the junior or senior year; all of the options will require the student to write a major paper. Any capstone course within the student’s area of concentration will count toward the five-course requirement for that concentration.

   **Option 1**: 3883, Internship Research (3 credit hours). Must be taken in conjunction with 3880 (internship training). Prerequisite: 3000W. Note: a student may take 3883 as an elective before completing 3000W but in this case 3883 will not count as a capstone course.

   **Option 2**: 4960, Majors Seminar (3 credit hours). Prerequisite: 3000W.

   **Option 3**: 4980–4981, Senior Honors Seminar (6 credit hours). Limited to seniors in the History Honors Program. Note: At the discretion of the director of honors and the director of undergraduate studies, a student who has taken 4980 but does not take 4981 may be considered to have fulfilled the capstone requirement for the major.

4. Electives (6–12 credit hours, depending on the nature of the capstone course)

**Honors Program**

The Honors Program in History is a three-semester program of study. It offers superior undergraduate history majors a program of advanced reading, research, and writing. The Honors Program combines seminar work and independent study under the supervision of a thesis adviser. This structure provides participants an introduction to historical research and writing, as well as the opportunity to study defined areas of history and significant historical problems that accord with their own interests. The final objectives of the Honors Program are successful authorship of the honors thesis and graduation with honors or highest honors in the major.

Students apply to the Honors Program in the first semester of the junior year. Students meeting college and departmental
requirements will enroll for a total of 12 credit hours: History 3980, Junior Honors Seminar in History (3 credit hours); History 4980–4981 Senior Honors Research Seminar (6 credit hours); and 4999, Senior Honors Thesis (3 credit hours). In addition, the Honors Program requires an oral defense of the honors thesis before a faculty committee at the end of the third semester.

Program of Concentration in Economics and History
This is an interdisciplinary program split between Economics and History that provides a more focused program of study while requiring fewer credit hours than a double major in the two fields. See the Economics and History section of this catalog for details.

Minor in History
The minor in history requires a minimum of 18 credit hours of course work in one area of concentration. No more than 3 credit hours of AP or IB credit may count toward this total. The following options are offered:

I. Asian History
   Six of the courses listed under “Program A. Asia”

II. Latin American History
   1. 1370 or 1380 and
   2. Any five of the courses listed under “Program B. Latin America”

III. European History
   1. 1350 or 1360 and
   2. Five of the courses listed under “Program C. Europe”

IV. Early America and United States History
   1. 1390, 1400, 1410, or 1420 and
   2. Five of the courses listed under “Program D. Early America and the United States”

V. Middle East and Africa
   1. Six of the courses listed under “Program E. Middle East and Africa”

VI. Global and Transnational
   1. Six of the courses listed under “Program F. Global and Transnational”

VII. Science, Medicine, and Technology
   1. Six of the courses listed under “Program G. Science, Medicine, and Technology,” among which no more than two may be courses outside the Department of History.

Course descriptions begin on page 164.

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### History of Art

CHAIR Kevin D. Murphy
DIRECTOR OF UNDERGRADUATE STUDIES Sheri Shaneyfelt
PROFESSORS EMERITI Robert A. Baldwin, F. Hamilton Hazlehurst, Milan Mihal, Robert L. Mode, Ljubica D. Popovich
PROFESSORS Leonard Folgarait, Vivien Green Fryd, Christopher M. S. Johns, Kevin D. Murphy
ASSOCIATE PROFESSORS Tracy Miller, Betsey A. Robinson, Barbara Tsakirgis
ASSISTANT PROFESSORS Mireille M. Lee, Elizabeth J. Moodey, Rebecca K. VanDiver
MELLON ASSISTANT PROFESSOR Riyaz Latif
SENIOR LECTURER Sheri Shaneyfelt

THE Department of History of Art treats critically the major fields in world art, from ancient through modern, and serves to connect the arts to the other humanities. Many students will use the program in history of art as a foundation for careers in which analytical reading and writing skills gained in the major are especially valued: as the basis for advanced training in professional schools (such as architecture, law, medicine, journalism, and business), for postgraduate work in history of art, and for employment in galleries, museums, or design-related fields. A major goal of the department is to help students become readers of visual images and material culture throughout their lives, as well as to encourage visual approaches to learning.

Majors in history of art participate in the activities of the Vanderbilt History of Art Society and work closely with departmental advisers. The society sponsors events such as panels, lectures, debates, and other programs where majors meet and engage in discussions with historians of art and museum curators.

The department curriculum complements those of related departments and programs, including African American and Diaspora Studies, American Studies, Asian Studies, Cinema and Media Arts, Classical Studies, European Studies, Latin American Studies, Religious Studies, and Women's and Gender Studies.

**NOTE:** New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration
The history of art major requires 30 credit hours and gives students the opportunity to study art and visual culture across a wide range of historical periods, from ancient to contemporary. The program is designed to allow for concentration in particular periods and areas of interest. By requiring courses in both the lecture and seminar format, the program aims to provide a basis of comprehensive knowledge and challenging opportunities for more specialized instruction.

Students should consider related offerings in cognate disciplines in the humanities and social sciences. Those planning graduate work in history of art should pursue advanced studies—which may include honors—and take advanced courses in other departments offering complementary course work. Advanced language studies are strongly recommended, as graduate programs expect reading facility in one language for the M.A. and two for the Ph.D., with French and German the most commonly required. Non-European languages should be considered for those primarily interested in non-Western traditions.
Requirements for the Program of Concentration

A 1000-level course (3 credit hours): Students must complete one 1000-level survey course in history of art or architecture selected from HART 1100, 1105, 1120 or 1121, 1200, 1205, 1220, 1300, or 1400. This course is not a prerequisite for further history of art course work but must be taken at Vanderbilt; AP and transfer credit will not be accepted.

Area requirements (15 credit hours)—five history of art courses at the 2000 level or above, one each from the following areas:

- **a. Ancient:** HART 2210, 2220, 2260, 3224, 3226, 3228W, 3240W, 3252, 3272; CLAS 2200, 2210, 2250, 3200, 3210
- **b. Medieval:** HART 2270, 2275, 2285, 2288, 3274
- **c. Renaissance/Baroque:** HART 2310, 2320W, 2325, 2330, 2362, 2390, 3320, 3320W, 3332, 3334, 3334W, 3364W
- **d. Modern:** HART 2600, 2620, 2622, 2650, 2660, 2710, 2720, 2722, 2750, 2760, 2765, 3718W, 3740
- **e. Non-Western:** HART 2110, 2130, 2150, 2180, 3112, 3164W

Electives (6 credit hours)—two upper-level courses in history of art (HART 2110 to 3850 and 3890) in addition to the area requirements.

Advanced Seminars (6 credit hours)—HART 4960

Honors Program

The Honors Program in History of Art allows exceptional undergraduate students to undertake independent research on a topic in art history in consultation with faculty members. The program is open to all history of art majors with junior standing who meet a 3.30 grade point average in all university courses and a 3.30 grade point average in history of art courses. They must also be approved for acceptance into the honors program by the department faculty. Completion of the program requires 9 credit hours of study: HART 3850, Independent Research (the second semester of the junior year, unless studying abroad, in which case one is expected to enroll in this class the first semester of the junior year); HART 4998, Honors Research (first semester of the senior year); and HART 4999, Honors Thesis (second semester of the senior year); submission of an honors thesis; and successful completion of an oral honors examination. These independent research-credit hours are expected to be in addition to the 30 credit hours required for the major in history of art. Students meeting these requirements receive honors or highest honors in history of art, depending on the quality of the thesis, grades in history of art courses, and examination results. Successful departmental honors students will receive a Vanderbilt diploma that records honors or highest honors in history of art.

Minor in History of Art

The minor in history of art requires 18 credit hours of course work, including the following:

Two 1000-level courses from 1100, 1105, 1120 or 1121, 1200, 1205, 1220, 1300, or 1400, plus any four upper-level history of art courses (HART 2110 to 3850 and 3890, 4960), and classes designated CLAS 2200, 2210, 2250, 3200, 3210, 3720.

Minor in History of Architecture

The minor in history of architecture requires 18 credit hours of course work, including the following:

Two 1000-level courses from 1100, 1105, 1120 or 1121, 1200, 1205, 1220, 1300, or 1400, plus four upper-level history of art courses selected from HART 2110, 2130, 2150, 2180, 2210, 2220, 2270, 2275, 2285, 2650, 2720, 2722, 2780, 2782, 3112, 3240W, 3252, and CLAS 2200, 2210, 2250, 3200, 3210, 3720.

Course descriptions begin on page 170.

Honors

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

COURSES designated “Honors” are parts of a special honors program in liberal education. They may be taken only by students who have been appointed College Scholars by the dean of the College of Arts and Science. Some College Scholars are appointed before they arrive for their first semester in residence; others may be appointed on the basis of their records in that first semester. Students may apply to the associate dean for honors programs for admission to the College Scholars program; only freshmen are considered for admission. An honors seminar will satisfy the requirement for a first-year seminar.

Honors seminars offered in the College Scholars program provide an especially interesting and challenging way for College Scholars to complete certain parts of the program for Achieving Excellence in Liberal Education (AXLE). In addition to regular credit hours and grade points, they carry honors points toward graduation with the designation “Honors in the College of Arts and Science.” College Scholars must earn fifteen honors points to receive that designation (they are not required to earn this designation but may take as many honors seminars as they wish). They may earn up to thirteen of the required fifteen points in honors seminars: three points each for the first time they take Honors 1810W, 1820W, 1830W, 1840W, 1850W, or 1860W; one point if they take a second seminar in the same area. Single honors points may be earned (a) in departmental honors sections of regular courses, (b) in independent study approved by the associate dean for honors programs, and (c) in a regular course in which an enriched curriculum approved by the Committee on the Honors Program is pursued. Honors points are only earned for courses in which the student earns the grade B or better.

Honors seminars are designed to cover topics through the intensive analysis afforded by the seminar setting and format. Honors 1810W, 1820W, 1830W, 1840W, 1850W, and 1860W count toward the AXLE requirements identified by the seminars’ titles. Honors 1810W challenges students to examine their personal understanding of life and how their individual experiences overlap with those of the rest of human kind. Honors 1820W gives significant attention to individual and cultural diversity, multicultural interactions, sexual orientation, gender, racial, ethical, religious, and “Science and Society” issues. Honors 1830W studies human behavior at the levels of individuals, their
Any student who is at least a sophomore and in good academic standing may earn one credit hour per semester or summer for an internship completed under the designation INDS 280 exclusively on a Pass/Fail basis. This course may be repeated twice for a maximum of three credit hours. Students are responsible for obtaining their own internship and faculty adviser. The student and faculty adviser work together to plan the academic project associated with the internship. Their agreement must be approved by Associate Dean Yollette Jones.

Course descriptions begin on page 173.

Interdisciplinary Studies

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Jewish Studies

INTERIM DIRECTOR Michael Bess
ASSOCIATE DIRECTOR Adam S. Meyer
PROFESSORS Robert F. Barsky, Lenn Goodman, Amy-Jill Levine, David J. Wasserstein
ASSISTANT PROFESSORS Phillip Ackerman-Lieberman, Ari Joskowicz, Nina Warnke
LECTURERS Judith Klass, Caryl Tamber-Rosenau

JEWISH Studies at Vanderbilt offers an interdisciplinary academic program that facilitates the critical study of Jewish history, religion, language, philosophy, politics, culture, society, music, art, and literature across continents and over three millennia. Integral to understanding crucial moments in the formation of Christianity and Islam as well as distinct episodes in the cultures of the modern Middle East, Europe, and America, the program accesses the resources of the entire university to explore Judaism, its evolution and expression from biblical times to the present. This interdisciplinary program reflects Vanderbilt’s commitment to advancing the understanding of diverse cultures and traditions. Students of all backgrounds will find in Jewish Studies at Vanderbilt a wide array of material and methodologies, presented by scholars from history, anthropology, sociology, religious studies, philosophy, literature, and history of art. Students may focus on several areas of concentration and tailor the major to their academic and career interests. They also have access to courses offered by the schools of divinity, education, and music; they have access to the Zimmerman Judaica collection as well as the opportunity to study abroad, pursue internships locally or nationally, and do research in archives overseas. The interdisciplinary nature of Jewish Studies offers excellent preparation for graduate studies and provides an outstanding academic foundation for a variety of rewarding career paths. Visit as.vanderbilt.edu/jewishstudies for more details.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Jewish Studies

The major in Jewish studies requires a minimum of 30 credit hours.

1. Foundational course, 3 credit hours. JS 1002 or 1002W, Introduction to Jewish Studies.

2. Language, 6 credit hours. A year of modern Hebrew (Hebrew 2201–2202, Intermediate Hebrew) or biblical Hebrew (REL 5120, Intermediate Hebrew).* Proficiency at the level of intermediate Hebrew can be demonstrated through testing. If this option is exercised, students will take an additional 6 credit hours of electives toward the major.

*In place of biblical or modern Hebrew, interested students may substitute one of the following languages of the Jewish people: Rabbinic Hebrew, Aramaic, Yiddish, Ladino, or Judaic-Arabic. For languages not presently taught at Vanderbilt, proficiency at the intermediate level may be demonstrated through an exam administered by a designated member of the Jewish Studies faculty. If this option is exercised, students will take an additional 6 credit hours of electives toward the major.

3. Focus courses, 12 credit hours selected from three of four subfields of study:
   - Area 1: Biblical Studies
   - Area 2: Antiquity and the Medieval World
   - Area 3: Modern and Contemporary Experience
   - Area 4: Culture, Philosophy, and Literature

4. Senior capstone course, 3 credit hours. JS 4970, Senior Project in Jewish Studies. Senior Project proposal must be approved by the director of undergraduate studies.

5. Electives (minimum of 6 credit hours)—Any of the courses listed below that are not used to fulfill a requirement towards the major may be counted as an elective with the exception of JS 3880, which cannot count toward the major because it must be taken Pass/Fail. In addition to courses drawn from Arts and Science departments and the professional schools, nontraditional course work may also be selected, including archaeology at Tel Megiddo (Israel), service learning, and internships. Study abroad is encouraged and can be fulfilled with CET Jewish Studies in Prague and at the Hebrew University of Jerusalem.
Honors Program

The Honors Program in Jewish Studies offers superior students a more intensive concentration within their major field. Admission to the program requires:

1. A 3.3 cumulative grade point average.
2. A 3.3 cumulative grade point average in Jewish Studies.
3. Completion of the junior year.

Requirements for graduation with Honors in Jewish Studies are:

1. 6 credit hours in Honors sections (JS 4980–4981), including completion of thesis—these credit hours may count as elective credit toward the major. Honors thesis is to be completed by mid-spring of the senior year.
2. Successful completion of an honors oral examination on the topic of the thesis.

Minor in Jewish Studies

The minor in Jewish studies provides a basic understanding of Jewish history and culture across continents and the past three millennia. The minor requires a minimum of 18 credit hours.

1. Foundational course, 3 credit hours. JS 1002 or 1002W, Introduction to Jewish Studies.
2. Focus courses, 6 credit hours. (See major for categories.)
3. Electives (minimum of 9 credit hours)

Any of the courses listed below that are not used to fulfill a requirement toward the minor may be counted as an elective. Special Topics courses or First-Year Writing Seminar courses dealing with topics related to Jewish studies may be counted with the approval of the program director.


AREA 3. MODERN AND CONTEMPORARY EXPERIENCE: Jewish Studies: 1111.03, Radical Jews from Karl Marx to Noam Chomsky; 1111.07, From Einstein to Chomsky: Revolutionary Sciences in Jewish America; 1111.09, Jews and Muslims: A Modern History; 1240, Perspectives in Modern Jewish History; 2300, Modern Jewish Thought; 2400, American Jewish Life; 2450, The Jewish Diaspora; 2500, Modern Israel; 2540, Power and Diplomacy in the Modern Middle East; 2560, Social Movements in Modern Jewish Life; 3100, The Holocaust; 3830, Contemporary Jewish Issues; 3883, Internship Research; 3894, Topics in Modern Jewish History.


Course descriptions begin on page 175.

Latin American Studies

DIRECTOR Edward F. Fischer
EXECUTIVE DIRECTOR Avery Dickins de Girón
ASSOCIATE DIRECTORS W. Frank Robinson, Helena Simonett
DIRECTOR OF UNDERGRADUATE STUDIES W. Frank Robinson
DIRECTOR OF GRADUATE STUDIES W. Frank Robinson
ASSISTANT PROFESSOR Helena Simonett
LATIN AMERICAN BIBLIOGRAPHER Paula Covington

Affiliated Faculty
PROFESSORS Robert Barsky (French and Italian), Richard Blackett (History), John Brock (Medicine), Ellen Clayton (Medicine), Daniel Cornfield (Sociology), Pelayo Correa (Medicine), Arthur A. Demarest (Anthropology), Tom D. Dillehay (Anthropology), Katharine Donato (Sociology), Marshall Eakin (History), David J. Ernst (Physics), Edward F. Fischer (Anthropology), Earl E. Fitz (Portuguese), Leonard Folgarait (History of Art), Edward H. Friedman (Spanish), Lesley Gill (Anthropology), Ruth Hill (Spanish), Doug Hemburgh (Medicine),
Vanderbilt’s education, engineering, law, management, medical, music, and nursing schools. The center fosters a lively research community on campus by sponsoring colloquia, conferences, films, and a speaker series that brings distinguished scholars, government and business leaders, and social activists to campus.

For undergraduates, the Program in Latin American Studies offers an interdisciplinary undergraduate major and a minor in Latin American studies, as well as a minor in Brazilian studies. The program also offers summer opportunities in Brazil and Guatemala, and facilitates study abroad and service learning opportunities in Latin American countries. An honors program is available.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Latin American Studies

The major in Latin American studies consists of 36 credit hours plus a language requirement.

I. Language requirement demonstrated proficiency

II. Core courses 6 credit hours

III. Distribution requirements 12 credit hours

IV. Area of concentration 12 credit hours

V. Electives 6 credit hours

Note: No course may be counted twice in calculating the 36 credit hours. Upon approval of the Committee on Individual Programs and the student’s adviser, (a) as many as 6 credit hours may be counted as part of both the interdisciplinary major and a second major, or (b) normally, no more than three introductory-level courses will be counted toward the interdisciplinary major.

I. Language Requirement. A student must acquire advanced knowledge of one Latin American language (Spanish, Portuguese, or an indigenous language) and an intermediate knowledge in another Latin American language. The requirement to acquire advanced knowledge of a Latin American language may be satisfied by completing Spanish 3303, or any course with a higher number taught in Spanish, or any course with a higher number taught in Portuguese. The requirement to acquire intermediate knowledge of another Latin American language may be satisfied by successfully completing Spanish 2203, Portuguese 2203, or K’iche’ 101 (formerly Anthropology 2612 indigenous language) Intro to a Maya Language. Individual standardized testing may also be used to demonstrate knowledge.

II. Core Courses (6 credit hours)

LAS 2101, Introduction to Latin America

LAS 4901, Interdisciplinary Research Methods

III. Distribution Requirements (12 credit hours). Two relevant classes in two of the following three areas not chosen as the major area of concentration.

A) History

B) Language, Literature, and Art History (Departments of Spanish & Portuguese and History of Art)

C) Social Sciences (Departments of Anthropology, Economics, Political Science, Sociology).

DESIGNATED by the U.S. Department of Education as a National Resource Center for Latin America, Vanderbilt’s Center for Latin American Studies draws on departmental strengths and faculty expertise from across campus. Integrating teaching, research, and service, the center maintains substantive collaborations with all of Vanderbilt’s colleges and schools. The center has special strengths in Maya studies, Brazilian studies, Andean studies, and the Black Atlantic, as well as unique library collections of Colombiana. Programs of instruction provided by the center promote greater understanding of the region’s history, culture, political economy, and social organization and cultivate the ability to think strategically about global issues.

Faculty and courses come from the Departments of Anthropology, Economics, History, History of Art, Political Science, Sociology, and Spanish and Portuguese as well as from foreign language departments.

David Hess (Sociology), Cathy L. Jrade (Spanish), Vera Kutzinski (English), Jane G. Landers (History), William Luis (Spanish), Terry Maroney (Law), Peter Martin (Medicine), José Medina (Philosophy), Beverly Moran (Law), Fernando Polack (Medicine), Philip D. Rasio (Spanish), Fernando Segovia (Divinity), Mitchell A. Seligson (Political Science), Randall Thomas (Law), Benigno Trigo (Spanish), Stan Vermund (Medicine), Bart Victor (Management), Elizabeth Zechmeister (Political Science), Mel Ziegler (Art)

ASSOCIATE PROFESSORS Candice Amich (English), Marcio Bahia (Anthropology), Markus Eberl (Anthropology), Quentin Eibach (Medicine), Carol Etherington (Nursing), William R. Fowler Jr. (Anthropology), Guillerme Gualda (Earth and Environmental Sciences), Elizabeth Heitman (Medicine), Jonathan Hiskel (Political Science), John Janusek (Anthropology), John Johns (Music), Christina Karageorgou (Spanish), Lorraine Lopez (English), Douglas Morgan (Medicine), Iteoma Nwanwko (English), Emanuelle Oliveira-Monte (Portuguese), Cynthia Paschel (Engineering), Tiffany Patterson (African American and Diaspora Studies), Norbert O. Ross (Anthropology), Mariano Sana (Sociology), Mavis Schorn (Nursing), Tiffany A. Tung (Anthropology), Steven A. Wernke (Anthropology), Gilman Whiting (African American and Diaspora Studies), Edward Wright-Rios (History), Andrés Zamora (Spanish)

ASSISTANT PROFESSORS Candice Amich (English), Marcio Bahia (Portuguese), Adriana Blastoskozy (Music), Carvil Bjork-James (Anthropology), José Cárdenas Bunsen (Spanish), Kathryn Carlson (Medicine), Celso Castillo (History), Neerav Desai (Medicine), Andrew Dustain (Economics), Markus Eberl (Anthropology), Lindy Fenlason (Medicine), Stella Flores (Education), Oscar Gomez (Medicine), Federico Gutierrez (Economics), Brian Heuser (Education), Maria Luisa Jorge (Earth and Environmental Sciences), Thomas Morgan (Medicine), Marzia Milazzo (English), Paul B. Miller (French and Latin American Studies), Cecilia Hyunjung Mo (Political Science), Alicia Monroe (African American and Diaspora Studies), Alistair Newcomb (Law), Vesna Pavlovic (Art), Efrén O. Pérez (Political Science), Yolanda Redero (Law), W. Frank Robinson (History), HelenaSimonett (Blair Latin American Studies), Susan G. Stewart (Astronomy), Sarah Vancoozer Suiter (Education), Thomas Verrier (Music), Zina Yzquierdo (Education), Carol Ziegler (Nursing)

SENIOR LECTURERS Frances Alpen (Spanish), Ana Regina Andrade (Economics), Jose Aznar (Spanish), Joe Bandi (Sociology), Lorraine Catanzaro (Spanish), Rachel Chigukuri (Spanish), Paula Covington (Latin American Studies), Sarah Delassus (Spanish), Heraldo Falconi (Spanish), Victoria Gardner (Spanish), Chalene Helmuth (Spanish), Clint Hendrix (Spanish), Alicia Lorenzo (Spanish), Patrick Murphy (Spanish), Michael Newton (Law), Elena Olazagasti-Segovia (Spanish), Amarilis Ortiz (Spanish), David Owens (Management), Carolina Palacios (Spanish), Gina M. Perez (Medicine), Maria Paz Pintante (Spanish), Raquel Rincon (Spanish), Mareike Sattler (Anthropology), James Schorr (Management), Waldir Sepulveda (Spanish), Cynthia Wasick (Spanish), Catesby Yant (Anthropology), Isleide Zissimos (Economics)

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.
IV. Area of Concentration (12 credit hours from one of the following areas; special topics and independent study courses must be approved for sufficient LAS content by major adviser):

A. History.

HISTORY: 1370, Colonial Latin America; 1380, Modern Latin America; 2450, Reform, Crisis, and Independence in Latin America, 1700–1820; 2460, Colonial Mexico; 2470, Modern Mexico; 2480, Central America; 2490, Brazilian Civilization; 2510, Reform and Revolution in Latin America; 2530, African Religions in the Americas; 2535, Latin America and the United States; 2540, Race and Nation in Latin America; 2570, Caribbean History, 1492–1983; 3280, Popular Cultures in Modern Latin America; 3890, Selected Topics in History; 3850, Independent Study.

LATIN AMERICAN STUDIES: 2102, Introduction to Brazil.

B. Language, Literature, History of Art.

AFRICAN AMERICAN AND DIASPORA STUDIES: 2148, Blacks in Latin America and the Caribbean; 3248, Atlantic African Slave Trade; 1706, Cape Verde: Afro-Brazilian Race, Culture, and Expression.


INDIGENOUS LANGUAGES: K’ICHE’: 1101, Introduction to a Maya Language; 1102, Conversational K’iche’ Mayan; 2201, Advanced K’iche’ Mayan; 2202, Readings in K’iche’ Mayan.

LATIN AMERICAN STUDIES: 2102, Introduction to Brazil; 2301, Music of Protest and Social Change in Latin America.

PORTUGUESE: 1103, Intensive Elementary Portuguese; 2203, Intermediate Portuguese; 3301, Portuguese Composition and Conversation; 3302, Brazilian Pop Culture; 3303, Introduction to Luso-Brazilian Literature; 4350, Brazilian Culture through Native Material; 4420, Brazilian Literature through the Nineteenth Century; 4425, Modern Brazilian Literature; 3850, Independent Study; 3892, Special Topics in Portuguese Language, Literature, or Civilization.

SPANISH: 2203, Intermediate Spanish; 3303, Introduction to Spanish and Spanish American Literature; 3320, Introduction to Hispanic Cultural Studies; 3345, Spanish for Business and Economics; 3340, Advanced Conversation; 3355, Advanced Conversation through Cultural Issues in Film; 3350, Spanish for the Legal Profession; 3830, Spanish for the Medical Profession; 4310, Translation and Interpretation; 4325, Dialectology; 4340, History of the Spanish Language; 3360, Spanish Civilization; 3330, Cultural Studies in the Andes; 3375, Film and Culture in Latin America; 4470, Development of Lyric Poetry; 4400, The Origins of Spanish Literature; 4405, Literature of the Spanish Golden Age; 4415, Spanish Literature from 1900 to the Present; 4420, Spanish American Literature from the Conquest to 1900; 4425, Spanish American Literature from 1900 to the Present; 4445, Development of the Novel; 4450, The Contemporary Novel; 3835, Latino Immigration Experience; 4750, Afro-Hispanic Literature; 4640, Don Quixote; 4455, Development of Drama; 4620, Love and Honor in Medieval and Golden Age Literature; 4440, Development of the Short Story; 4810, Images of the City; 4730, Modern Latin American Poetry; 4760, Literature and Medicine; 4755, Latina and Latin American Women Writers; 4720, Literary Genres and National Identities in Latin America; 4465, The Theory and Practice of Drama; 3850, Independent Study; 2995, Contemporary Latin American Prose Fiction in English Translation; 3893, Special Topics in Hispanic Literature; 3892, Special Topics in Spanish Language and Linguistics; 3891, Special Topics in Hispanic Culture.

C. Social Sciences.


ECONOMICS: 2220, Latin American Development; 3650, Development Economics; 3851–3852, Independent Study in Economics.

MEDICINE, HEALTH, AND SOCIETY: 3210, Health, Development, and Culture in Guatemala; 3212, Health, Development, and Culture in Guatemala.

POLITICAL SCIENCE: 2213, Democratization and Political Development; 3217, Latin American Politics; 2219, Politics of Mexico; 2225, International Political Economy; 3228, International Politics of Latin America; 3897, Selected Topics; 3851–3852, Independent Research.

SOCIOLGY: 3322, Immigration in America; 3322, Contemporary Mexican Society; 3851, Independent Research and Writing.

V. Electives (6 credit hours). Any two classes listed above (or others approved by the major adviser).

Honors Program

An honors program is available, acceptance into which must be approved by the director of undergraduate studies. Students must have a minimum 3.3 cumulative GPA and a 3.3 GPA in courses that count toward the Latin American studies major to be accepted into the program. The Honors Program requires: completion of 6 credit hours in LAS 3851 and 3852; the writing of an honors thesis; and passing an oral honors examination. Interested students should consult their academic adviser during their junior year.

Minor in Latin American Studies

Students must complete 15 credit hours of approved courses with Latin American content including Latin American Studies 2101. In addition, students must demonstrate intermediate knowledge of one Latin American language by successfully completing Spanish 2203, Portuguese 2203, or Anthropology 2612 (indigenous language). Courses taken to satisfy the language requirement may not be counted toward the 15 credit hours of core courses. Individual standardized knowledge may also be used to demonstrate knowledge.

Course selection must be approved by the undergraduate adviser of the Program in Latin American Studies.

Minor in Brazilian Studies

The Program in Latin American Studies also offers a minor in Brazilian studies. Students must complete 15 credit hours of approved courses with Brazilian content including LAS 2102 and Portuguese 2203. In addition, students must complete three additional courses from the Areas of Study listed below: one course in Area I, one course in Area II, and one course in Area III. Proficiency at the level of intermediate Portuguese can be demonstrated through testing. If this option is exercised, students must take 3 credit hours of course work approved
by the director of undergraduate studies in lieu of the 3 credit hours of PORT 2203.

Course selection must be approved by the director of undergraduate studies for Latin American Studies. Other elective courses, including special topics courses, may be counted toward the minor with the approval of the director of undergraduate studies.

Requirements for completion of the minor include at least 15 credit hours as follows:

1. 3 credit hours of LAS 2102: Introduction to Brazil
2. 3 credit hours of PORT 2203: Intermediate Portuguese (PORT 1103 is a prerequisite)
3. 3 credit hours from Area I: Portuguese Language and Literature
4. 3 credit hours from Area II: Brazilian Society, History, and Cultures
5. 3 credit hours from Area III: Brazil in Regional and Global Context

Areas of Study

Area of Study I: Portuguese Language and Literature
PORTUGUESE: 3301, Portuguese Composition and Conversation; 3303, Introduction to Luso-Brazilian Literature; 4420, Brazilian Literature through the Nineteenth Century; 4425, Modern Brazilian Literature.

Area of Study II: Brazilian Society, History, and Cultures
ANTHROPOLOGY: 2108, Indigenous Peoples of Lowland South America.
HISTORY: 2490, Brazilian Civilization.
PORTUGUESE: 3302, Brazilian Pop Culture; 4350, Brazilian Culture through Native Material; 3891, Special Topics in Portuguese and Brazilian Literature or Civilization in English Translation.

Area of Study III: Brazil in Regional and Global Context
AFRICAN AMERICAN AND DIASPORA STUDIES: 2148, Blacks in Latin America and the Caribbean; 3248, Atlantic African Slave Trade; 1706, Capoeira: Afro-Brazilian Race, Culture, and Expression.
ANTHROPOLOGY: 2106, Culture and Power in Latin America.
ECONOMICS: 2220, Latin American Development.
HISTORY: 1370, Colonial Latin America; 1380, Modern Latin America; 2450, Reform, Crisis, and Independence in Latin America, 1700–1820; 2510, Reform and Revolution in Latin America; 2540, Race and Nation in Latin America.
POLITICAL SCIENCE: 3217, Latin American Politics; 3228, International Politics of Latin America.
SOCIOLOGY: 3231, Contemporary Latin America.

Course descriptions begin on page 177.

Latino and Latina Studies

DIRECTOR William Luis

LATINO and Latina Studies focuses on cultural production and political and socioeconomic experiences of people inculcated with the U.S. experience, self-identifying as Latinos and Latinas and communicating primarily in English and sometimes in Spanish. The LATS major and minor will examine this enduring and dynamic population that crosses and re-crosses borders constructed by geography, linguistics, class, race, and gender. This program of study is designed to accommodate a range of voices and multiple manifestations of Latino and Latina identity and cultural expression in historical and contemporary contexts to fill in this vital but often overlooked component of our national identity and discourse.

Students pursuing a LATS major or minor are expected to obtain language competence in Spanish before completing the program, though they do not need to meet this requirement when declaring the major or minor. Students may satisfy this requirement by completing SPAN 3303, or any other course with a higher number taught in Spanish.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Latino and Latina Studies

The interdisciplinary major in Latino and Latina studies consists of thirty-six (36) credit hours. The specific requirements are as follows:

1. LATS 2201, Introduction to Latino and Latina Studies (3 credit hours)
2. SPAN 3303, Introduction to Spanish and Spanish American Literature (3 credit hours)

SPAN 3303 requires up to 19 prerequisite credit hours of Spanish language instruction through SPAN 3302, depending on departmental placement.

3. ENGL 3658, Latino-American Literature (3 credit hours)
4. LATS 4961, Latino and Latina Studies Seminar, which is taken in the senior year (3 credit hours)
5. Eight elective courses (24 credit hours) with at least two courses from Group A (Latino and Latina Culture) and two courses from Group B (Historical Context), that have not already been applied to satisfy above requirements.

Minor in Latino and Latina Studies

Students pursuing the interdisciplinary minor must complete eighteen (18) credit hours. The specific requirements are as follows:

1. LATS 2201, Introduction to Latino and Latina Studies (3 credit hours)
2. SPAN 3303 or ENGL 3658 (3 credit hours)

If both courses are taken, only one may be applied as elective credit.
3. LATS 4961, Latino and Latina Studies Seminar (3 credit hours)
4. Three other courses (9 credit hours), with at least one course from Group A (Latino and Latina Culture) and one course from Group B (Historical Context), that have not already been applied to satisfy above requirements.

Approved List of Courses

Category A: Latino and Latina Culture
ENGLISH: 3658, Latino-American Literature.
HISTORY: 2725, Race, Power, and Modernity.
HUMAN AND ORGANIZATIONAL DEVELOPMENT: 2510, Health Service Delivery to Diverse Populations.
SPANISH: 3302, Spanish for Oral Communication Through Cultural Topics; 3303, Introduction to Spanish and Spanish American Literature; 3345, Spanish for Business and Economics; 3830, Spanish for the Medical Profession; 4310, Translation and Interpretation; 3835, Latino Immigration Experience; 4750, Afro-Hispanic Literature; 4755, Latina and Latin American Women Writers.

Category B: Historical Context
AFRICAN AMERICAN AND DIASPORA STUDIES: 3178, Colonialism and After.
ENGLISH: 3674, Caribbean Literature.
HISTORY: 1380, Modern Latin America; 2450, Reform, Crisis, and Independence in Latin America, 1700–1820; 2480, Central America; 2570, Caribbean History, 1492–1983; 2580, American Indian History before 1850; 2590, American Indian History since 1850; 3080, U.S. and Caribbean Encounters.
LATIN AMERICAN STUDIES: 2101, Introduction to Latin America.
MUSIC LITERATURE: 2110, Music in Latin America and the Caribbean.

Category C: Critical Perspectives
AFRICAN AMERICAN AND DIASPORA STUDIES: 1010, Introduction to African American and Diaspora Studies.
PHILOSOPHY: 3617, Philosophy of Language.
POLITICAL SCIENCE: 3217, Latin American Politics; 2219, Politics of Mexico; 3228, International Politics of Latin America; 3264W, Global Feminisms.
SOCIOLOGY: 3314, Environmental Inequality and Justice; 3612, Class, Status, and Power; 3701, Racial Domination, Racial Progress; 3232, Contemporary Mexican Society.
WOMEN’S AND GENDER STUDIES: 1150/1150W, Sex and Gender in Everyday Life; 3201, Women and Gender in Transnational Context.

Course descriptions begin on page 178.

Managerial Studies

DIRECTOR Gary R. Kimball
ASSOCIATE DIRECTOR William W. Damon
PROFESSOR William W. Damon
ADJUNCT PROFESSORS Corey M. Cleek, David H. Furse, Stuart A. Garber, Bob Isherwood
ASSOCIATE PROFESSORS OF THE PRACTICE Alice R. Goodyear, Arthur J. Johnsen, Gary R. Kimball, Patrick R. Leddin, Brent Trentham
ADJUNCT ASSOCIATE PROFESSORS Timothy F. Logan, Janet M. McDonald, Garnett Slatton
LECTURER Joseph J. Rando

THE College of Arts and Science offers two minors in the liberal arts tradition to help students understand management functions, corporate strategy, and financial economics. These two minors are administered by the Managerial Studies program. Each of the minors has a distinct focus with basis in economics and accounting.

The program is directed by Professor Gary R. Kimball, 215 Calhoun Hall, (615) 322-4021.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Minor in Managerial Studies: Corporate Strategy

The minor in corporate strategy requires 18 credit hours.

The following courses are required:
FNEC 1600 Financial Accounting
MGRL 1100 Fundamentals of Management
MGRL 3250 Corporate Strategy

Three elective courses to be chosen from:
MGRL 1200 Principles of Marketing
MGRL 3200 Advanced Marketing
MGRL 3209 Creative Advertising
MGRL 3300 Entrepreneurial Challenge
MGRL 3300 Entrepreneurship: The Business Planning Process
FNEC 2600 Managerial Accounting
FNEC 2700 Corporate Finance
FNEC 3705 Financial Management

Minor in Managerial Studies: Financial Economics

The minor in financial economics requires 18 credit hours.

The following courses are required:
ECON 1500 Economic Statistics
or 1510 Intensive Economic Statistics
FNEC 1600 Financial Accounting
FNEC 2700 Corporate Finance

Three elective courses to be chosen from:
FNEC 2600 Managerial Accounting
FNEC 3700 Investment Analysis
FNEC 3705 Financial Management
ECON 3200 Money and Banking
ECON 3300 Financial Instruments and Markets
Mathematics 2820, Psychology 2100, or Psychology 2110
(Peabody College) may substitute for Economics 1500. Economics majors must complete 15 hours of credit in FNEC courses to complete the financial economics minor.
Minors may be combined with any departmental or interdisciplinary major; however, the minor in managerial studies must include 15 credit hours that are being counted solely toward the minor.

Students electing a second minor in managerial studies must complete at least 12 credit hours counted solely toward the second minor.

Financial Economics

Course descriptions begin on page 160.

Managerial Studies

Course descriptions begin on page 178.

Mathematics

CHAIR Dietmar Bisch
VICE CHAIR Mike Neamtu
DIRECTOR OF UNDERGRADUATE STUDIES John Rafter
DIRECTOR OF GRADUATE STUDIES Denis Osin
ASSOCIATE PROFESSORS Jesse Peterson, Alexander Powell, Steven T. Tschantz
ASSISTANT PROFESSORS Yago Antolin-Pichel, Marcel Bischoff, Anna Marie Bohmann, Arnaud Brothier, Darren Creutz, Marcelo Disconzi, Spencer Dowdall, Victor Falgas-Ravry, José Gil-Férez, Gili Golan, Keaton Hamm, Benjamin Hayes, Matthew Moore, Rares Rasdeaconu, Ioana Suvaina, Maria Van der Walt, Kun Wang
SENIOR LECTURER EMERITA Jo Ann W. Staples
SENIOR LECTURERS Derek Bruff, Linda Hutchison, Pamela Pigg, John Rafter, Lori Rafter, Jakayla Robbins

THE Department of Mathematics offers an undergraduate major with a high degree of flexibility. A solid background in mathematics provides an excellent foundation for any quantitative discipline as well as many professions—many students go on to professional studies in law, medicine, or business.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Mathematics

Three tracks are available.

Program I (Standard Track) is intended for most mathematics majors in the College of Arts and Science, Blair School of Music, and Peabody College.

Program II (Applied Track) is intended for students in the School of Engineering who elect a second major in mathematics, but is also available for other students.

Program III (Honors Track) is intended for highly qualified students who either plan for graduate studies in mathematics or plan to graduate with departmental honors. Students who complete this program and, in addition, complete a senior thesis will graduate with departmental honors.

Requirements for the three tracks are summarized below.

Program I (Standard Track).

At least 32 credit hours in mathematics, as follows.
2. Linear algebra and differential equations: 2600 or 2500–2501, and 2610.
3. At least 15 additional credit hours from 2800 or above.
4. The remainder of the credit hours must be chosen from 2800 or above.

Program II (Applied Track).

At least 29 credit hours in mathematics and 6 credit hours outside the department, as follows.
1. A calculus sequence as in Program I.
2. Linear algebra and differential equations—one of the following:
   (a) one of 2410, 2600, or 2500–2501, and one of 2420 or 2610; or
   (b) 2400 and either 2600 or 2500–2501.
3. At least 12 additional credit hours from 2800 or above, excluding 3000.
4. The remainder of the credit hours in mathematics must be chosen from 2800 or above.
5. At least 6 credit hours of advanced, mathematically based science or engineering courses approved by the director of undergraduate studies. This requirement is automatically fulfilled by students who complete a physics major or a major in the School of Engineering.

Program III (Honors Track).

At least 38 credit hours in mathematics, as follows.
1. A calculus sequence as in Program I.
2. Linear algebra and differential equations as in Program I.
3. At least 21 additional credit hours of advanced course work,
   (a) including four courses taken from the following three categories, at least one from each category:
      1) Algebra: 3300, 4300, 4301.
      2) Analysis: 3100, 3110, 6100, 6101.
      3) Topology and Geometry: 3200, 4200, 4201, 4220, 6210.
   (b) The remainder of the 21 credit hours must be chosen from 2800 or above, excluding 4999.
4. The remainder of the credit hours must be chosen from 2800 or above.

Students who complete Program III and, in addition, complete a senior thesis will graduate with departmental honors.

Students planning to teach in secondary school should contact the director of secondary education programs in the Department of Teaching and Learning at Peabody College for course recommendations.
Honors Program

The Honors Program in Mathematics is designed to afford superior students the opportunity to pursue more intensive work within their major field. The program requires:

1. Completion of all the requirements of Program III (Honors Track).
2. A minimum grade point average of 3.6 in mathematics.
3. Completion of a senior thesis in Math 4999 (3 credit hours) in the second semester of the senior year. With approval of the director of undergraduate studies, the thesis may be based on research initiated or completed at another academic institution, such as during an NSF-sponsored REU program.
4. Oral examination on the senior thesis. A committee of at least three faculty members—at least two from the Department of Mathematics, one being the thesis adviser—shall evaluate the thesis and the oral examination. Exceptional achievement on the thesis will earn highest honors.

Interested students may apply to the director of undergraduate studies for admission to the Honors Program in their junior year or the first semester of their senior year. Applicants must meet college requirements for entry to the Honors Program, and must carry a minimum grade point average of 3.6 in mathematics.

The application includes a one- to two-page proposal of the planned thesis and the signature of the faculty member who will be the thesis adviser.

The thesis must be submitted no later than two weeks before the end of classes in the semester of graduation. The oral examination will take place by the last day of classes in the semester of graduation. Highest honors will be awarded for a thesis that contains original high-quality research results in combination with an oral defense at the highest quality level.

Students may sign up for Math 4999 during one semester of their senior year. Math 4999 will not count toward the 21 credit hours requirement in Program III.

Please consult the director of undergraduate studies for details.

Minor in Mathematics

The minor in mathematics requires at least 15 credit hours in mathematics, including:

1. Completion of a calculus sequence: 2300 or 2500–2501.
2. Linear algebra and differential equations: as in the Program II major.
3. At least 6 credit hours not used to satisfy item 2 from 2800 or above.

Completion of a single-variable calculus sequence (1200–1201–2200 or 1300–1301) is a prerequisite for the minor, but does not count toward the credit hours of the minor.

Licensure for Teaching

Candidates for teacher licensure at the secondary level in mathematics should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

Calculus

Several calculus sequences are available: 1100; 1200–1201; 1300–1301–2300.

The courses in these sequences cover similar material, but at different rates, and therefore overlap in content and credit. Students should not switch from one to another without approval of the department. Such switching may result in loss of credit. Students intending to take mathematics classes beyond one year of calculus are advised to enroll in the 1300–1301–2300 sequence.

First-year students with test scores of 5 on the Calculus BC advanced placement examination, thereby earning AP credit for 1300–1301, may choose to enroll in the 2500–2501 sequence. The combination of 2500–2501 is a blend of multivariable calculus and linear algebra, with an emphasis on rigorous proofs.

Duplicate Credit Policies

Deduction of credit caused by duplication proceeds as follows. Students who earned math credit

1. through Advanced Placement/International Baccalaureate in one sequence and complete a course at Vanderbilt from another sequence that duplicates this credit will lose credit from the Advanced Placement/International Baccalaureate earnings.
2. by transfer in one sequence and complete a course at Vanderbilt from another sequence that duplicates this credit will lose credit from the Vanderbilt course.
3. at Vanderbilt in one sequence and complete a course at Vanderbilt from another sequence that duplicates this credit will lose credit from the second Vanderbilt course.

Course descriptions begin on page 179.

Medicine, Health, and Society

DIRECTOR Jonathan M. Metzl
ASSISTANT DIRECTOR JuLeigh Petty
DIRECTOR OF UNDERGRADUATE STUDIES Dominique Béhague
DIRECTOR OF GRADUATE STUDIES Jonathan M. Metzl
DIRECTOR OF ADVISING Courtney S. Muse
DIRECTOR OF EVALUATION JuLeigh Petty
PROFESSORS Jonathan M. Metzl, Hector Myers
ASSOCIATE PROFESSORS Dominique Béhague, Derek Griffith, Martha W. Jones
ASSISTANT PROFESSORS Almi Hamraie, Tara McKay, Kenneth MacLeish, Lijun Song, Laura Stark
SENIOR LECTURERS Odie A. Lindsey, Courtney S. Muse, JuLeigh Petty

Affiliated Faculty

PROFESSORS EMERITI Vera Chatman (Human and Organizational Development), Matthew Ramsey (History), R. Jay Turner (Sociology)
PROFESSORS Kathryn Anderson (Economics), Victor Anderson (Christian Ethics), Michael Bess (History), James Blumstein (Health Law and Policy), Frank Boehm (Obstetrics and Gynecology), Peter Buerhaus (Nursing), Christopher Carpenter (Economics), Larry Churchill (Medicine), Ellen Clayton (Pediatrics and Law), Jay Clayton (English), Bruce Combs (Psychology and Human Development), Katherine Crawford (History), Kate Daniels (English), Richard D’Aquila (Infectious Diseases), Dennis Dickerson (History), Katharine Donato (Sociology), Volney Gay (Religious Studies), Lenn Goodman (Philosophy), Douglas Heimburger (Medicine), Joni Hersch (Law)
and Economics), David Hess (Sociology), George Hill (Microbiology and Immunology), Carl Johnson (Biological Sciences), John Lachs (Philosophy), Jane Landers (History), Jana Lauderdale (Nursing), Pat Levitt (Pharmacology), Leah Marcus (English), Richard McCarty (Psychology), Timothy McNamara (Psychology), Velma McBride Murry (Human and Organizational Development), Linda Norman (Nursing), Sharon Shields (Human and Organizational Development), John Tarpley (Surgery), Benigno Trigo (Spanish), Arleen Tuchman (History), Holly Tucker (French), Sten Vermund (Pediatrics and Global Health), Bart Victor (Organization Studies), Kip Viasci (Law and Economics), Lynn Walker (Pediatrics and Psychology and Human Development), Kenneth Wallston (Nursing and Psychology), David W. Wright (Chemistry), Laurence Zwiebel (Biological Sciences)

ASSOCIATE PROFESSORS Carolyn Audet (Preventive Medicine), Mark Bilton (Medicine), Tony N. Brown (Sociology), Karen Campbell (Sociology), Laura Carpenter (Sociology), André Christie-Mizell (Sociology), Beth Conklin (Anthropology), Elizabeth Heitman (Medicine), Julián F. Hiltyer (Biological Sciences), Kathleen Hoover-Dempsey (Psychology and Human Development), Sarah Igo (History), Melanie Lutenbacher (Nursing), Terry A. Maroney (Law), Ieoma Nwankwo (English), Scott Pearson (Surgery), Ruth Rogaski (History), Norbert Ross (Anthropology), Russell Rothman (Medicine), David Schlundt (Psychology), Tiffany Tung (Anthropology), Timothy J. Vogus (Management and Organization Studies)

ASSISTANT PROFESSORS Carolyn Audet (Preventive Medicine), Tyson Brown (Sociology), Joseph B. Fanning (Medicine), Rolanda Johnson (Nursing), Chase Lesane-Brown (Psychology and Human Development), Ebony O. McGee (Diversity and Urban Schooling), Chandra Y. Osborn (Medicine), Evelyn Patterson (Sociology), Michele Salisbury (Nursing), Kevin T. Seale (Biomedical Engineering)

SENIOR LECTURER EMERITUS Russell M. McIntire Jr. (Philosophy)

SENIOR LECTURERS Lorraine Catanzaro (Spanish), Elisabeth H. Sandberg (Psychology)

THE Program in Medicine, Health, and Society offers an interdisciplinary major (36 credit hours) and minor (18 credit hours) for students interested in studying health-related beliefs and practices in their social and cultural contexts. As part of the requirements of the major, students must complete 12 credit hours in one of the six concentrations in Medicine, Health and Society: global health; health behaviors and health sciences; health economics and policy; race, inequality, and health; medicine, humanities, and arts; or critical health studies. In consultation with their adviser, students will choose a concentration as early as possible but no later than the end of the change period of the first semester of the senior year. An honors program is available. MHS draws on a variety of fields in the social sciences and humanities—anthropology, economics, history, literature, philosophy/ethics, psychology, sociology, and religious studies. It will be of particular interest to students preparing for careers in health-related professions but will have much to offer any student open to examining an important part of human experience from multiple perspectives and developing a critical understanding of contemporary society. Students are encouraged to take advantage of the opportunities offered by the Center for Medicine, Health, and Society. Visit vanderbilt.edu/mhs for more details.

The program is directed by Jonathan M. Metzl, Frederick B. Rentschler II Professor of Sociology and Medicine, Health, and Society.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/

Program of Concentration in Medicine, Health, and Society

The major requires a minimum of 36 credit hours of coursework, distributed as follows:

Note: No more than 21 credit hours may be in courses designated MHS. Other than MHS, no more than 12 credit hours may be in the same subject area; A&S Psychology and Peabody Psychology are considered the same subject area for purposes of the major/minor.

1. Core Courses — Students must complete one of the following (3 credit hours):

- ANTH 2342, Biology of Inequality
- MHS 1920, Politics of Health
- MHS 1930, Fundamental Issues in Medicine, Health, and Society
- MHS 1940, Racial and Ethnic Health Disparities
- MHS 1950, Theories of the Body
- MHS 2110, American Medicine in the World
- MHS 2230, Masculinity and Men's Health

2. Concentration — Students must complete four courses not used to satisfy the core course requirement in one of the following six concentrations (12 credit hours):

Note: Courses must be from at least two subject areas.

A. Global health
B. Health behaviors and health sciences
C. Health policies and economics
D. Race, inequality, and health
E. Medicine, humanities, and arts
F. Critical health studies

See below for a list of courses that count for Concentrations A, B, C, D, and E. Students choosing concentration F must propose a set of four courses (12 credit hours) that form a coherent program of study related to critical health studies and receive approval from the director of undergraduate studies.

3. Electives — Seven courses not used to satisfy the core course or concentration requirements chosen from the list of approved courses (21 credit hours).

4. Disciplinary Requirement — At least 3 credit hours from the following courses must be used to satisfy the concentration requirement or electives requirement.

- ANTH 3143, Medical Anthropology
- ANTH 3143, Anthropology of Healing
- ECON 2350, Health Care Policy
- ECON 3350, Economics of Health
- HIST 2800, Modern Medicine
- MHS 3050W, Medicine and Literature
- PHIL 1008, 1008W, Introduction to Medical Ethics
- PHIL 3608, Ethics and Medicine
- PSCI 3268, American Health Policy
- POT 3635, Health Psychology
- SOC 3301, Society and Medicine
- SOC 3304, Race, Gender, and Health
- WGS 2240, Introduction to Women's Health

In order to graduate with a major in MHS, students must take a written exam in the second semester of their senior year. (Students who are away during the second semester of their senior year because they are studying abroad or graduating early should schedule the exam during the first semester.) The exam is not graded and no grade will appear on the student's transcript. The purpose of the exam is to ascertain the extent to which MHS majors demonstrate knowledge of the MHS curriculum.
Honors Program

The Honors Program in Medicine, Health, and Society offers superior students a more intensive concentration within their major field. Admission to the program requires:

1. A 3.3 cumulative grade point average.
2. A 3.3 cumulative grade point average in Medicine, Health, and Society.
3. An application that (a) describes the proposed topic; (b) identifies the faculty member who will serve as the thesis adviser; and (c) includes a letter of recommendation from the proposed thesis adviser.

Completion of the program requires:

1. Two semesters, three credit hours each semester of the senior year in MHS 4998/4999.
2. An honors thesis of approximately fifty pages that reveals an interdisciplinary perspective, submitted no later than two weeks before the end of classes in the second semester of the senior year, and approved by a committee of at least two faculty members (one of whom must be affiliated with Medicine, Health, and Society).
3. Successful completion of an oral examination focusing on the topic of the thesis.

Minor in Medicine, Health, and Society

The minor consists of a minimum of 18 credit hours of course work, distributed as follows:

Note: No more than 9 credit hours may be in the same subject area; A&S Psychology and Peabody Psychology are considered the same subject area for purposes of the major/minor.

1. Core Courses — Students must complete one of the core courses of the major (3 credit hours).
2. Concentration — Students must complete three courses in one of the following five concentrations (9 credit hours):
   A. Global health
   B. Health policies and economies
   C. Health behaviors and health sciences
   D. Race, inequality, and health
   E. Medicine, humanities, and arts
3. Electives — Two additional courses, excluding those with an asterisk, chosen from the list of approved courses. (6 credit hours)

4. Disciplinary Requirement — At least 3 credit hours from the following courses must be used to satisfy the concentration requirement or electives requirement.
   ANTH 3143, Medical Anthropology
   ANTH 3141, Anthropology of Healing
   ECON 2350, Health Care Policy
   ECON 3350, Economics of Health
   HIST 2800, Modern Medicine
   MHS 3050W, Medicine and Literature
   PHIL 1008, 1008W, Introduction to Medical Ethics
   PHIL 3608, Ethics and Medicine
   PSCI 3268, American Health Policy
   PSY 3635, Health Psychology
   SOC 3301, Society and Medicine
   SOC 3304, Race, Gender, and Health

   WGS 2240, Introduction to Women’s Health

Approved Courses

(Please consult the director of undergraduate studies for approval of “as appropriate” courses in concentration areas.)

CONCENTRATION A: Global Health

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3143, Medical Anthropology.
ASIAN STUDIES: 2630, Chinese Medicine.
BIOLOGICAL SCIENCES: 1111, First-Year Writing Seminar (as appropriate); 3965, Undergraduate Seminar (as appropriate).
FRENCH: 3112, Medical French in Intercultural Contexts.
HISTORY: 1111, First-Year Writing Seminar (as appropriate); 2160, Medicine in Islam.
HUMAN AND ORGANIZATIONAL DEVELOPMENT (PEABODY): 3200, Global Dimensions of Community Development; 3231, Introduction to Health Services.
INTERDISCIPLINARY STUDIES: 3831, Global Citizenship and Service; 3832, Global Community Service; 3833, Seminar in Global Citizenship and Service (as appropriate).
MEDICINE, HEALTH, AND SOCIETY: 2110, American Medicine and the World; 2310, Chinese Medicine and Society; 2420, Economic Demography and Global Health; 2410, HIV/AIDS in the Global Community; 2510, Caring for Vulnerable Populations; 3010, Perspectives on Global Public Health; 3000, Undergraduate Seminar (as appropriate); 3110, Global Health and Social Justice; 3210, Health, Development, and Culture in Guatemala; 3212, Health, Development, and Culture in Guatemala; 3210, Healthcare in the US and France; 3890, Special Topics (as appropriate); 4010, Psychiatry, Culture, and Globalization.
POLITICAL SCIENCE: 1111, First-Year Writing Seminar (as appropriate); 2215, Change in Developing Countries; 2236, The Politics of Global Inequality; 3893, Selected Topics in American Government (as appropriate); 3894, Selected Topics in Comparative Politics (as appropriate).
SOCIOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3321 Population and Society; 3314, Environmental Inequality and Justice.
SPANISH: 3830, Spanish for the Medical Profession; 4760, Literature and Medicine.
WOMEN’S AND GENDER STUDIES: 1111, First-Year Writing Seminar (as appropriate); 3201, Women and Gender in Transnational Context; 2267, Seminar on Gender and Violence.

CONCENTRATION B: Health Policies and Economics

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 2109, Food Politics in America.
ECONOMICS: 1010, Principles of Macroeconomics; 1020, Principles of Microeconomics; 1111, First-Year Writing Seminar (as appropriate); 1500, Economic Statistics; 1510, Intensive Economic Statistics; 2350, Health Care Policy; 3050, Introduction to Econometrics; 3350, Economics of Health.
HISTORY: 1111, First-Year Writing Seminar (as appropriate); 2800, Modern Medicine.
HUMAN AND ORGANIZATIONAL DEVELOPMENT (PEABODY): 3205, Policy Analysis Methods; 3231, Introduction to Health Services; 3241, Introduction to Health Policy; 3331, Managing Health Care Organizations.
MEDICINE, HEALTH, AND SOCIETY: 1920, Politics of Health; 2120, Health Social Movements; 2250, Autism in Context; 2320, Medicine, Law, and
Society; 2420, Economic Demography and Global Health; 3000, Undergraduate Seminar (as appropriate); 3020, U.S. Public Health Ethics and Policy; 3220, Healthcare Organizations; 3120, Medicine, Technology, and Society; 3310, Healthcare in the US and France; 3890, Special Topics (as appropriate).

PHILOSOPHY: 1008, 1008W, Introduction to Medical Ethics; 1111, First-Year Writing Seminar (as appropriate); 3608, Ethics and Medicine.

POLITICAL SCIENCE: 1111, First-Year Writing Seminar (as appropriate); 2236, The Politics of Global Inequality; 2270, Conducting Political Research; 3268, American Health Policy; 3893, Selected Topics in American Government (as appropriate); 3894, Selected Topics in Comparative Politics (as appropriate).

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3302, Poverty, Health, and Politics; 3314, Environmental Inequality and Justice; 4961, Seminars in Selected Topics (as appropriate).

CONCENTRATION C: Health Behavior and Health Sciences

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3344, Genetic Anthropology Lab Techniques; 4345, Human Evolutionary Genetics.

BIOLOGICAL SCIENCES: 1105, Human Biology; 1111, First-Year Writing Seminar (as appropriate); 3243, Genetics of Disease; 3245, Biology of Cancer; 3254, Neurobiology of Behavior; 3270, Statistical Methods in Biology; 3865, Undergraduate Seminar (as appropriate).

BIOMEDICAL ENGINEERING: 3200, Analysis of Biomedical Data.

HUMAN AND ORGANIZATIONAL DEVELOPMENT (PEABODY): 3221, Health Service Delivery to Diverse Populations; 3311, Introduction to Health Promotion.

MEDICINE, HEALTH, AND SOCIETY: 1930, Fundamental Issues in Medicine, Health, and Society; 1940, Racial and Ethnic Health Disparities; 2120, Health Social Movements; 2330, Men's Health Research; 2430, Social Capital and Health; 3030, Community Health Research; 3890, Special Topics (as appropriate); 3000, Undergraduate Seminar (as appropriate).

NEUROSCIENCE: 2201, Neurosciences; 3235, Biological Basis of Mental Disorders.

PSYCHOLOGY: 1111, First-Year Writing Seminar (as appropriate); 1200, General Psychology; PSY-PC-1250, Developmental Psychology; 2100, Quantitative Methods; PSY-PC-2550, Adolescent Development; PSY-PC 2110, Introduction to Statistical Analysis; PSY-PC 2102, Statistical Analysis; 2150, Principles of Experimental Design; PSY-PC-2250, Cognitive Aspects of Human Development; 3100, Abnormal Psychology; 3620, Schizophrenia; 3625, Depression; 3635, Health Psychology; PSY-PC-3650, Advanced Topical Seminar (approval dependent upon topic); 3705, Human Sexuality; 3750, Perception; 3760, Mind and Brain; 3785, Brain Damage and Cognition.

SOCIOLOGY: 1111, First-Year Writing Seminar (as appropriate); 1010, 1010W, Introduction to Sociology; 1020, 1020W, Contemporary Social Issues; 2100, Statistics for Social Scientists; 3002, Introduction to Social Research; 3003, Research Practicum; 3501, Society and Medicine; 3303, Social Dynamics of Mental Health; 4961, Seminars in Selected Topics (as appropriate). *Only one of SOC 101 or 102 may be counted towards the major or minor.

WOMEN’S AND GENDER STUDIES: 1111, First-Year Writing Seminar (as appropriate); 2240, Introduction to Women's Health.

CONCENTRATION D: Race, Inequality, and Health

AFRICAN AMERICAN AND DIASPORA STUDIES: 1111, First-Year Writing Seminar (as appropriate); 1016, Race Matters; 3214, Black Masculinity: Social Imagery and Public Policy.

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 2342, Biology of Inequality; 3343, Biology and Culture of Race; 4345, Human Evolutionary Genetics.

HISTORY: 1111, First-Year Writing Seminar (as appropriate); 3040, Health and the African American Experience.

HUMAN AND ORGANIZATIONAL DEVELOPMENT (PEABODY): 3221, Health Service Delivery to Diverse Populations.

MEDICINE, HEALTH, AND SOCIETY: 1940, Racial and Ethnic Health Disparities; 2230, Masculinity and Men's Health; 2330, Men's Health Research; 2240, Bionic Bodies, Cyborg Cultures; 3000, Undergraduate Seminar (as appropriate); 3890, Special Topics (as appropriate).

SOCIOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3301, Society and Medicine; 3304, Race, Gender, and Health; 3321, Population and Society; 3723, Gender, Sexuality, and the Body; 4961, Seminars in Selected Topics (as appropriate).

WOMEN’S AND GENDER STUDIES: 1111, First-Year Writing Seminar (as appropriate); 2268, Gender, Race, Justice, and the Environment.

CONCENTRATION E: Medicine, Humanities, and Arts

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3143, Medical Anthropology; 3141, Anthropology of Healing; 3142, Medicine, Culture, and the Body (same as History 2830); 2370, Death and the Body.

ASIAN STUDIES: 2630, Chinese Medicine.

ENGLISH: 1111, First-Year Writing Seminar (as appropriate); 3720, 3720W, Literature, Science, and Technology (as appropriate); 3891, Special Topics in Creative Writing (as appropriate).

HISTORY: 1111, First-Year Writing Seminar (as appropriate); 2160, Medicine in Islam; 2800, Modern Medicine; 2810, Women, Health, and Sexuality; 2780, Superhuman Civilization; 2830, Medicine, Culture, and the Body (same as Anthropology 3142); 2835, Sexuality and Gender in the Western Tradition to 1700; 2840, Sexuality and Gender in the Western Tradition since 1700; 3030, Epidemics in History; 3040, Health and the African American Experience.

MEDICINE, HEALTH, AND SOCIETY: 1111, First-Year Writing Seminar: Medicine, Health, and the Body; 1950, Theories of the Body; 2150, Medical Humanities; 2230, Masculinity and Men's Health; 2250, War and the Body; 4050, Narrative and Medicine: Stories of Illness and the Doctor-Patient Relationship; 3000, Undergraduate Seminar (as appropriate); 3150, Death and Dying in America; 3050W, Medicine and Literature; 3250, Perspectives on Trauma; 3890, Special Topics (as appropriate); 4010, Psychiatry, Culture, and Globalization.

PHILOSOPHY: 1111, First-Year Writing Seminar (as appropriate); 1008, 1008W, Introduction to Medical Ethics; 3606, 3606W, Moral Problems; 3608, Ethics and Medicine; 3630, Philosophy of Mind.

RELGIOUS STUDIES: 6711, Post-Freudian Theories and Religion.

SOCIOLOGY: 1111, First-Year Writing Seminar (as appropriate).

SPANISH: 4760, Literature and Medicine.

WOMEN’S AND GENDER STUDIES: 1111, First-Year Writing Seminar (as appropriate); 2612, Lesbian, Gay, Bisexual, and Transgender Studies; 2267, Seminar on Gender and Violence.
OTHER ELECTIVES

In addition to the electives listed below, any course from the above concentration areas may serve as an elective if it is not already being used to satisfy a concentration requirement. No more than 12 credit hours of courses with an asterisk in the list below may be used to satisfy the major. Courses with an asterisk may not be used to satisfy the minor. (Please consult the director of undergraduate studies for approval of "as appropriate" courses for electives.)

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 1301, Introduction to Biological Anthropology; 3372, Human Osteology; 4373, Health and Disease in Ancient Populations.

BIOLOGICAL SCIENCES: *1510–1511, Introduction to Biological Sciences; 2520, Biochemistry.


HUMAN AND ORGANIZATIONAL DEVELOPMENT (PEABODY): 3342, Introduction to Community Psychology; 3890, Health Promotion Delivery.


MEDICINE, HEALTH, AND SOCIETY: 1001, Commons Seminar; 3831, Service Learning Research and Readings (Note: 3831, Service Learning Research and Readings, must be taken concurrently with 3830); 3850, Independent Study; 3881, Internship Readings and Research (Note: 3881, Internship Readings and Research, must be taken concurrently with 3880).

NURSING: *1601, Introduction to Nutrition; *1602, Nutrition and Health; *3101–3102, Anatomy and Physiology.

PSYCHOLOGY: PSY-PC-1205, PSY-PC-1207, Minds, Brains, Cultures, and Contexts; PSY-PC-2400, Social and Personality Development; PSY-PC-2500, Infancy; 3800, Personality; 3610, Introduction to Clinical Psychology OR PSY-PC-3200, Introduction to Clinical Psychology; 3615, Emotion; PSY-PC-3650, Advanced Topical Seminar (as appropriate).

RELIGIOUS STUDIES: 6711, Post-Freudian Theories and Religion.

SOCIOLGY: 1111, First-Year Writing Seminar (as appropriate); 4961, Seminars in Selected Topics (as appropriate).

Course descriptions begin on page 182.

Nanoscience and Nanotechnology

DIRECTORS Paul E. Labinis, Sandra J. Rosenthal

FACULTY in the School of Engineering and the College of Arts and Science offer an interdisciplinary minor in nanoscience and nanotechnology. The minor is administered by the School of Engineering in collaboration with the College of Arts and Science.

Nanoscience and nanotechnology are based on the ability to synthesize, organize, characterize, and manipulate matter systematically at dimensions of ~1 to 100 nm, creating uniquely functional materials that differ in properties from those prepared by traditional approaches. At these length scales, materials can take on new properties that can be exploited in a wide range of applications such as for solar energy conversion, ultra-sensitive sensing, and new types of vaccines. These activities require the integration of expertise from various areas of science and engineering, often relying on methods of synthesis, fabrication, and characterization that are beyond those encountered in an individual course of study.

Students who minor in nanoscience and nanotechnology learn the principles and methods used in this rapidly growing field. Its core originates in the physical sciences by providing key approaches for describing the behavior of matter on the nanoscale. Synthetic approaches are used to manipulate matter systematically, for creating uniquely functional nanomaterials that can be inorganic, organic, biological, or a hybrid of these. With a third component of characterization, a process for designing systems to have particular properties as a result of their composition and nanoscale arrangement emerges. Students are introduced to these areas through foundational and elective courses for the minor that are specified below, the latter of which can be selected to fulfill the degree requirements for their major.

The minor in nanoscience and nanotechnology is supported by the Vanderbilt Institute of Nanoscale Science and Engineering (VINSE) that brings together faculty from the College of Arts and Science, the School of Engineering, and the Medical Center. A specialized laboratory facility maintained by VINSE provides students in the minor with capstone experiences that allow them to prepare and characterize a variety of nanostructured systems using in-house state-of-the-art instrumentation. This hands-on laboratory component enhances the attractiveness of students to both employers and graduate schools.

Details of the minor requirements are provided in the School of Engineering section of the catalog.

Neuroscience

DIRECTOR David H. Zald
DIRECTOR OF UNDERGRADUATE STUDIES Elizabeth Catania

Steering Committee

PROFESSORS Vivien A. Casagrande (Medicine), Renè Marois (Psychology), Douglas G. McMahon (Biological Sciences), Mark Wallace (Medicine)

ASSISTANT PROFESSORS Elizabeth Catania (Neuroscience), Alexander Maier (Psychology)

SENIOR LECTURER Leslie M. Smith (Psychology)

THE study of the nervous system is an interdisciplinary enterprise that draws upon a variety of scientific disciplines ranging from molecular biology and biophysics to computational science and engineering to the study of behavior and cognition. To meet the challenge of providing training for entry into this exciting and growing field, Vanderbilt offers an interdisciplinary program of concentration in neuroscience that utilizes expertise from several departments within the university. The program consists of three components. The first provides for a broad foundation in the basic sciences and mathematics. Second, the program provides for exposure to each of the general areas of neuroscience including courses in cellular/molecular, systems, and integrative/cognitive neuroscience. This course work is supplemented with exposure to the laboratory techniques utilized in neuroscience research. Finally, the program allows students to pursue more work in the specific sub-disciplines of neuroscience and in areas of inquiry related
to neuroscience through elective courses. Students are especially encouraged to participate in research in the laboratories of neuroscience faculty under the auspices of the undergraduate research courses. More extensive research experience is available through the Honors Program in Neuroscience.

For additional information, see as.vanderbilt.edu/neuroscience.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration

Students majoring in neuroscience are required to complete a core of introductory courses in mathematics, chemistry, physics, and biology that provide the broad scientific background necessary to the study of neuroscience. The neuroscience major consists of 39 credit hours of course work that includes 8 credit hours of organic chemistry and 31 credit hours of neuroscience and related courses distributed among specific disciplines associated with the study of neuroscience. The areas and associated course options are listed below. Excluding research credit (3861, 3862, 3863, 3864, and 4999), the neuroscience and related courses must be drawn from at least two departments.

Students seeking a second major within the College of Arts and Science may count a maximum of 6 credit hours of 2000-or-higher-level course work to meet the requirements of both majors.

Required Math and Science Courses

- **Biological Sciences**
  - BSCI 1510, 1511, 1510L, and either 1511L or 1512L.

- **Chemistry**
  - CHEM 2221 or 2211; CHEM 2222 or 2212; and CHEM 2221L and 2222L.

- **Mathematics**
  - Option 1: MATH 1200 or 1300 and MATH 1201 or 1301.
  - Option 2: MATH 1100 and either BSCI 3270 or PSY 2100 or PSY-PC 1400.

- **Physics**
  - Option 1: PHYS 1501, 1502, 1501L, and 1502L.
  - Option 2: PHYS 1601, 1602, 1601L, and 1602L.
  - Option 3: PHYS 1901 and 1902.

Neuroscience Courses

- **Introduction to Neuroscience** (required)
  - Neuroscience 2201.

- **Cellular and Molecular Neuroscience** (6 credit hours required)
  - Biological Sciences 3252, 3256; Neuroscience 3235, 3260, 3269, 3891

- **Systems, Integrative, and Cognitive Neuroscience** (6 credit hours required)
  - Biological Sciences 3320, 3254; Neuroscience 4961, 3270, 3274, 3892, 4969; Psychology 3750, 3700, 3120, 3760, 3780, 3765, 3620, 3775, 3640, 3785.

- **Neuroscience Laboratory** (4 credit hours required)
  - Neuroscience 3861, 3862.

- **Neuroscience Electives** (6 credit hours required)
  - Two additional courses from the Neuroscience courses listed above. One semester of Neuroscience 3863 or 3 credit hours of Neuroscience 4999 may be used to count for one elective course.

Related Course Electives (6 credit hours required)

- Biological Sciences 2201, 2201L, 2210, 2210L, 2520, 4265, 3270; Biomedical Engineering 3100, 3101; Chemistry 2100, 3710, 4720, 3310; Computer Science 1101, 1103; Mathematics 2300, 2400, 2420; Philosophy 3616, 3630; Psychology 2100, 3600, 3100, 3620, 3625, 3705, 3715.

Honors Program

Superior students with a strong interest in research are encouraged to consider the Honors Program in Neuroscience. Normally a student will apply to enter the Honors Program in the spring semester of the junior year and assemble an Honors Committee that will consist of the research mentor and at least two other appropriate members of the faculty. The student should begin within the program the following semester. Entrance into and satisfactory completion of the Honors Program requires that students maintain an overall grade point average of 3.3 and a grade point average of 3.3 in courses counting toward the neuroscience major. Honors candidates must meet all the normal requirements for the neuroscience major, but students are expected to complete at least 8 credit hours of research course work (Neuroscience 3861, 3862, 3863, 3864, and 4999). Three of these research-credit hours may count toward neuroscience elective course work. The candidate must present an honors thesis during the final semester in residence and satisfactorily pass an oral examination by the student's Honors Committee. Students interested in becoming honors candidates should consult with the director of honors and independent study. For more information on the Honors Program, please see as.vanderbilt.edu/neuroscience/the-honors-program.

Minor in Neuroscience

This program provides a foundation of knowledge in neuroscience that is appropriate for students majoring in a related discipline or who have a general interest in the nervous system. The minor program consists of 15 credit hours of course work distributed as follows:

- Neuroscience 2201.
- Biological Sciences 2352 or 3356.

At least 9 additional credit hours (3 courses) chosen from the courses listed as “Neuroscience Courses” in the Program of Concentration in Neuroscience, except that research courses (Neuroscience 3860, 3861, 3862, 3863, 3864, and 4999) do not count toward the minor.

As prerequisites, students are also required to complete two semesters of chemistry with a laboratory and Biological Sciences 1510–1511 and 1510L–1511L/1512L.

Course descriptions begin on page 184.
Philosophy

THE Department of Philosophy at Vanderbilt offers a wide range of courses relating philosophy to various dimensions of human concern. The department also emphasizes those philosophers and movements that have had significant, forming effect in Western culture.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Philosophy

The program of concentration should be tailored to the needs and interests of the student. The following distribution of courses is required as part of the major. Logic: 1003 or 3003 (at least 3 credit hours); Ethics: 1005, 3605, 3606, or 3606W (at least 3 credit hours); History of Philosophy: 2100, 2102, or 2103 (at least 6 credit hours). Any alterations must be approved by the director of undergraduate studies. We encourage all majors to work closely with their advisers to select courses that form a coherent whole. The student must take at least 30 credit hours in the major field of which at least 21 credit hours must be in courses beyond the 1000 level.

Honors Program

The Honors Program offers opportunities for advanced study in philosophy, including independent research projects and/or enrollment in certain graduate seminars (with permission of the instructor). To be admitted to the program, the student must: (a) be a major in philosophy; (b) have a grade point average of 3.3 in all courses; (c) have a 3.5 grade point average in philosophy courses; and (d) develop a written proposal for advanced study in consultation with a philosophy faculty sponsor. Students who satisfy these requirements should meet with the director of undergraduate studies to review their programs, whereupon the director may nominate the students for honors work. Honors work typically begins in the junior year or in the first semester of the senior year; students in the program must complete at least 3 credit hours of Philosophy 3999. Students who successfully complete the program while maintaining the grade point averages of 3.3 generally, and 3.5 in the major, will receive honors in philosophy; students who do especially distinguished work will receive highest honors.

Minor in Philosophy

The minor in philosophy consists of 18 credit hours, including at least 12 credit hours in courses beyond the 1000 level. The minor program will be constructed so as to provide a broad grounding in philosophy and to complement the student's other studies. Each program must be approved by the director of undergraduate studies.

Note: 1002 or 1002W or 1005 or 111 are ordinarily taken prior to all other philosophy courses, except 1003 and 3003 (logic courses), 3616 (philosophy of science), and 3013 (aesthetics).

Course descriptions begin on page 185.

Physics and Astronomy

CHAIR Robert J. Scherrer
DIRECTOR OF UNDERGRADUATE STUDIES David A. Weintraub
DIRECTOR OF GRADUATE STUDIES Julia Velkovska
DISTINGUISHED RESEARCH PROFESSOR C. Robert O'Dell
ASSOCIATE PROFESSORS Andreas Berlind, Kirill Boldtin, Steven E. Csorna, Kelly Holley-Bochkalmann, M. Shane Hutson, Hassanne Mchaourab, Kalman Varga, Sharon Welsh
ASSISTANT PROFESSORS Dennis Duggan, Daniel F. Goebberg, William R. Holmes, Erin Reicher, Yaoqing Xu
SENIOR LECTURERS Forrest Charnock, Sourish Dutta

AS fundamental sciences, physics and astronomy continue to be driving intellectual forces in expanding our understanding of the universe, in discovering the scientific basis for new technologies, and in applying these technologies to research. In keeping with this crucial role, the Department of Physics and Astronomy offers courses dealing with both the cultural and intellectual aspects of the disciplines, a broadly based major program flexible enough to serve as preparation for graduate study in physics, applied physics, medical physics, astronomy or astrophysics, professional study in another area, or technical employment, and minor programs for students desiring to combine physics or astronomy with other majors. An honors program is available for qualified departmental majors.

A distinguishing feature of the Vanderbilt undergraduate curriculum is the close coupling between teaching and research. At Vanderbilt, active research groups are studying the physics of elementary particles; nuclear structure and heavy-ion reactions; nonlinear interactions of lasers with materials at ultrafast time scales; the behavior of electrons, atoms, molecules, and photons near surfaces; the electric and magnetic properties of living systems; the structure and dynamics of biopolymers; young stars; and cosmology. All professors are
engaged in research, and undergraduate students can participate in this research informally or through independent study or summer work.

The Society of Physics Students arranges informal discussions.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Physics

The departmental major provides a thorough grounding in the core areas of physics. It is suitable either as a preparation for careers in science and engineering or as a springboard for applying technical knowledge in such fields as business, medicine, law, public policy, and education. The major in the Department of Physics and Astronomy consists of 32 or 33 credit hours, depending on the student’s choice for requirement 1.

1. The second semester (Physics 1502 and 1502L or 1602 and 1602L or 1902) in introductory, calculus-based physics;
2. A 19-credit-hour core sequence, which consists of five courses covering the major subdisciplines of physics at an intermediate level and one semester each of the astronomy and physics seminars (Astronomy 2600, Physics 3600); and
3. 9 credit hours of electives in physics or astronomy, with at most 6 of these 9 credit hours earned from any combination of directed study (3840), independent study (3860), and/or Honors research (4998).

The core intermediate-level courses are: Concepts and Applications of Quantum Physics (Physics 2250 or 2250W); Modern Physics (Physics 2260 or 2260W); Thermal and Statistical Physics (Physics 3200 or 3207); Classical Mechanics I (Physics 2270); and Electricity, Magnetism, and Electrodynamics I (Physics 2290). Exceptionally well-qualified students should discuss their first-year program with the director of undergraduate studies for appropriate advising.

The electives required by the major may be satisfied by any combination of courses offered by the department that are at the 2000 level or above, with the exception of the seminar courses Physics 1600 and Astronomy 2600 (one credit hour of each is already required for the major). Other courses may count as an elective, such as courses offered by the engineering school (or other departments and schools) that are particularly relevant, such as a course in health physics, optics, or materials science. Such exceptions must be approved by the department’s Undergraduate Program Committee. Other courses, such as 1000-level courses in the physics department or additional credit hours of the Physics seminar (3600) or Astronomy seminar (2600) will be considered with sufficient justification. The purpose of the above policy is to allow relevant courses to count without having to specify them in advance, since it is expected that the relevant courses offered by other departments and schools will change and it is not practical to attempt to maintain a list of approved electives. Majors should seek approval of an elective from their adviser prior to their taking the course and, if applicable, from the department’s Undergraduate Program Committee.

Students with specific educational or professional objectives in the sciences or engineering may wish to augment the major by taking additional courses to prepare for graduate study or employment in physics, astronomy and astrophysics, applied physics, or medical physics. Students are encouraged to consult with the director of undergraduate studies to learn about study abroad options.

Licensure for Teaching

Candidates for teacher licensure in physics at the secondary level may qualify by taking the basic physics major together with the requisite education courses described in the chapter on Licensure for Teaching in the Peabody College section of the catalog.

Honors Program

A student majoring in the Department of Physics and Astronomy may apply for admission to an honors program that allows the student to engage in independent study under the guidance of a faculty member, usually in an area related to an ongoing research program in the department. Admission to the Honors Program is granted only to students who have attained a departmental GPA and overall GPA of at least 3.300. The requirements for graduation with honors in physics or in astronomy are: at least a 3.300 average both in the department and overall; at least 10 credit hours in Physics 3860, Physics 4998, Astronomy 3860, Astronomy 4998; a senior thesis of high merit; and high attainment on an oral honors examination given near the end of the senior year.

Departmental Minors

The physics or astronomy minor is suitable for students who wish to supplement a related discipline or simply have a general interest in the field. Note that the Independent and Directed Study portion of the physics minor is not a requirement but may count toward the minor under certain circumstances. Seek departmental approval before enrolling in either of these classes.

Minor in Physics

The minor requires a minimum of 19 credit hours of course work, distributed as follows:

- Any first-semester calculus-based physics class with lab (1501 and 1501L, 1601 and 1601L, or 1901) 4–5
- Any second-semester calculus-based physics class with lab (1502 and 1502L, 1602 and 1602L, 1902) 4–5
- Physics 2250, 2250W, 2260, or 2260W 4
- Two 2000-level or higher level physics courses, one of which may be a 3 credit hour one semester directed study course (3840) or a 3 credit hour one semester independent study course (3860) 6
- Physics 3600 1

Total credit hours: 19–21

Minor in Astronomy

- Astronomy 1110 and 1110L; or 3000 and 1110L; or 1220 4
- Four other astronomy courses, one of which may be a 3-credit-hour directed study (ASTR 3840) 12
- Two semesters of ASTR 2600 2

Total credit hours: 18

Physics

Course descriptions begin on page 187.
Advanced Courses

Medical and Health Physics Courses

2110, 2130, 2220, 2600, 3000, 1602L, 1901, 1902

Introductory Courses

2110, 2110L, 1111, 1501, 1501L, 1502, 1502L, 1601, 1601L, 1602, 1602L, 1901, 1902

Introductory, calculus-based physics is offered at several different levels, each with the appropriate laboratory. Only one of 1501/1601/1901 and one of 1502/1602/1902 may be taken for credit. Students in 1501–1502 must concurrently enroll in the appropriate laboratory class, 1501L–1502L. Students in 1601–1602 must concurrently enroll in the appropriate laboratory class, 1601L–1602L. Courses in these sequences can be interchanged if scheduling conflicts occur. Physics 1501–1502/1501L–1502L is intended for students in the health sciences. Physics 1601–1602/1601L–1602L is intended for students in engineering. Physics 1901–1902 is intended for students planning to major in physics or pursue research-oriented careers in science, engineering, or mathematics; however, students may major in physics after starting in any of these three introductory physics sequences. Prospective majors are strongly advised to begin their study of physics in the fall semester of their freshman year whenever possible, although with careful planning it is possible to complete the physics major with a later start. Physics 1110 is intended for students without strong backgrounds in mathematics or science who have a general interest in the subject. 1110 is not recommended as preparation for further study in a natural science, is not appropriate for engineering, premedical, or pre-dental students, and does not count toward the physics major or minor.

Intermediate Courses

2210, 2250, 2250W, 2260, 2260W, 2270, 2290, 2237, 2660, 3200, 3207, 3600

The intermediate-level courses cover the major subdisciplines of classical and modern physics.

Advanced Courses

2271, 2291, 3640, 3651, 3652, 3660, 3840, 3860, 3890, 4998

These courses are intended for physics majors in their junior and senior year and provide material supporting independent study or honors projects in physics.

Medical and Health Physics Courses

2805, 3125, 3645

Astronomy

Course descriptions begin on page 143.

Introductory Courses

1001, 1110, 1110L, 1111, 1501, 1501L, 1502, 1502L, 1601, 1601L, 1602, 1602L, 1901, 1902

The intermediate-level courses cover the major subdisciplines of classical and modern physics.

Advanced Courses

2271, 2291, 3640, 3651, 3652, 3660, 3840, 3860, 3890, 4998

These courses are intended for physics majors in their junior and senior year and provide material supporting independent study or honors projects in physics.

Medical and Health Physics Courses

2805, 3125, 3645

Astronomy

Course descriptions begin on page 143.

Introductory Courses

1001, 1110, 1110L, 1111, 1220

Intermediate Courses

2110, 2130, 2220, 2600, 3000

Advanced Courses

3600, 3700, 3800, 3900, 3840, 3860, 4998

Political Science

Chair David E. Lewis
Associate Chair Jonathan T. Hiskey

Director of Undergraduate Studies Carrie A. Russell

Director of Graduate Studies Jonathan T. Hiskey


Visiting Distinguished Professor Jon Meacham

Professors Larry M. Bartels, William James Booth, Joshua D. Clinton, John G. Geer, Marc J. Hetherington, Cindy D. Kam, David E. Lewis, Bruce I. Oppenheimer, Edward Rubin, Mitchell A. Seligson, Carol M. Swain, Elizabeth J. Zechmeister

Associate Professors Brooke A. Ackerly, Brett V. Benson, Giacomo Chiozza, Jonathan T. Hiskey, Alan Wiseman

Assistant Professors Katherine B. Carroll, Amanda Clayton, Suzanne Globetti, Brenton Kenkel, Kristin Micheltitch, Cecilia Mo, Emily Nacol, Efrén O. Pérez, Hye Young You

Senior Lecturer Carrie A. Russell

Lecturers J. Tyson Chatagnier, Jungmoo Woo

The Department of Political Science is oriented toward both teaching and research and has multiple missions. First, it offers a balanced curriculum for undergraduates and graduate students to study the art and science of politics. Second, it offers training for students preparing to become professionals in political science and other fields. Third, it exists as a research faculty seeking new knowledge about government and politics.

Many members of the faculty have national and international reputations in their fields of scholarship. These research and teaching interests vary widely, from political leadership to the comparison of new and old democratic governments, issues of political economy, and ethical questions about politics.

Political science majors may participate in independent study, directed study, selected topics seminars, first-year seminars, the Honors Program, and internships. Average class size is close to thirty—small classes make personal contact with the faculty relatively easy. Students participate in the governance of the department through the Undergraduate Political Science Association, and may qualify for membership in Pi Sigma Alpha, the national political science honorary society.

Note: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Political Science

Students majoring in political science are required to complete a minimum of 30 credit hours of work, distributed as follows:

Political Science 1110, 1101, 1102, 1103 or 1150 6
Political Theory (2202, 2203, 2205, 2207, 2207W, 2208, 2209, 3253, 4257, 3258, 2262, 3264W, 2270, 3271, 3896) 3
Comparative Politics (2210, 3211, 2213, 2215, 2216, 3217, 2219, 2223, 3228, 2230, 3235, 2236, 4238, 2270, 3272W, 3894) 3
International Politics (3211, 2221, 2222, 2223, 2225, 2226, 3228, 3229, 236, 2270, 3272W, 2273, 2274, 3275, 4277, 3895) 3
American Government and Politics (2240, 3241, 2243, 3244, 2245, 3247, 3249, 3250, 2251, 3252, 3253, 3254, 2255, 2256, 2259, 3260, 2262, 2265, 2266, 2267, 3268, 2270, 3893)  3
Electives (Any 2000, 3000, or 4000-level course listed above; 3897; one additional 1100-level course, including 1111; up to 6 credit hours of 3882, 3883, 3851, 3852, 3841, 3842, 4998, 4999 combined)  12

Minimum credit hours: 30

In order to graduate with a political science major, students must take a brief exam within the subfield in which they are most interested during their senior year. Students are to take this exam in the fall of their senior year (students who are on leave or are studying abroad during the fall semester of their senior year should schedule the exam upon their return to campus). The exam is not graded, and no grade will appear on the student's transcript. The purpose of the exam is to ascertain the extent to which political science majors are retaining core aspects of the political science curriculum.

In meeting the above requirements, students must develop a specialty within one of the four subfields of Political Theory, Comparative Politics, International Politics, or American Government by taking the introductory, 1000-level course in that subfield, and at least three 2000-level courses in that subfield. It is recommended that one of those 2000-level courses in the subfield selected by each major should be a seminar.

In meeting the above requirements, students desiring African American emphasis in a program of concentration should consider courses in the following group: 2240, 2255, 2265, 2266. They may also choose to elect the following courses at Fisk University: Political Science 406 (African Political Systems), 245 (Afro-American Political Thought), and 254 (Politics in the Black Community).

Graduate Courses. Qualified undergraduates may enroll in graduate courses with the consent of their adviser, the course instructor, and the Graduate School. Undergraduate applicants to enroll in graduate courses need to comply with rules provided under the heading Undergraduate Enrollment in Graduate Courses in this catalog on p. 96.

Honors Program
To enter the program, students should have completed all but 6 credit hours of the AXLE requirements, and have a minimum overall GPA of 3.6. They should also have a minimum GPA of 3.6 in all the political science courses they have taken up to the point at which they enter the Honors Program. They must have exhibited to the department additional evidence of an ability to do independent work. Finally, they must be nominated by the director of the undergraduate studies program.

In addition to requirements set by the College of Arts and Science, the following requirements must be met in order for honors in political science to be awarded:

1. 30 credit hours in political science, as well as all of the requirements for political science majors.
2. 3.6 grade point average in all political science courses, and a 3.6 average in courses that count toward honors in political science.
3. Completion of an honors thesis, under the direction of a faculty adviser. Students will enroll in Senior Honors Research (4998 and 4999), during the semester(s) when they work on the honors thesis (at least 3 credit hours each).
4. An oral exam on the honors thesis in the last semester of the senior year.

Students in the Honors Program are encouraged to take PSCI 2270 before they enter or during their first semester in the Honors Program.

A three-member Honors Committee will be appointed to administer each student's program. Students should submit the names of a faculty adviser and the other two members of the committee to the director of the Honors Program as soon as possible after they are accepted into the Honors Program. The committee will administer the oral examination, after which it will also decide whether the student will receive honors or highest honors. Successful candidates are awarded honors or highest honors in their field, and this designation appears in the Commencement program and on their diplomas.

Minors in Political Science
The Department of Political Science offers three minors, which are detailed below. Each consists of 18 credit hours (one introductory-level course and five upper-level courses). One of these options may be chosen:

**Political Theory**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1103</td>
<td>3</td>
</tr>
<tr>
<td>Any five of the following: 2203, 2205, 2207, 2207W, 2208, 2209, 3253, 4257, 3258, 2262, 3264W, 2270, 3271</td>
<td>15</td>
</tr>
</tbody>
</table>

**World Politics**

A student may stress comparative politics or international politics or may mix the two in this minor.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1101 or 1102</td>
<td>3</td>
</tr>
<tr>
<td>Any five of the following: Comparative Politics: 2210, 3211, 2213, 2215, 2216, 3217, 2219, 2223, 3228, 2230, 3235, 2236, 4238, 2270, 3272W, 3894, Fisk Political Science 406 International Politics: 3211, 2221, 2222, 2223, 2225, 2226, 3228, 3229, 2236, 2270, 3272W, 2273, 2274, 3275, 4277, 3895</td>
<td>15</td>
</tr>
</tbody>
</table>

**American Politics**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1100 or 1150</td>
<td>3</td>
</tr>
<tr>
<td>Any five of the following: 2222, 2240, 3241, 2243, 3244, 2245, 3247, 3249, 3250, 2251, 3252, 3253, 3254, 2255, 2259, 3260, 2262, 2265, 2266, 3268, 3270, 3893</td>
<td>15</td>
</tr>
</tbody>
</table>

Licensure for Teaching

Candidates for teacher licensure in political science at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

Course descriptions begin on page 189.
Psychology

CHAIR René Marois
DIRECTOR OF UNDERGRADUATE STUDIES Jo-Anne Bachorowski
DIRECTOR OF GRADUATE STUDIES Geoffrey Woodman
DIRECTOR OF CLINICAL TRAINING Bunni O. Olutunji
PROFESSORS Randolph Blake, Vivien A. Casagrande, Isabel Gauthier, Steven D. Hollon, Jon H. Kaas, Gordon D. Logan, Timothy P. McNamara, René Marois, Richard C. McCarty, Hector Myers, Thomas J. Palmeri, Sohee Park, Jeffrey D. Schall, Frank Tong, David Zald
ASSOCIATE PROFESSORS Jo-Anne Bachorowski, Denise Davis, Bunni C. Olutunji, David G. Schlundt, Andrew J. Tomarken, Geoffrey Woodman
ASSISTANT PROFESSORS Anita Disney, Joseph Franklin, Alexander Maier, Sean Polyn, Jennifer S. Trueblood
SENIOR LECTURERS Leslie D. Kirby, Elisabeth H. Sandberg, Adriane E. Seiffert, Leslie M. Smith

PSYCHOLOGY is the scientific study of brain, behavior, and cognitive processes. At Vanderbilt, the undergraduate program introduces students to the major areas of contemporary psychology: clinical science, human cognition and cognitive neuroscience, developmental psychology, neuroscience, and social psychology. Clinical science studies human personality, emotion, abnormal behavior, and therapeutic treatments. Human cognition and cognitive neuroscience includes the study of processes such as learning, remembering, perceiving environmental objects and events, and neural mechanisms underlying these processes. Developmental psychology examines human development from conception through adulthood, including cognitive, emotional, physical, and social aspects. Neuroscience studies the structure and function of the brain and how nerve cells process sensory information about the environment, mediate decisions, and control motor actions. Social psychology examines interpersonal and intergroup relations and the influence of social conditions on cognitive, emotional, and behavioral processes.

The Department of Psychology offers a general program of study for students who desire a broad background in contemporary psychology: clinical science, as well as an honors program. The department offers a wide variety of opportunities for undergraduates to gain research experience through active participation in faculty research projects. Such research experience is encouraged as a basic aspect of education in psychology.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/

Programs of Concentration in Psychology

General Program
PSY 1200
PSY 2100 or PSY-PC 2110 (Peabody)
PSY 2150
4 Distribution Courses*
5 Psychology Electives**
Total credit hours: 36

Honors Program
PSY 1200
PSY 2100 or PSY-PC 2110 (Peabody)
PSY 2150
4 Distribution Courses*
PSY 3980 and/or 3981 and both PSY 4998 and 4999
3 Psychology Electives
Students who only take one semester of PSY 3980 or 3981 will need to take an additional elective course to fulfill their 42 credit hours.

Total credit hours: 42

Honors Program. The Honors Program is a two-year program that offers qualified majors the opportunity to conduct research projects in collaboration with faculty members. This research culminates in the writing and public presentation of a senior thesis.

The Honors Program offers unusual opportunities for interested and qualified students, including special seminars and individual research projects. The program should substantially aid those intending to do graduate work.

The program requires two years of honors research, and participation in the Honors Seminars, PSY 3980 and/or 3981 and both PSY 4998 and 4999 (at least 9 credit hours total). Under special circumstances (e.g., a semester abroad or student teaching), students may enroll in only three semesters of the Honors Seminars—provided they can complete the research project by extra work during three regular semesters and/or a summer, and provided this arrangement is acceptable to the faculty mentor and to the director of the Honors Program. Students who only take one semester of PSY 3980 or 3981 will need to take an additional elective course to fulfill their 42 credit hours.

Students who are majoring in psychology may apply to the Honors Program at the end of their sophomore year if they have a cumulative grade point average of at least 3.3, both overall and in all courses that count toward the psychology major. Students must also find a faculty mentor who is willing to sponsor them in the program. Students who complete the program successfully and have a final cumulative and major grade point average of 3.3 or higher will receive honors or highest honors in psychology.

* Distribution Courses
(at least 4 of the following 5 courses are required)
The following courses provide grounding in core content areas of experimental psychology.

PSY 3100, 3120, 3110; NSC 2201; PSY-PC 1250 (Peabody)

** Electives
Any course in the Department of Psychology (A&S) or the Department of Psychology and Human Development (Peabody) that is not being used to meet another psychology requirement can be used as an elective.

Comprehensive Exam
In order to graduate with a psychology major, students must take a comprehensive exam during their senior year. Students are expected to take the comprehensive exam in the fall of their senior year (students who are on leave or are studying abroad during the fall semester of their senior year should schedule to take the exam upon their return to campus). The exam is not graded, and no grade will appear on the student's transcript. The purpose of the exam is to test the extent to which psychology majors are retaining core aspects of the psychology curriculum.
Minor in Psychology

The minor in psychology is intended for those students who want to gain an overview of the science of psychology and its methodological foundations, and to sample more advanced work in the areas of specialization within psychology at Vanderbilt.

Students are required to complete 18 credit hours of course work inside the department, distributed as follows:

- Psychology 1200  3
- Psychology 2150 and either 2100 or PSY-PC 2110 (Peabody)  6
- Two courses from the list of Distribution Courses specified for the major  6
- One psychology elective as defined in the psychology major  3

Total credit hours: 18

Independent/Directed Study courses (3850/3850 and 3840/3860) may not be counted as the elective course for minors.

1200 (or 1111, sections 1, 2, and 3) is prerequisite for all other psychology courses except 1111. PSY 1111 – 01, 02, 03 – General Psychology, First-Year Writing Seminar – covers the same material as PSY 1200 and also serves as the introductory prerequisite for all 2000-level courses in psychology. Credit cannot be earned for both PSY 1200 and PSY 1111 – 01, 02, or 03. PSY 1111– sections 4 and higher – are First-Year Writing Seminars on special topics in psychology. PSY1111 – sections 4 and higher – do not replace PSY 1200 as a prerequisite for all 2000-level courses in psychology and may be taken in conjunction with PSY 1200.

Note: NSC courses 2201 (Neuroscience), 3235 (Biological Basis of Mental Disorders), 3269 (Developmental Neuroscience), 3270 (Computational Neuroscience), 3272 (Structure and Function of the Cerebral Cortex), and 3274 (Neuroanatomy) count as courses in the Department of Psychology (A&S). See the Neuroscience course listings for descriptions of these classes.

Course descriptions begin on page 193.

Public Policy Studies

DIRECTOR Katherine Carroll (Political Science)
ADVISORY BOARD Kathryn Anderson (Economics), Jay Clayton (English), Kevin Davis (Philosophy), David Lewis (Political Science)

Affiliated Faculty
VISITING PROFESSOR Bill Purcell
ASSOCIATE PROFESSOR Zdravka Tzankova (Sociology)
SENIOR LECTURER Carrie A. Russell (Political Science)

STUDENTS may choose an interdisciplinary program of concentration in public policy studies. The major requires students to take courses in government, ethics, and social science. In addition, students develop analytical skills through course work in research methodology, statistics, and economics. Each student also chooses a policy track, an area of public policy they want to explore in depth.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Public Policy Studies

The interdisciplinary major requires 39 credit hours of course work divided into two parts: 24 credit hours of required core courses and 12 credit hours of elective courses focusing on one substantive policy area. A student contemplating a major in public policy studies must take the following prerequisites: PSCI 1100, 1101, 1102, or 1150; ECON 1010 and 1020. Individual courses included in the program may specify additional prerequisites. If one of the required courses is not offered, students may substitute with the permission of their major adviser.

I. Core Courses (24 credit hours)

1. General (3 credit hours): HOD 2700, Public Policy; PSCI 2256, Politics of Public Policy; or PSCI 2255, Introduction to Public Policy.

2. Research Methods (3 credit hours): HOD 2500, Systematic Inquiry; PSCI 2270, Conducting Political Research; or SOC 3002, Introduction to Social Research.


4. Ethics (3 credit hours): PSCI 3253, Ethics and Public Policy.

5. Public Finance (3 credit hours): HODE 3225, Introduction to the Public Finance of Education; or ECON 3200, Public Finance (prerequisite ECON 3010).

6. Government (3 credit hours): any upper-level Political Science course excluding 3253, 2270, 2255, and 2256.

7. Economics (3 credit hours): any upper-level Economics (ECON) course except 3200.

8. Society and Culture (3 credit hours): any upper-level Sociology (SOC) course, excluding 3002 and 3003; or any Anthropology (ANTH) course above 2602, excluding language classes.

II. Policy Track (12 credit hours)

The track is intended to allow students to go more deeply into one area of public policy (for example: health policy, STEM policy, education policy, criminal justice policy). Each student is free to choose and design his or her own track with the advice and approval of the program director. Classes should generally be upper-level and should represent at least two disciplines.

III. Capstone Seminar (3 credit hours)

PPS 4960, Senior Seminar on Research in Public Policy, is required of all Public Policy majors and is taken during their last year.

Total: 39 credit hours

Course descriptions begin on page 194.
Program of Concentration in Religious Studies

31 credit hours. The program of concentration in religious studies seeks to introduce students to the rich diversity of religious traditions in the world (breadth component) and to build depth of study in areas of specific interest to the student (depth component). In addition, the curriculum includes instruction in the range of theories and methods used to approach religious traditions academically (tools of the discipline component). The student will then be able to pursue individual interests (electives).

A maximum of two courses (6 credit hours) outside of the department may count toward the major. Of these, one course (3 credit hours) outside of the department may count toward the Depth Component. A foreign language course approved as an elective is not subject to the two-course (6 credit hours) limit. No course may be used to satisfy more than one of the four components of the major.

1. Breadth Component (9 credit hours)

Ensures a familiarity with the rich diversity of religious traditions in the world.

a. Encountering religious diversity. 3 credit hours. RLST 1010. An introduction to the field of religious studies and select traditions.

b. Introductory course in African or Western traditions. 3 credit hours. Introductory course in a religious tradition originating in the Mediterranean, Middle East, Africa, or the Americas (including but not limited to Judaism, Christianity, Islam, Egyptian religious traditions of Sub-Saharan Africa, Native American traditions). RLST 1100, 1200, 1208, 1309, 1500. An appropriate First-Year Writing Seminar RLST 1111 may count with the approval of the director of undergraduate studies in Religious Studies.

c. Introductory course in Asian or non-Western traditions. 3 credit hours. Introductory course in a religious tradition originating in Asia or the Pacific (including but not limited to Hindu and Buddhist traditions and those religious traditions originating in East and South Asia). RLST 1637, 1700, 1710, 2644, 2664. An appropriate First-Year Writing Seminar RLST 1111 may count with the approval of the director of undergraduate studies in Religious Studies.

2. Depth Component (9 credit hours)

The Depth Component is organized according to three tracks: traditions, geographies, and theories and themes. The introductory course taken to satisfy the breadth requirement cannot be double-counted in this category. The student must choose 9 credit hours from one of the following tracks. An appropriate First-Year Writing Seminar RLST 1111 may count toward any track with the approval of the director of undergraduate studies in Religious Studies.

a. Traditions. Allows students to focus on a particular religious tradition or related cluster of traditions that may transcend geographic limitations.

Buddhist Traditions: RLST 1700, 1710, 1637, 2644, 3669, 3670W, 3749, 3753, 375; ASIA 3633

Christian Traditions: RLST 1309, 1330W, 1820, 2310, 3119, 3304W, 3306, 3312, 3313, 3316; HIST 1760, 2250

Hindu Traditions: RLST 2664, 4665, 4666

Indigenous Traditions: RLST 1637, 3178, 3890, 4774

Islamic Traditions: RLST 1500, 2461, 3561, 4551, 4552, 4554, 4562; ARA 3301; HIST 1930, 2140, 2190

Jewish Traditions: RLST 1200, 1208, 2210, 2210W, 3270; JS 1002, 1002W, 1200, 2300, 2330, 2620; PHIL 2102

b. Geographies. Gives students the option of focusing on regional cultures, histories, and religions, as well as relationships between religious traditions within a specific region.

Africa, West Asia, and the Mediterranean: RLST 1208, 1330W, 1500, 2461, 2471, 2472, 3312, 3890, 4562; ARA 3301; HIST 1190, 2190

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.
The Americas: RLST 1100, 1190W, 3119, 3142, 3178, 3304; HIST 2530
East Asia: RLST 1700, 1710, 3747, 3749, 3753, 3670W, 3775, 4774; ASIA 3633
South/Southeast Asia: RLST 1500, 1637, 2644, 2664, 3561, 3669, 3670W, 4665, 4666
c. **Theories and Themes.** Enables students to focus on theoretical, scientific, or thematic questions that may cross both traditional and geographic lines.

**Religion in the literary and visual arts:** RLST 2881, 2940, 3669, 3775, 4665, 4774, 4939

**Theories of religion, science, and/or psychology:** RLST 1820, 2472, 3079, 3940, 3941, 4834, 4835, 4837; JS 2330; ANTH 3141

3. **Tools of the Discipline Component (4–6 credit hours)**

Key issues in the study of religion and a formal introduction to the theories and methods in the academic study of religion.

- **Theory and Method.** 3 credit hours. RLST 4960W "Approaches to the Academic Study of Religion." Recommended for juniors, but may be taken earlier with permission of director of undergraduate studies in Religious Studies.
- **Majors Colloquium.** 1 credit hour (may be taken a total of three times). RLST 4970 "Majors Colloquium." Initiation into the range of professional activities in the study of religion from the craft of research to the production of papers, articles, and theses, coupled with targeted theoretical concerns relevant to the research of the students enrolled in that particular class.

4. **Electives (9 credit hours)**

- Electives may be drawn from any of the courses listed under the three components of the major (Breadth, Depth, and Tools of the Discipline). Students may elect to deepen an area of study or they may build additional breadth in other traditions, regions, or themes.
- One relevant language course (at least 3 credit hours) may count, with the approval of the director of undergraduate studies in Religious Studies. This course is not subject to the two-course (6 credit hours) limit on courses taken outside the department.

**Honors in Religious Studies**

The honors thesis provides an opportunity for highly motivated and exceptionally capable students to engage in independent work on a topic in religious studies. Honors theses require original research with primary sources and extensive use of relevant secondary scholarship, both with regard to the narrowly defined topic of the thesis and on the larger theoretical and methodological issues in the academic study of religion. 3.3 GPA in courses toward the major and cumulative 3.3 GPA are required for entry and must be maintained for completion of honors. Students work closely with faculty members in designing, researching, and writing a thesis beginning in the second semester of their junior year in order to present the thesis at the end of the second semester of their senior year, culminating in a final oral examination on the thesis.

- **Research and Writing.** 6 credit hours. RLST 4998–RLST 4999 "Seniors Honors Thesis." RLST 4998 and RLST 4999 count as 6 of the 9 credit hours of the elective component of the major.
- **Majors Colloquium – Co-requisite with RLST 4999.** RLST 4970 "Majors Colloquium" in the second semester of senior year, in which candidate must present results of research. Honor program candidates shall take 4970 co-requisite with 4999. Initiation into the range of professional activities in the study of religion from the craft of research to the production of papers, articles, and theses, coupled with targeted theoretical concerns relevant to the research of the students enrolled in that particular class.

**Minor in Religious Studies**

18 credit hours. The minor will introduce the rich diversity of religious traditions (Breadth component), initiate depth in at least one tradition (Depth component), and encourage further exploration of different perspectives or traditions through electives. A maximum of one course (3 credit hours) from outside the department may count if it is included in any of the three components of the major (Breadth, Depth, and Tools of the Discipline). No course may be used to satisfy more than one of the three components of the minor.

1. **Breadth Component (9 credit hours)**

Ensures a familiarity with the rich diversity of religious traditions in the world.

- **Encountering religious diversity.** 3 credit hours. RLST 1010 Encountering Religious Diversity. An introduction to the field of religious studies and select traditions.
- **Introductory course in African or Western traditions.** 3 credit hours. Introductory course in a religious tradition originating in the Mediterranean, Middle East, Africa, or the Americas (including but not limited to Judaism, Christianity, Islam, Egyptian religions, traditions of Sub-Saharan Africa, Native American traditions). RLST 1100, 1200, 1208, 1309, 1500. An appropriate First-Year Writing Seminar RLST 1111 may count with the approval of the director of undergraduate studies in Religious Studies.
- **Introductory course in Asian or non-Western traditions.** 3 credit hours. Introductory course in a religious tradition originating in Asia or the Pacific, including but not limited to Hindu and Buddhist traditions and those religious traditions originating in East and South Asia. RLST 1637, 1700, 1710, 2644, 2664. An appropriate First-Year Writing Seminar RLST 1111 may count with the approval of the director of undergraduate studies in Religious Studies.

2. **Depth Component (3 credit hours)**

- **Deepening the study of one tradition.** 3 credit hours. The student must choose one of the two religious traditions used to meet the introductory course Breadth Component to delve further into that religion.
3. Electives (6 credit hours)

a. Electives may be drawn from any of the courses listed under the three components of the major (Breadth, Depth, and Tools of the Discipline). Students may elect to deepen an area of study or they may build additional breadth in other traditions, regions, or themes.

b. With the permission of the director of undergraduate studies in Religious Studies and a minimum 3.3 GPA in the minor, the student may take the Majors Colloquium RLST 4970.

Minor in Islamic Studies

20 credit hours. Students complete a required minimum of 20 credit hours from the list below, which must include Arabic 1102, Elementary Arabic; Religious Studies 1500, Introduction to Islam; and Religious Studies 4554, The Qur’an and Its Interpreters. The maximum number of credit hours to be counted toward the minor from Arabic language courses is 9. No credit hours will be counted for Arabic 1101.

ARABIC: 1102, Elementary Arabic; 2201–2202, Intermediate Arabic; 3101–3102, Advanced Arabic; 3201, Media Arabic; 3301, Arabic of the Qur’an and Other Classical Texts.


HISTORY: 1111, First-Year Writing Seminar (when related to Islamic history or culture as determined by the director of undergraduate studies); 1160, Modern South Asia; 1190, A History of Islam; 1200, The Arab Spring; 1270, Sub-Saharan Africa: 1400–1800; 1280, Africa since 1800: The Revolutionary Years; 2140, The Mughal World; 2150, India and the Indian Ocean; 2155, Muhammad and Early Islam; 2170, Islam and the Crusades; 2190, Last Empire of Islam; 3150, Cities of Europe and the Middle East; 3210, Muslims, Christians, and Jews in Medieval Spain.

JEWISH STUDIES: 2600, Islam and the Jews.

PHILOSOPHY: 2102, Medieval Philosophy; 3006, Islamic Philosophy.

POLITICAL SCIENCE: 2203, Middle East Politics; 3896, Selected Topics (when related to Islamic politics or culture as determined by the director of undergraduate studies).

RELIGIOUS STUDIES: 1500, Introduction to Islam; 1111, First-Year Writing Seminar (when related to Islamic religion or culture as determined by the director of undergraduate studies); 4551, Islamic Mysticism; 4552, Reformers of the Islamic Tradition; 4554, The Qur’an and Its Interpreters; 4562, Culture, Religion, and Politics of the Arab World; 4666, Devotional Traditions of South Asia: Hindu, Muslim, Sikh; 4992, Advanced Seminar in Islamic Tradition.

Course descriptions begin on page 194.

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**Scientific Computing**

**DIRECTORS** Robert E. Bodenheimer (Computer Science), Thomas J. Palmeri (Psychology), David A. Weintraub (Physics and Astronomy)

**Affiliated Faculty**

**PROFESSORS** Ralf Bennartz (Earth and Environmental Sciences), Gautam Biswas (Electrical Engineering and Computer Science), Mario Crucini (Economics), Peter T. Cummings (Chemical and Biomolecular Engineering), Mark N. Ellingham (Mathematics), David Furbish (Earth and Environmental Sciences), Gordon D. Logan (Psychology), Terry P. Lybrand (Chemistry and Pharmacology), Charles F. Maguire (Physics), Clare M. McCabe (Chemical and Biomolecular Engineering), Michael I. Miga (Biomedical Engineering), Mark Neamtu (Mathematics), Thomas J. Palmieri (Psychology and Neuroscience), Antonis Rokas (Biological Sciences and Biomedical Informatics), Jeffrey D. Schall (Psychology and Neuroscience), Larry Schumaker (Mathematics), Paul Sheldon (Physics), David A. Weintraub (Astronomy), Robert Weller (Electrical Engineering)

**ASSOCIATE PROFESSORS** Andreas A. Berlind (Astronomy), Robert E. Bodenheimer (Computer Science), Guilherme Gualda (Earth and Environmental Sciences), Kelly Holley-Bockelmann (Astronomy), Shane Hutson (Physics), Haoxiang Luo (Mechanical Engineering), Jens Meiler (Chemistry), Kalman Varga (Physics), Greg Walker (Mechanical Engineering), Steve Wernke (Anthropology)

**ASSISTANT PROFESSORS** Tony Capra (Biological Sciences), Bennett Landman (Electrical Engineering), Sean Polyn (Psychology and Neuroscience)

**ADJUNCT ASSISTANT PROFESSOR** William R. French (Chemical and Biomolecular Engineering)

**ASSOCIATE PROFESSOR OF THE PRACTICE** Gerald H. Roth (Computer Science)

THE College of Arts and Science and the School of Engineering offer an interdisciplinary minor in scientific computing to help students in the physical, biological, and social sciences as well as engineering acquire the ever-increasing computational skills that such careers demand. Students who complete this minor will have a toolkit that includes programming skills useful for simulating physical, biological, and social dynamics as well as an understanding of how to take advantage of modern software tools to extract meaningful information from small and large data sets.

Computation is now an integral part of modern science. Computer simulation allows the study of natural phenomena impossible or intractable through experimental means. Astronomers studying the formation of massive black holes, neuroscientists studying brain networks for human memory, economists studying effects of regulation on market dynamics, and biochemists studying the three-dimensional structure of proteins are united in many of the computational challenges they face and the tools and techniques they use to solve these challenges.

Students pursuing the scientific computing minor are taught techniques for understanding such complex physical, biological, and social systems. Students are introduced to computational methods for simulating and analyzing models of complex systems, to scientific visualization and data mining techniques needed to detect structure in massively large multidimensional data sets, to high-performance computing techniques for simulating models on computing clusters with hundreds or thousands of parallel, independent processors and for analyzing terabytes or more of data that may be distributed across a massive cloud or grid storage environment.
The scientific computing minor at Vanderbilt is supported by faculty and includes students from a wide range of scientific and engineering disciplines. While the content domain varies, these disciplines often require similar computational approaches, high-performance computing resources, and skills to simulate interactions, model real-life systems, and test competing hypotheses. Scientific computing embodies the computational tools and techniques for solving many of the grand challenges facing science and engineering today.

The minor in scientific computing prepares students for advanced course work that combines computational approaches with a substantive area of science or engineering. It prepares students for directed or independent study with a faculty member on a research project. It prepares students for advanced study in graduate school. It provides skills that will be attractive to many employers after graduation.

The minor in scientific computing is distinct from the minor in computer science. Scientific computing uses computation as a tool to solve scientific and engineering problems in research and application. It is more focused on simulation, numerical techniques, high performance computing, and higher-level methods than the minor in computer science, which is focused on the algorithms, systems, and technologies that enable such methods to be developed and employed.

Details of the minor requirements are provided in the School of Engineering section of the catalog, and are also available at vanderbilt.edu/scientific_computing.

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**Sociology**

CHAIR Larry W. Isaac
DIRECTOR OF UNDERGRADUATE STUDIES David J. Hess
DIRECTOR OF GRADUATE STUDIES Mariano Sana
PROFESSORS EMERITI Jack P. Gibbs, Walter R. Gove, Gary F. Jensen, Ronnie Steinberg, R. Jay Turner
ASSISTANT PROFESSORS Tyson Brown, Joshua Murray, Evelyn Patterson, Ljun Song, LiTonya Trotter
SENIOR LECTURERS Joe Bandy, Rosevelt Noble
LECTURERS Amy Cooter, Terrie Spetalnick, Laurie Woods

**SOCILOGY**, the study of social consensus, conflict, and change, offers students a better understanding of society and the meaning of social interaction. The department's courses cover a wide range of sociological themes including arts, culture, religion; cities, states, and political economy; deviant behavior and social control; gender and sexuality; health and the life course, race, ethnicity, and immigration; social movements, politics, and power; environment and society; and work, labor, and occupations. Undergraduate courses in sociology prepare students for graduate work or provide further preparation for a career in law, medicine, business, the ministry, nursing, social work, civil service, or teaching. Two major programs are available. Students may declare only one of the majors offered by the Department of Sociology; double majors within the department are not permitted.

**NOTE:** New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

**Program of Concentration in Sociology**

Students majoring in sociology are required to complete 33 credit hours of work in sociology (36 credit hours for students in the Honors Research Track). The major consists of five types of courses as listed below: introduction, theory, research skills, core areas, and electives.

Course work for the major is distributed as follows:

**Program I (Standard Track)**

A total of 33 credit hours as follows:

1. **Introduction:** Sociology 1010, 1010W, 1020, or 1020W
2. **Theory:** Sociology 3001
3. **Research Skills:** Sociology 3002 (or HOD 2500 for students who double major in sociology and HOD)
4. **Core Areas**

   Students must take at least one course in three of the four core areas listed below. A course cannot be used to satisfy more than one requirement in the major.

   **Culture, Institutions, and Socialization**
   - Sociology 3201, 3202, 3203, 3204, 3205, 3206, 3221, 3222, 3223, 3224, 3231, 3232, 3233

   **Health, Environment, Population, and Migration**
   - Sociology 3301, 3302, 3303, 3304, 3311, 3312, 3313, 3314, 3315, 3316, 3321, 3322; Environmental Studies 4101; Medicine, Health, and Society 2310, 2430

   **Politics, Law, and Conflict**
   - Sociology 3233, 3601, 3602, 3603, 3604, 3605, 3611, 3612, 3613, 3614, 3615, 3616, 3621, 3622, 3623, 3624; Jewish Studies 2560

   **Race, Ethnicity, and Gender**
   - Sociology 3601, 3615, 3616, 3701, 3702, 3704, 3711, 3722, 3723, 3724; Jewish Studies 2400, 2450

5. **Electives**

Any 5 sociology courses not used to satisfy the above requirements. SOC 2100 or its equivalent may be counted toward the electives. (Equivalent courses are ECON 1500 or 1510 or MATH 1011 or 2820. Students who double major in sociology and psychology or in sociology and the Peabody majors of human and organizational development, child development, cognitive studies, or child studies may also choose from PSY 2100 or PSY-PC 2110.) Electives may also include only one of the following 1000-level sociology courses: Sociology 1041, 1041W, or 1111. No other 1000-level sociology course may be counted toward the electives requirement of the major except by permission of the director of undergraduate studies. The Department of Sociology advises students to group their elective sociology courses in a cluster of advanced concentration electives to be selected with the student’s adviser. See the director of undergraduate studies or the departmental website for suggested clusters: as.vanderbilt.edu/sociology/undergraduate-major.
Program II (Honors Research Track)

A total of 36 credit hours as follows:

The Honors Research Track offers superior majors in sociology the opportunity to pursue intensive work through an independent research project. Students interested in pursuing the Honors Research Track in Sociology should contact the director of undergraduate studies for more information. To be considered for the Honors Research Track in Sociology, a student must have a minimum cumulative GPA of 3.3 and a minimum GPA of 3.3 for courses that count toward the sociology major. Students who are recommended for the program by the director of undergraduate studies will typically begin the program in the first semester of their junior or senior year.

The Honors Research Track in Sociology requires:

1. Successful completion of requirements 1–4 in Program I, for a total of 18 credit hours.
2. Successful completion of the statistics requirement: SOC 2100 or its equivalent (defined in requirement 5 of Program I).
3. Completion of 12 credit hours of elective courses. The elective requirement is counted toward the electives. Electives may include only one of the following 1000-level sociology courses: Sociology 1041, 1041W, or 1111. No other 1000-level sociology course may be counted toward the electives requirement of the major except by permission of the director of undergraduate studies. If students take more than 6 credit hours of SOC 4981, the additional credit hours (7–12) are counted toward the elective courses.
4. Successful completion of at least two semesters of SOC 4981 (Honors Research). The first semester of 4981 (Honors Research) is a 3 credit hour seminar in which students develop the literature review and research plan for the honors thesis. In the second semester of 4981 (Honors Research), also for 3 credit hours, students must complete the research and data collection, data analysis, and initial write-up of results of the thesis. Students may elect to take a third or fourth semester of 4981 during their senior year, when they may, for example, work on revisions of the project and/or on publication. Students who begin the Honors Track in their senior year may also take more than 6 credit hours of 4981, up to a maximum of 12 credit hours.
5. Successful defense of the completed thesis through an oral defense attended by the chair and reader of the thesis; this oral defense typically takes place during the second semester of the student’s senior year. In order to earn honors in sociology, students must successfully complete and defend an honors thesis before graduation.

Comprehensive Exam

In order to graduate with a sociology major, students must take a comprehensive exam during their senior year. The exam is not graded, and no grade will appear on the student’s transcript. The purpose of the exam is to test the extent to which sociology majors are retaining core aspects of the sociology curriculum.

Program of Concentration in Environmental Sociology

Environmental sociology is the study of the relationship between modern societies and the environment at a variety of scales, from households to global relations. It includes issues such as public understanding of environmental issues, the environment and inequality, environmental social movements and social change, and analysis of environmental reform and adaptation.

Environmental sociology is different from environmental science, which is based in the natural sciences, and environmental studies, which includes courses from a wide range of disciplines, including engineering and the humanities. The department’s program in environmental sociology includes a solid introduction to sociology and sociological methods as well as foundation requirements in environmental science. The program prepares students for careers in government, the law, management, research and teaching, and the nonprofit sector.

Students majoring in environmental sociology are required to complete 33 credit hours of course work. The major consists of four types of courses: foundation social science courses, foundation environmental science courses, research skills, and environmental sociology courses.

Program I (Standard Track)

A total of at least 33 credit hours as follows:

1. Foundation Courses in Sociology
   - SOC 1020 or 1020W
   - SOC 3001
   - 6 credit hours

2. Foundation Courses in Environmental Sciences
   - At least 6 credit hours
   - Two courses from EES 1510, 1030, 1070, 1080, 1140, 1111, 2110, 2510, 3220, 4680, 4750, 4820; at least one of which must address climate-related issues (EES 1080, 1140, 2110, 2510, 3220, 4680, 4820, or another EES course as approved by the director of undergraduate studies of Environmental Sociology).
   - Requires EES 1510 and the lab EES 1510L as prerequisites.
   - **1111 requires permission of the director of Environmental Sociology.

3. Research Skills
   - 6 credit hours
   - SOC 2100 (or other statistics course approved by the director of undergraduate studies of Environmental Sociology) followed by or concurrent with SOC 3002 or HOD 2500 for those majoring in HOD.

4. Environmental Sociology Core
   - 15 credit hours
   - 15 credit hours selected from the following:
   - SOC 3311, 3312, 3313, 3314, 3315, 3316, 3321, 3604, 3605, 3881, 4981, ENVS 4101
   - *As approved by the director of undergraduate studies of Environmental Sociology

Program II (Honors Research Track in Environmental Sociology)

A total of at least 36 credit hours as follows:

The Honors Research Track offers superior majors in environmental sociology the opportunity to pursue intensive work through an independent research project. Students interested in pursuing the Honors Research Track in Environmental Sociology should contact the director of undergraduate studies of Sociology for more information. To be considered for the Honors Research Track in Environmental Sociology, a student must have a minimum cumulative GPA of 3.3 and a minimum GPA of 3.3 for courses that count toward the environmental sociology major. Students who are recommended for the program by the director of undergraduate studies of Sociology will typically begin the program in the first semester of their junior or senior year.

The Honors Research Track in Environmental Sociology requires:

1. Successful completion of requirements 1 through 3 in the Standard Track.
2. At least 12 credit hours from requirement 4 in the Standard Track.
Minor in Sociology

The minor in sociology is intended for those students who want to gain an overview of the discipline and to sample some of the special lines of study in it.

Students are required to complete 18 credit hours of coursework inside the department, distributed as follows:

1. Sociology 1010, 1010W, or 1020, 1020W 3
2. Sociology 3001 3
3. Four courses, including at least one from three of the four core areas listed in above major 12

Total credit hours: 18

Licensure for Teaching

Candidates for teacher licensure in sociology at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

Course descriptions begin on page 199.

Spanish and Portuguese

The major consists of 30 credit hours in Spanish courses numbered 3301W and above. The distribution requirements are as follows:

1. Core requirements: 3301W, 3302, and 3303.
2. Literature: Nine credit hours from courses numbered 4400–4980 or 3835 or 3893.
3. Linguistics: Three credit hours from courses numbered 4300–4360 or 3892.
4. **Electives:** Nine credit hours from courses numbered 3320–3835 or 3891–4980. Students may substitute 3 credit hours of a language course in either Portuguese (1103 or higher) or Catalan (1103 or higher).

A more advanced composition course may be substituted for 3301W. A more advanced conversation course may be substituted for 3302. Spanish 3303 is the prerequisite for all literature courses offered by the department. Students must take Spanish 3301W, 3302, and 3303 in order to participate in most study abroad programs. Seniors are eligible to take one or two graduate-level courses (7000 and above) with the approval of the instructor and the chair of the department.

**Honors Program in Spanish**

Candidates for honors in Spanish who meet college and departmental requirements must complete 36 credit hours in Spanish courses numbered 3301W and above. Students satisfy the requirements of the 30-credit-hour major in Spanish, in which one of the required literature courses is either the undergraduate seminar, Spanish 4980 (3 credit hours), which may be taken during either the junior or senior year, or a graduate seminar (course numbered 7000–9520) approved by the adviser to the Honors Program, which may only be taken during the senior year. (If Spanish 4980 has not been available, it may, with permission of the adviser to the Honors Program, be substituted by an “enriched” undergraduate literature course in which the instructor assigns outside research and a second or longer term paper to an honors candidate.)

The remaining 6 credit hours of the honors major must consist of a senior honors thesis, which is completed during the senior year as independent study (Spanish 4980–4999) under the direction of a faculty adviser. Candidates must submit a proposal for the thesis to their prospective faculty adviser no later than the second semester of their junior year. The completed thesis must be submitted within the second semester of the senior year (deadlines are available from the department). An oral examination on the thesis and the general area of research, administered by a committee of the department, will follow.

**Minor in Spanish**

The minor in Spanish consists of a minimum of 18 credit hours. The specific requirements are as follows:

- **Spanish 3301W** (A more advanced composition course may be substituted) 3
- **Spanish 3302** (A more advanced conversation course may be substituted) 3
- **Spanish 3303** 3
- Three credit hours of advanced Spanish literature chosen from courses numbered from 4400–4980 or 3835 or 3893 3
- Six credit hours of electives chosen from Spanish courses numbered 3320–3835, 3891–4980 6

Total credit hours: 18

**Minor in Portuguese**

The minor in Portuguese consists of a minimum of 15 credit hours. The specific requirements are as follows:

- **Portuguese 2203** (Intermediate Portuguese; a more advanced language course may, subject to approval by the department, be substituted) 3

One of the following two courses: Portuguese 3301 (Portuguese Composition and Conversation) or Portuguese 3302 (Brazilian Pop Culture) 3

Portuguese 3303 (Introduction to Luso-Brazilian Literature) 3

At least one of the following two courses: Portuguese 4420 (Brazilian Literature through the Nineteenth Century) or Portuguese 4425 (Modern Brazilian Literature) 3

At least 3 additional credit hours selected from among the courses listed below (or a graduate course numbered 7000–9520 for qualified seniors; procedures may be found in the Academic Regulations section of the Undergraduate Catalog).

- Portuguese 4350 (Brazilian Culture through Native Material), 4420 (Brazilian Literature through the Nineteenth Century), 4425 (Modern Brazilian Literature), 3892 (Special Topics in Portuguese Language, Literature, and Civilization) 3

Total credit hours: 15

**Program of Concentration in Spanish and Portuguese**

This major focuses on the two dominant languages (Spanish and Portuguese) of the Iberian Peninsula and Latin America and their literatures and cultures. The basic requirement for this major is a minimum of 33 credit hours in Spanish and Portuguese. The distribution is as follows:

1. **Core requirements of Spanish 3301W, 3302, and 3303:**

2. At least two Spanish courses numbered between 3320–3375 or 4400–4980 or 3891 or 3893.

3. At least two of the following Portuguese courses: 3892, 4350, 4420, 4425, 7070, 7071, and 9520.

4. One additional elective to be chosen from the courses listed under area 2 and 3 above.

A student who studies abroad may be able to substitute similar culture or literature courses with the permission of the director of undergraduate studies.

**Program of Concentration in Spanish and European Studies**

Students pursuing the interdisciplinary major in Spanish and European studies combine their focus on Spanish language and literature with a study of modern Europe in its political, economic, and cultural diversity. Students may elect this interdisciplinary major, which requires a minimum of 42 credit hours of course work. A semester of study abroad in Spain is recommended. Course work for the major is distributed as follows:

**Spanish** (27 credit hours)

- Spanish language and literature core courses (9 credit hours): Spanish 3301W, 3302, and 3303 (a more advanced composition course may be substituted for 3301W; a more advanced conversation course may be substituted for 3302)
- Spanish culture and civilization (6 credit hours): Two of the following: Spanish 3320, 3325, 3360, 3365, 3891
- Spanish literature (6 credit hours): Two Spanish courses numbered from 4400–4980 or 3835 or 3893
- Elective (6 credit hours): Two additional Spanish courses that count toward the Spanish major. Students may substitute
Candidates for teacher licensure in Spanish at the secondary level should refer to the chapter on Licensure for Teaching in the Peabody College section of this catalog.

Catalan

Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.

Course descriptions begin on page 201.

Portuguese

Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language.

Course descriptions begin on page 146.

Spanish

Entering students should consult their advisers or the Department of Spanish and Portuguese for advice on placement. Students who have not studied Spanish in high school should begin their studies at Vanderbilt in Spanish 1100. Students with high school Spanish on their records must present a department placement test score in Spanish to be placed correctly. (See department website for more details.) Students with a score of 4 or 5 on the AP Spanish Language or Literature examination should register for Spanish 3301W (Intermediate Spanish Writing).

Note: Students may not earn credit for an introductory language course if they previously have earned credit for a higher-level course taught in that same language. In addition, students may not earn credit for an intermediate-level language course if they previously have earned credit for a higher-level course taught in that same language. Students who have earned Advanced Placement or International Baccalaureate credit in a foreign language will forfeit the test credit if they complete a lower-level course taught in that same language. Exception: Students who take Spanish 3301W do not forfeit credit for Spanish 3302.

Course descriptions begin on page 201.

Teacher Education

STUDENTS interested in preparing for licensure as early childhood, elementary, special education, or secondary school teachers should meet with Associate Dean Roger Moore, College of Arts and Science, as soon as possible to initiate discussion with appropriate personnel in teacher education.
Specific information on program requirements will be found under Licensure for Teaching in the Peabody College section of this catalog.

Early Childhood and Elementary Education

Students interested in preparing to teach early childhood or elementary school pupils major in a single discipline or an interdisciplinary program in the College of Arts and Science as well as in education at Peabody College.

Secondary Education

The College of Arts and Science and Peabody College offer teacher education programs leading to secondary school teacher licensure in the following fields:

- English
- Mathematics
- Science (Biological Sciences, Chemistry, Earth and Environmental Sciences, Physics)
- Social Studies (History and Political Science), Economics, Psychology, and Sociology may become additional endorsement areas for students who also have selected history or political science as an endorsement area.

Students major in an academic discipline in the College of Arts and Science and complete a second major in education at Peabody College.

Special Education

Students interested in preparing to teach children with special needs major in special education at Peabody College. Areas of teacher licensure available are mild and moderate disabilities, multiple and severe disabilities, visual impairment, hearing impairment, and early childhood special education.

On one level, the Department of Theatre helps the general liberal arts student develop reasoned standards of criticism and an understanding of the intimate correlation between the theatre and the society which it reflects, preparing Vanderbilt graduates for successful careers in theatre as well as other fields of interest. For its majors and minors, the department provides a more detailed and specialized study of the major components of theatrical endeavor, allowing opportunities for the practical application of course work in the productions staged at the theatre. In many cases, the department helps to prepare students with professional aspirations as either artists or teachers in their specialized area of interest.

Work in the productions at Vanderbilt reflects the instruction that occurs in the classroom at Neely Auditorium. Because the academic endeavors require hands-on, project-oriented teaching, students can expect small-to-medium class enrollments and numerous opportunities for exposure to faculty instruction outside of the classroom. The department's curriculum includes courses in acting, directing, design, technology, dramatic literature, theatre history and criticism, and playwriting. Students can either major or minor in theatre at Vanderbilt. The major consists of a minimum of 35 credit hours that include courses in acting, directing, dramatic literature, theatre history/criticism, design, technology, and stagecraft. For the minor, students select one of three more narrowly focused tracks (dramatic literature/theatre history, acting/directing, or design/technology) and complete a minimum of 18 credit hours of course work.

Students may also learn about theatre by studying with Coe Artists, distinguished guest-artist professionals brought to campus each year to benefit majors, minors, and those with a serious interest in theatre. Weeklong master classes are taught by playwrights, actors, designers, and directors from the professional world of theatre, television, and film. Previous Coe Artists have included such celebrated artists as Karl Malden, Olympia Dukakis, Fiona Shaw, Eva Marie Saint, the Living Theatre, and Actors from the London Stage. The Department of Theatre also offers a month-long program of study of theatre in London during the May session. Students have the opportunity to witness a variety of theatrical experiences, as well as hear professional artists speak as guest lecturers.

Theatre majors and minors from Vanderbilt have entered a wide variety of professions and post-graduate opportunities after they graduate. Those seeking employment in the fields of theatre, film, radio, or television have secured positions at appropriate graduate schools or internships with professional companies immediately following their study at Vanderbilt. Many distinguished professional theatre companies across the nation, television networks in New York, and the film industry in Los Angeles include Vanderbilt University Theatre alumni as writers, actors, designers, technicians, dramaturgs, and stage managers. In addition, many Vanderbilt theatre students have secured teaching assignments at either the college/university level (once they have completed appropriate post-graduate education) or the elementary/secondary education level.

The practice of theatre requires individuals to participate through a variety of means: to collaborate with all other members of a production team; to express elements of abstract thought in both oral and written form; and to develop the critical ability to assess and analyze aesthetic choices. As a result of these experiences, recent graduates have also pursued careers in such widely diverse fields as law, medicine, psychology, and business.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website.
Program of Concentration in Theatre

Students majoring in theatre are required to complete a minimum of 35 credit hours in courses concerned exclusively with theatre and dramatic literature. Required courses are 1010/1010W or 1111, 1711, 1611 2651, and 4961; two courses chosen from 2201, 2202W, 2204, and 4201; one course chosen from 3721, 3761, and 3741; additional 9 credit hours chosen from other theatre courses above the 2000 level.

Honors Program

The Honors Program in Theatre is designed to afford superior students the opportunity to pursue more intensive work within their major field. Admission requirements are: (1) completion of junior year; (2) completion of at least 21 credit hours of the theatre major; (3) 3.3 minimum cumulative GPA and a 3.5 minimum GPA in courses counting toward the major. Candidates who successfully complete the following requirements may graduate with honors or highest honors: (1) maintain the aforementioned GPA throughout the senior year; (2) complete all requirements of the theatre major; (3) complete 6 credit hours of independent research 4998–4999 (Honors Research and Thesis) normally taken during the senior year; (4) write an honors thesis to be completed by the second semester of the senior year; (5) successfully complete an honors oral examination on the topic of the thesis.

Minor in Theatre

A minor in theatre requires a minimum of 18 credit hours of courses in the department. All students minoring in theatre must complete 1010/1010W or 1111 and 4201. In addition, each student must complete one of the following three clusters: Dramatic Literature/Theatre History: 2201, 2202W, 2204, and 3201W; Acting/Directing: 1611, 3611, 4611, and 4201; Design/Technology: 1711 is required; choose three from 3721, 3761, 3741, or 3781.

Course descriptions begin on page 204.

Women’s and Gender Studies

DIRECTOR Katherine B. Crawford (History)
ASSOCIATE DIRECTOR Melanie Adley
DIRECTOR OF UNDERGRADUATE STUDIES Melanie Adley
PROFESSOR EMERITA Charlotte Pierce-Baker
PRINCIPAL SENIOR LECTURER Julia A. Fesmire (Women’s and Gender Studies, English)
SENIOR LECTURERS Sandy Stahl (Women’s and Gender Studies)
LECTURERS Jamie Shenton (Women’s and Gender Studies)

Affiliated Faculty

PROFESSORS Houston A. Baker (English, African American and Diaspora Studies), Robert F. Campany (International Programs), Ellen W. Clayton (Pediatrics, Law), Katherine B. Crawford (History), Cynthia J. Cyrus (Blair), Colin Dayan (English), Katharine M. Donato (Sociology), Bonnie J. Dow (Communication Studies), Lynn E. Enterline (English), Earl E. Fitz (Portuguese), Vivien G. Fryd (History of Art), Tracey E. George (Law), Barbara Hahn (German), Joni L. Hersch (Law), Cathy L. Iraide (Spanish), Michael P. Kreyling (English), Vera M. Kutzinski (English), Amy-Jill Levine (New Testament Studies), Leah S. Marcus (English), Jonathan M. Metz (Sociology, Medicine, Health, and Society), Holly J. McCammon (Sociology), Thomas A. McGinn (Classical Studies), Josél M. Medina (Philosophy), Bonnie J. Miller-Mckemore (Religion, Psychology, and Culture), Dana D. Nelson (English and American Studies), Kelly Oliver (Philosophy), Mark L. Schoenfield (English), Kathryn Schwarz (English), Virginia M. Scott (French and Italian), Laurel C. Schneider (Religious Studies), Tracy D. Sharples-Whiting (African American and Diaspora Studies, French), John M. Sloop (Communication Studies), Hortense J. Spillers (English), Carol M. Swain (Political Science), Cecelia Tichi (English), Benigno L. Trigo (Spanish and Portuguese), Arleen M. Tuchman (History), Holly A. Tucker (French and Italian, Biomedical Ethics and Society)

ASSOCIATE PROFESSORS Brooke A. Ackerly (Political Science), Ellen T. Armour (Theology, Philosophy), Vanessa B. Beasley (Communication Studies), Karen E. Campbell (Sociology), Laura M. Carpenter (Sociology), Beth A. Conkin (Anthropology), Nathalee A. Debrauwere-Miller (French and Italian), Idit Dobbs-Weinstein (Philosophy), Jennifer Fay (Cinema and Media Arts, English), James C. Fraser (Human and Organizational Development), Kathy L. Gaca (Classical Studies), Teresa A. Goddu (English), Derek M. Griffith (Medicine, Health, and Society), Lisa Guenther (Philosophy), Eva M. Harth (Chemistry), Sarah E. Igo (History), Christina Karash (Spanish and Portuguese), Shaul J. Kelner (Sociology, Jewish Studies), Melanie D. Lowe (Blair), Richard J. McGregor (Religious Studies), Adam S. Meyer (Jewish Studies), Catherine A. Molineux (History), Ifeoma C. Nwankwo (English), Emanuelle Oliveira-Monte (Spanish and Portuguese), Bridget E. Orr (English), Richard N. Pitt (Sociology), Lynn T. Ramsey (French), Nancy B. Reisman (English), Ruth Rogaski (History), Allison H. Schachter (English, Jewish Studies), C. Melissa Snarr (Ethics and Society), Melke G. Werner (German and Slavic Languages), Edward N. Wright-Rios (History)

ASSISTANT PROFESSORS Candice Amich (English), Christin Essin (Theatre), Aimi Hamraie (Medicine, Health, and Society), Rolanda L. Johnson (Nursing), Claire S. King (Communication Studies), Mireille M. Lee (History of Art), Linda G. Manning (Psychiatry), N. Michelle Murray (Spanish and Portuguese)

SENIOR LECTURERS Yollette T. Jones (History), Elizabeth S. Meadows (English), Courntey S. Muse (Medicine, Health, and Society), Elena Olazagasti-Segovia (Spanish), Alexandra A. Sargent (Theatre), Gay H. Welch

LECTURERS Sophie Bjork-James (Anthropology), Elizabeth R. Covington (English), Jeremy DeWaal (History), Christy Halbert, Amanda M. Kinard (English), Nancy M. Roche (English), Terrie Spetalnick (Sociology)

WRITER IN RESIDENCE Alice Randall (English, African American and Diaspora Studies)

WOMEN’S and Gender Studies is an interdisciplinary program that examines gender as a social construct and as a historically variable component of culture that orders human behavior, perceptions, and values. Women’s and Gender Studies teaches its students to reexamine traditional beliefs, to engage in new kinds of research, and to bring a critical perspective to the everyday practices that shape women’s and men’s lives in the United States and globally. Our courses and instructors pay particular attention to the consequences for women, men, and children of living in a world characterized by profound inequalities. The program also recognizes that race, class, ethnicity, age, sexuality, ability, and nationality are crucial aspects of identity and experience; these are understood to be intersecting and contested features of social life and are examined as such.

Because these aforementioned features of human experience cut across many disciplines, students in Women’s and Gender Studies achieve a deeper understanding of the complexity and wholeness of human life. In the classroom, as in faculty and student research, our goal is to transform traditional ways of knowing by reaching across epistemological and methodological divisions to foster comprehensive,
interdisciplinary perspectives on gender, sexuality, identity, and power in social life. Women's and Gender Studies not only compels us to recognize the problems and possibilities of the changing times in which we live, but also empowers us to effect change.

The Women's and Gender Studies program offers a major and a minor which provide an excellent foundation for students who plan to enter professional schools in law, medicine, and business; for those who pursue advanced degrees in women's and gender studies, the humanities, and social sciences; as well as for those who move into careers in business, government, research, teaching, health and social administration, counseling, journalism, advocacy, and the media.

NOTE: New course numbers took effect in fall 2015. Former course numbers are included in course descriptions in this catalog and at this website: registrar.vanderbilt.edu/faculty/course-renumbering/course-lookup/.

Program of Concentration in Women's and Gender Studies

The interdisciplinary major in women's and gender studies consists of 36 credit hours of course work, distributed as follows:

1. Core courses. Either WGS 1150 (or 1150W) or WGS 1160 and 3201, and either 3246W or 3250 or 3250W. (9 credit hours)
2. Senior Seminar. WGS 4960. Generally taken in the spring semester of the student's final year. (3 credit hours)
3. 24 credit hours of electives. Any courses in the Women's and Gender Studies program; any courses dual-listed in Women's and Gender Studies; any course that meets the approval of the director, and is not used to satisfy the above requirements. These elective courses may include up to 6 credit hours of internship and/or independent research (Women's and Gender Studies 3882, 3883).

Honors Program

The Honors Program in Women's and Gender Studies requires 36 credit hours of course work and is designed to afford exceptional students the opportunity to undertake interdisciplinary research on a topic in feminist and/or gender scholarship in consultation with faculty members. The program is open to all Women's and Gender Studies majors with junior standing who have completed at least 24 credit hours of the major and who have earned a 3.3 cumulative grade point average and a 3.3 grade point average in Women's and Gender Studies courses. Students must be approved for acceptance into the Honors Program by the program director. To graduate with honors in Women's and Gender Studies, students must:

(a) Complete 36 credit hours of course work;
(b) Complete the required courses for the major (described above);
(c) Submit for approval a short description of the Honors project/thesis to the director of the Women's and Gender Studies program, no later than spring semester of the junior year;
(d) Complete 6 credit hours of independent research, Women's and Gender Studies 4998 and 4999 (Honors Research and Project), typically during the senior year under supervision of the project adviser. These 6 credit hours count as electives in the 36 credit hours of course work for Honors majors.
(e) Complete an honors project by spring of the senior year; and
(f) Pass an oral examination on the topic of the Honors project/thesis.

Candidates for honors in Women's and Gender Studies may, with the written permission of the director of the program, substitute one 3000-level course in gender and/or feminist studies for one 2000-level course required for the major. Such permission must be acquired prior to enrollment in the course.

Information concerning the Honors Program is available from the director of the Women's and Gender Studies program. College regulations governing honors may be found in this catalog under Honors Programs.

Minor in Women's and Gender Studies

The minor in Women's and Gender Studies consists of 18 credit hours of course work, distributed as follows:

1. Core courses. Either WGS 1150 (or 1150W) or WGS 1160 and 3201, and either 3246W or 3250 or 3250W. (9 credit hours)
2. Senior Seminar. WGS 4960. Generally taken in the spring semester of the student's final year. (3 credit hours)
3. At least 6 credit hours of electives. Any courses in the Women's and Gender Studies program; any courses dual-listed in Women's and Gender Studies; any course that meets the approval of the director, and is not used to satisfy the above requirements.

Recommended courses organized by subject area are as follows.

*Note: 1111 First-Year Writing Seminars and Special Topics courses vary each semester. For full descriptions of current seminar offerings and information on whether a particular First-Year Writing Seminar can be used to fulfill requirements for the Women's and Gender Studies major or minor, consult the program director.

AFRICAN AMERICAN AND DIASPORA STUDIES: 1111, First-Year Writing Seminar*; 1204, Diaspora Feminisms; 2204, Politics of Beauty and Blacks; 3214, Black Masculinity: Social Imagery and Public Policy; 4264, Black Diaspora Women Writers.

ANTHROPOLOGY: 2105, Race in the Americas; 3121, Global Wealth and Poverty; 2342, Biology of Inequality; 2110, Gender and Cultural Politics.


COMMUNICATION STUDIES: 1111, First-Year Writing Seminar*; 3100, Rhetoric of Social Movements; 3110, Women, Rhetoric, and Social Change; 3720, Communicating Gender; 2950, Rhetoric of Mass Media; 3890, Selected Topics in Communication Studies*.

DIVINITY: 7123, Ethics and Society: Justice.


GERMAN: 4535, German Romanticism; 4537, Women and Modernity; 2444, German Fairy Tales: From Brothers Grimm to Walt Disney; 3344, Women at the Margins: German-Jewish Writers.

HISTORY: 1111, First-Year Writing Seminar*; 2835, Sexuality and Gender in the Western Tradition to 1700; 2840, Sexuality and Gender in the Western Tradition since 1700; 3010, Pornography and Prostitution in History; 2810, Women, Health, and Sexuality; 4960, Majors Seminar*.

HISTORY OF ART: 2765, Art since 1945; 3228W, Gender and Sexuality in Greek Art; 3840, Directed Study*; 4960, Advanced Seminar*.

ITALIAN: 3340, Famous Women by Boccaccio.

JEWISH STUDIES: 1111, First-Year Writing Seminar*.


MEDICINE, HEALTH, AND SOCIETY: 1111, First-Year Writing Seminar*; 1940, Racial and Ethnic Health Disparities; 1930, Health Social Movements; 2250, War and the Body; 2230, Masculinity and Men’s Health; 2240, Bionic Bodies, Cyborg Cultures; 3890, Special Topics*.

PHILOSOPHY: 3604, Gender and Sexuality; 3007, French Feminism.


PSYCHOLOGY: 3705, Human Sexuality.


RUSSIAN: 1874, Russian Fairy Tales.

SOCIOLOGY: 3611, Women and the Law; 3603, Women and Social Activism; 3221, The Family; 3711, Women, Gender, and Globalization; 3604, American Social Movements; 3722, Gender in Society; 3616, Women and Public Policy in America; 3702, Racial and Ethnic Minorities in the United States; 3704, Race, Gender, and Sport; 3723, Gender, Sexuality, and the Body; 3304, Race, Gender, and Health; 3724, Gender Identities, Interactions, and Relationships.

SPANISH: 4755, Latin and Latin American Women Writers; 3893, Special Topics in Hispanic Literature*.


Course descriptions begin on page 205.
College of Arts and Science Courses

Explanation of Course Numbers and Symbols

1000-level courses are introductory courses primarily taken by freshmen and sophomores.

2000- and higher-level courses are intermediate- or advanced-level courses which typically require some prerequisite. They are primarily intended for sophomores, juniors, and seniors.

Hours are semester hours—e.g., a three-hour course carries credit of three semester hours.

Bracketed figures indicate semester hours credit, e.g., [3].

First-Year Writing Seminars are numbered 1111.

W symbols used in course numbers designate courses in the College of Arts and Science that will meet the AXLE writing requirement.

The AXLE designation in parentheses in each course description indicates which AXLE requirement pertains. For example, (HCA) indicates credit for Humanities and the Creative Arts in AXLE. The designation (No AXLE credit) indicates the course does not satisfy an AXLE degree requirement.

It is the responsibility of each student to avoid duplication, in whole or in part, of the content of any courses offered toward the degree. Such duplication may result in withdrawal of credit.

African American and Diaspora Studies

AADS 1001. Commons Seminar. [Formerly AADS 99] Topics vary. Open only to first-year students. General Elective credit only. [1] (No AXLE Credit)

AADS 1010. Introduction to African American and Diaspora Studies. [Formerly AADS 101] Foundations of African American culture from ancient African history and through contemporary issues in the African American experience and the larger diaspora. The characteristics, developments, and dynamics of diaspora culture in the Americas, with a particular focus on the United States. [3] (P)


AADS 1111. First-Year Writing Seminar. [Formerly AADS 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


AADS 2148. Blacks in Latin America and the Caribbean. [Formerly AADS 140] Distinctive cultural forms and patterns in the Caribbean basin and Latin America from the sixteenth century to the present. Diverse origins of culture. Slave society's impact on cultural production. [3] (INT)


AADS 2178. Global Africa. [Formerly AADS 165] The globalization of Africa within the context of Arab and European expansion. Historical flashpoints and contemporary events. The invention of Africa in literary and political discourses. The geopolitics of aid and development. Africa's relationship with the African diaspora, including modern migrations and debates on the racial and geographic divide between Arab regions north and south of the Sahara. [3] (INT)


AADS 2294. Black Paris - Paris Noir: The African Diaspora and the City of Light. [Formerly AADS 209] The lived experiences, tensions, belonging, and representations of people of African descent who self-identify and are identified as Black or Noir in Paris, France, from the interwar years to the present. Diversity, intergroup relations, and race beyond the United States. No credit for students who have earned credit for 1111 section 5. [3] (INT)

AADS 2306. Race, Mixed Race, and “Passing.” [Formerly AADS 230] Social, legal constructions and live experiences of race. Phenomenon of "passing" and category of "mixed race" in fiction, film, and land-mark court cases. [3] (HCA)

AADS 2654. Memoirs and Biographies. [Formerly AADS 265] Biographies and autobiographies as lenses for the study of historical trends and events; development of gender, sexual, and racial identities in subjects. [3] (US)

AADS 2694. African Diaspora Ethnography. [Formerly AADS 269] Anthropology and the construction of race and blackness. Ethnography as

AADS 3104W. Soul Food as Text in Text: An Examination of African American Foodways. [Formerly AADS 208W] Distinctions between Southern food and soul food. Soul food as performance and projection of gender and racial identity. Cookbooks as literary artifacts. Soul food in American popular culture, and in African American, Southern, and women’s writing. Soul food and community formation. Serves as repeat credit for students who have completed 265W and for students who completed ENGL. 288W in fall 2010. [3] (HCA)


AADS 3204W. African American Children’s Literature. [Formerly AADS 204W] From the seventeenth century to the present. Oral and written fiction and non-fiction. Major works, writers, and genres. No credit for students who earned credit for 294a section 1 in spring 2011. [3] (HCA)


AADS 3258. Black Issues in Education. [Formerly AADS 215] Race, ethnicity, gender, class and their relationships to both the broader roles of schooling and education in American society. Historical foundation of education for African Americans, educational and socioeconomic inequality, family structures, and social policy initiatives. [3] (SBS)


AADS 3850. Independent Study. [Formerly AADS 289] May be repeated for a total of 6 credits, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of AADS 3850] (No AXLE credit)

AADS 3880. Internship Training. [Formerly AADS 280a] Graded on a Pass/Fail basis only and must be taken concurrently with 3881. These hours may not be included in the minimum number of hours required for the African American and Diaspora studies major. Under faculty supervision, students from any discipline can gain experience in a broad range of public and private institutions on issues relative to the black experience. A minimum of 3 hours of background reading and research will be completed in AADS 3881 concurrently with and regardless of the numbers of hours taken in internship training in 3880. Normally a 2.90 grade point average, 6 hours of prior work in AADS, and prior approval by the director of Undergraduate Studies in African American and Diaspora Studies of the student’s plan are required. A research paper and report must be submitted at the end of the semester during which the internship training is completed. Corequisite: 3881. [Variable credit: 1–9] (No AXLE credit)

AADS 3881. Internship Readings and Research. [Formerly AADS 280a] Readings conducted under the supervision of a member of the African American and Diaspora Studies program and a substantial research paper are required. Under faculty supervision, students from any discipline can gain experience in a broad range of public and private institutions on issues relative to the black experience. A minimum of 3 hours of background reading and research will be completed in AADS 3881 concurrently with and regardless of the numbers of hours taken in internship training in 3880. Normally a 2.90 grade point average, 6 hours of prior work in AADS, and prior approval by the director of Undergraduate Studies in African American and Diaspora Studies of the student’s plan are required. A research paper and report must be submitted at the end of the semester during which the internship training is completed. Corequisite: 3880. [Variable credit: 3–6] (No AXLE credit)

AADS 3890. Special Topics. [Formerly AADS 294a] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)


AADS 4256. Haiti: Freedom and Democracy. [Formerly AADS 205] The Saint-Domingue Revolution from 1791 to 1803 and the development of Haiti from 1804 to the present. Haiti in global context; the revolution as a key moment in the Age of Revolution and the formation of the Black International. Historical monographs, novels, poetry, visual culture, and music. [3] (INT)


AADS 4979. Senior Thesis in African American and Diaspora Studies. [Formerly AADS 299] Senior Thesis in African American and Diaspora Studies. Supervised readings and independent research to produce an interdisciplinary research paper; topic to be selected in conjunction with a faculty member of African American and Diaspora Studies. Open only to seniors. [3] (No AXLE credit)

AADS 4999. Senior Honors Thesis. [Formerly AADS 298] Supervised readings and independent research for honors thesis under supervision of the adviser and another faculty member. Open only to seniors in the Honors Program. [3] (No AXLE credit)

American Studies

AMER 1001. Commons Seminar. [Formerly AMER 99] Topics vary. General elective credit only. [1] (No AXLE Credit)

AMER 1002. Introduction to American Studies. [Formerly AMER 100] An interdisciplinary approach to American culture, character, and life. Repeat credit for students who have completed 1002W. [3] (US)

AMER 1002W. Introduction to American Studies. [Formerly AMER 100W] An interdisciplinary approach to American culture, character, and life. Repeat credit for students who have completed 1002. [3] (US)

AMER 1111. First-Year Writing Seminar. [Formerly AMER 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once
if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


AMER 3200. Global Perspectives on the U.S. [Formerly AMER 202] Contemporary and historical views of the U.S. political and cultural presence in the world; comparative nationalism; emphasis on points of view outside the U.S. [3] (US)


AMER 3851. Independent Readings and Research. [Formerly AMER 289a] Independent readings and/or research on approved topics relating to American society and culture. May be repeated for a total of 6 credits in 3851 and 3852 combined if there is no duplication of topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of AMER 3851 and 3852] (No AXLE credit)

AMER 3852. Independent Readings and Research. [Formerly AMER 289b] Independent readings and/or research on approved topics relating to American society and culture. May be repeated for a total of 6 credits in 3851 and 3852 combined if there is no duplication of topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of AMER 3851 and 3852] (No AXLE credit)

AMER 3880. Internship Training. [Formerly AMER 280b] Offered on a pass/fail basis only and must be taken concurrently with 3881. Under faculty supervision, students intern in public or private organizations, conduct background research and reading, and submit a research paper at the end of the semester during which the internship training is complete. Background reading and research will be completed in 3881 concurrently with the completion of internship training, 3880; a minimum of 3 hours of 3881 must be completed, independent of hours taken in 3880. Corequisite: 3881. [Variable credit: 1–6] (No AXLE credit)

AMER 3881. Internship Readings and Research. [Formerly AMER 280a] Under faculty supervision, students intern in public or private organizations, conduct background research and reading, and submit a research paper at the end of the semester during which the internship training is complete. Background reading and research will be completed in 3881 concurrently with the completion of internship training, 3880; a minimum of 3 hours of 3881 must be completed, independent of hours taken in 3880. Corequisite: 3880. [3–6]. (No AXLE credit)

AMER 3890. Topics in American Studies. [Formerly AMER 240] Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (SBS)

AMER 4000. The American Studies Workshop. [Formerly AMER 294] Issues, methodologies, traditions, approaches, and problems in the discipline. Limited to juniors and seniors with preference given to majors and minors. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

AMER 4100. Undergraduate Seminar in American Studies. [Formerly AMER 295] Advanced reading, research, and writing in a particular area of American Studies. Limited to juniors and seniors with preference given to American Studies majors. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3; maximum of 6 credits total for all semesters of AMER 4100] (SBS)

AMER 4960. Senior Project. [Formerly AMER 297] A project conceived, developed, and completed under supervision of the American Studies faculty. Normally open only to senior American Studies majors. [3] (SBS)

AMER 4998. Senior Honors Research. [Formerly AMER 298] Acquisition, reading, and analysis of primary source research material. Open only to senior honors students. [3] (No AXLE credit)


Anthropology

ANTH 1001. Commons Seminar. [Formerly ANTH 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

ANTH 1101. Introduction to Anthropology. [Formerly ANTH 101] The study of diverse cultures in the contemporary world. The ways in which cultures have developed and changed. Intended for students with a general interest in the field of anthropology. [3] (SBS)

ANTH 1111. First-Year Writing Seminar. [Formerly ANTH 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


ANTH 1601. Introduction to Language and Culture. [Formerly ANTH 105] The interrelationship between language and culture. Language and thought, language ideologies, discourse, and linguistic and social identities. Culture and language change. [3] (SBS)


ANTH 2106. Culture and Power in Latin America. [Formerly ANTH 210] Survey of native cultures and Spanish and Portuguese heritage. Fundamental traditions, including marriage and the family, the relationship between men and women, racial and ethnic identity, social class, and religion. Peasant communities and contemporary urban life. [3] (INT)

ANTH 2108. Indigenous Peoples of Lowland South America. [Formerly ANTH 249] Native societies of Amazonia, the Orinoco basin, and other forest, savanna, and coastal regions of South America. Ecology, cos- mology, social organization, and political relations in historical and contemporar y populations. Government policies, human rights, environmentalism, sustainable development, and indigenous activism and advocacy. [3] (SBS)

ANTH 2109. Food Politics in America. [Formerly ANTH 208] The cultural, social, political, and economic contexts of the contemporary food system. Issues of health and nutrition. Land use, ecological relations, food chains, and links to climate change. Ethics of food production, distribution, and consumption. Agricultural policy, immigration, work conditions, animal
ANTH 2110. Gender and Cultural Politics. [Formerly ANTH 266] Cross-cultural comparison of women’s roles and status in western and non-Western societies. Role of myths, symbols, and rituals in the formation of gender identities and the politics of sexual cooperation, conflict, and inequality. Case studies from Africa, the Middle East, Europe, North and South America, Asia, and Melanesia. [3] (US)


ANTH 2211. Archaeology. [Formerly ANTH 211] An introduction to the methods used by archaeologists to study the nature and development of prehistoric societies. Approaches to survey, excavation, analysis, and interpretation are explored through lectures, case studies, and problem assignments. [3] (SBS)


ANTH 2220. Human Landscapes. [Formerly ANTH 282] Human-environment interactions in the formation of landscapes and settlement systems. Uses of archaeology, cultural anthropology, and cross-cultural comparison to understand social space, sacred landscapes, urban plans, and historical ecology. Methods of interpretation through quantitative, social, and symbolic analysis. Repeat credit for students who earned credit for 2220W. [3] (SBS)

ANTH 2220W. Human Landscapes. Human-environment interactions in the formation of landscapes and settlement systems. Uses of archaeology, cultural anthropology, and cross-cultural comparison to understand social space, sacred landscapes, urban plans, and historical ecology. Methods of interpretation through quantitative, social, and symbolic analysis. Repeat credit for students who earned credit for 2220W. [3] (SBS)


ANTH 2230. South American Archaeology. [Formerly ANTH 252] From 12,000 years ago to the present. Archaeology, ethnohistory, and ethnography. [3] (SBS)

ANTH 2231. Ancient Andean Civilizations. [Formerly ANTH 248] Introduction to the archaeology and peoples of ancient South America. Early hunters and gatherers, origins of agriculture and urbanism, and the rise and fall of the Huari and Inca empires. [3] (INT)


ANTH 2601. Introduction to Linguistics. [Formerly ANTH 201] Systematic study and analysis of human language. Formation of language sounds, sound systems, the structure of words, the structure of sentences, meaning, language change. Data from diverse languages of the world. [3] (SBS)

ANTH 2602. Anthropological Linguistics. [Formerly ANTH 203] An introduction to the study of language in its anthropological context. Language and culture, the structure of symbolic systems, vocabulary as a guide to the ways societies classify their universe. Linguistic analysis as a tool for ethnographic investigation. [3] (SBS)


ANTH 3120. Sociocultural Field Methods. [Formerly ANTH 275] Research design and proposal writing, access to data, ethical issues, sampling techniques, interviewing questionnaire design and question writing, data analysis. [3] (SBS)


ANTH 3122. The Anthropology of Globalization. [Formerly ANTH 232] Perspectives on globalization based on ethnographic case studies. The impact of new technologies on native cultures; different cultural meanings of global commodities; creation of new diaspora cultures; effects of neoliberal reforms on local economies; ethnic movements and terror networks. [3] (INT)


ANTH 3142. Medicine, Culture, and the Body. [Formerly ANTH 260] (Also listed as History 2830) Concepts of the human body from historical and cross-cultural perspectives. Exploration of experiences, representations, and medical theories of the body in birth, death, health, and illness in Western and non-Western societies. Comparison of methodologies of
anthropology and history. Repeat credit for students who have completed HIST 2830. [3] (P)


ANTH 3145. Sexuality, Gender, and Culture. Theories and case studies of sexuality and gender in Western and non-Western societies. Cross-cultural perspectives on how class, race, ethnicity, culture, and power influence sexual norms and gender roles. Performativity; masculinity and femininity; kinship; religion and sexuality. No credit for students who have earned credit for 2110. [3] (P)


ANTH 3150W. Cognitive Anthropology. Methods and approaches in linguistics and cognitive sciences. Exploration of culture and thought, and how culture affects our ways of reasoning, thinking, and behavior. Repeat credit for students who completed 3150. [3] (SBS)

ANTH 3160. Anthropologies and Archaeologies of Community. [Formerly ANTH 222] Creation, maintenance, and transformation of communities through time. Community as a village or settlement, and as an “imagined” or virtual aspect of social identity. Behaviorist, interactionist, discursive, and identity-oriented anthropological approaches to community, Community organization and the built environment. Ancient and modern case studies. [3] (P)


ANTH 3162. Material Culture of New World Slavery. Enslaved Africans’ lives in the New World from an archaeological perspective. Housing, artifacts, health, religion, and resistance in North America, South America, and the Caribbean. Repeat credit for students who earned credit for 294 section 1 in fall 2014. [3] (P)


ANTH 3240. Ancient Mesoamerican Civilizations. [Formerly ANTH 212] Development of pre-Hispanic civilization in Mesoamerica from the beginning of villages life to the rise of the great states and empires: Olmec, Maya, Toltec, and Aztec civilizations. [3] (INT)

ANTH 3241. The Aztecs. [Formerly ANTH 247] Origins of the Aztec peoples of central Mexico and their culture; history and structure of the Aztec empire; pre-Columbian social, political, and economic organization; warfare and religion; the Spanish conquest; colonial society in central Mexico; ethno-graphic study of modern descendants of the Aztecs. [3] (INT)

ANTH 3242. The Archaeology of the Ancient Maya Civilization. [Formerly ANTH 213] Case study in cultural evolution. Archaeological evidence and social theory on the enigmatic origins, complex nature, and sudden collapse of the ancient Maya civilization. [3] (INT)

ANTH 3243. Ancient Maya Gods and Rulers. [Formerly ANTH 281] Politics and religion in Classic Maya culture, 100–1000 C.E. Sources and symbols of power, ritual life, and metaphysical underpinnings of hierarchy and cosmology. Relationships among ideology, religion, and politics. Repeat credit for students who have earned credit for 3243W. [3] (SBS)

ANTH 3243W. Ancient Maya Gods and Rulers. Politics and religion in Classic Maya culture, 100–1000 C.E. Sources and symbols of power, ritual life, and metaphysical underpinnings of hierarchy and cosmology. Relationships among ideology, religion, and politics. Repeat credit for students who have earned credit for 3243. [3] (SBS)

ANTH 3250. The Inca Empire. [Formerly ANTH 254] The rise and fall of the Inca state in the Southern American Andes. Inca society, agriculture, economy, warfare, ancestor worship, mummies, and royal wealth. Imperial expansion, the role of the feasting in Inca politics, and place of ecology in Inca religion. Destruction of the empire during the Spanish conquest; persistence of pre-Columbian culture among Inca descendants in Peru and Bolivia. [3] (INT)


ANTH 3261. Introduction to Geographic Information Systems and Remote Sensing. [Formerly ANTH 280] Computerized graphics and statistical procedures to recognize and analyze spatial patterning. Spatial data-collection, storage and retrieval; spatial analysis and graphic output of map features. Integration of satellite imagery with data from other sources through hands-on experience. Assumes basic knowledge of computer hardware and software. [3] (MNS)

ANTH 3262. Ethics in Anthropology, Archaeology, and Development. [Formerly ANTH 283] Ethical perspectives on contemporary problems of archaeological and anthropological research, interaction, and interpretation of past and present non-Western societies. [3] (P)


ANTH 3620. Maya Language and Literature. [Formerly ANTH 221] Introduction to a contemporary Maya language. Linguistic analysis and cultural concepts. By permission of instructor. May be repeated for the study of different Maya languages for a total of 6 credits. Repeat credit for students who completed 3620W. [1–6; maximum of 6 credits total for all semesters of ANTH 221] (No AXLE credit)

ANTH 3622. Classic Maya Language and Hieroglyphs. [Formerly ANTH 261] Linguistic analysis of Classic Maya hieroglyphs, 100–1000 C.E. Methods of decipherment reading and interpreting an ancient script.
Role of socioeconomic status in literacy. Repeat credit for students who completed 3622W. [3] (SBS)

ANTH 3622W. Classic Maya Language and Hieroglyphs. Linguistic analysis of Classic Maya hieroglyphs, 100–1000 C.E. Methods of decipherment reading and interpreting an ancient script. Role of socioeconomic status in literacy. Repeat credit for students who completed 3622. [3] (SBS)

ANTH 3850. Independent Research. [Formerly ANTH 288a] Readings on selected topics (of the student’s choice) and the preparation of reports. [1–3] (No AXLE credit)

ANTH 3851. Independent Research. [Formerly ANTH 288b] Readings on selected topics (of the student’s choice) and the preparation of reports. [1–3] (No AXLE credit)

ANTH 3865. Field Research. [Formerly ANTH 298] Directed field research on topics of the student’s choice. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [1–6] (No AXLE credit)


ANTH 3880. Internship Training. [Formerly ANTH 287b] Offered on a Pass/Fail basis only and must be taken concurrently with 3881. Hours of 3880 will not count toward the Anthropology major or minor. Students from any discipline can gain experience working with a local, national, or international organization in developing a project to broaden their understanding of anthropological issues. Hours for background readings and research will be completed in ANTH 3881 concurrently with and regardless of the numbers of hours taken in internship training in 3880. Normally a 2.90 grade point average, 6 hours of prior work in ANTH, and prior approval of the student’s plan by the director of undergraduate studies in Anthropology are required. A research paper and report must be submitted at the end of the semester during which the internship training is completed. Corequisite: 3881. [Variable credit: 1–9] (No AXLE credit)

ANTH 3881. Internship Readings and Research. [Formerly ANTH 287a] Readings and research conducted under the supervision of a member of the Anthropology department and a substantial research paper are required. Students from any discipline can gain experience working with a local, national, or international organization in developing a project to broaden their understanding of anthropological issues. Hours for background readings and research will be completed in ANTH 3881 concurrently with and regardless of the numbers of hours taken in internship training in 3880. Normally a 2.90 grade point average, 6 hours of prior work in ANTH, and prior approval of the student’s plan by the director of undergraduate studies in Anthropology are required. A research paper and report must be submitted at the end of the semester during which the internship training is completed. Corequisite: 3880. [Variable credit: 1–6] (No AXLE credit)

ANTH 3890. Special Topics. [Formerly ANTH 294] Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

ANTH 3900. Theories of Culture and Human Nature. [Formerly ANTH 206] Survey of the views of anthropological thinkers, from the late nineteenth century to the present, about the basic attributes of humankind and human culture. Comparison of different ideas of how people create culture and in turn are molded by culture. [3] (SBS)

ANTH 3901. Problems in Anthropological Theory. [Formerly ANTH 284] An advanced seminar in anthropological theory: cultural evolution, cultural history, ethnic relations, cultural ecology, archaeological method and theory, social structure, political organizations, religious institutions. [3] (SBS)


ANTH 4155. Realities and Worldviews: Why Culture Matters. [Formerly ANTH 255] Worldviews and constructed realities that influence human behavior. Stereotyping and conflict as triggered by ontological misunderstandings. Western ontology, science, and understanding the Other. Interaction of worldviews and human behavior such as in resource management and public health. Offered on a graded basis only. [3] (SBS)

ANTH 4345. Human Evolutionary Genetics. [Formerly ANTH 273] Core issues in human evolution and population genetics. Molecular evidence for the origin of modern humans, reconstruction of human migrations, race, and detection of admixture between populations. Implications for human disease. Offered on a graded basis only. No credit for students who earned credit for 294 section 1 in fall 2012. Prerequisite or corequisite: BSCI 1100, BSCI 1105, or BSCI 1510. [3] (MNS)


ANTH 4998. Honors Research. [Formerly ANTH 298] Research to be done in consultation with a member of the faculty in anthropology. Open only to those beginning honors work in anthropology. May be repeated for a total of 6 credits. [1–6; maximum of 6 credits total for all semesters of 4998] (No AXLE credit)

ANTH 4999. Honors Thesis. [Formerly ANTH 299] Open only to seniors in the departmental honors program. Students completing this course with distinction, including a thesis and final examination, will earn honors in anthropology. Prerequisite: 4998. May be repeated for a total of 6 credits if there is no duplication in topic. [1–6; maximum of 6 credits total for all semesters of 4999] (No AXLE credit)

Arabic

ARA 1101. Elementary Arabic. [Formerly ARA 210a] Development of reading, listening, speaking, and writing skills. No credit for students who have earned credit for a more advanced Arabic language course. [5] (No AXLE credit)

ARA 1102. Elementary Arabic. [Formerly ARA 210b] Continuation of 1101. Development of reading, listening, speaking, and writing skills. No credit for students who have earned credit for a more advanced Arabic language course. Prerequisite: 1101. [5] (INT)

ARA 2201. Intermediate Arabic. [Formerly ARA 220a] Practice and development of all language skills at the intermediate-advanced level. Intensive work in spoken Arabic with emphasis on vocabulary acquisition, reading comprehension, and writing skills. Advanced grammar, modern Arabic word formation, verb aspect usage, and structure of complex sentences. Three hours of class work per week with an additional two hours per week
of individual work in the language laboratory. No credit for students who have earned credit for a more advanced Arabic language course. Prerequisite: 1102. [4] (INT)

**ARTS 2202. Intermediate Arabic.** [Formerly ARA 220b] Continuation of 2201. Practice and development of all language skills at the intermediate-advanced level. Intensive work in spoken Arabic with emphasis on vocabulary acquisition, reading comprehension, and writing skills. Advanced grammar, modern Arabic word formation, verb aspect usage, and structure of complex sentences. Three hours of class work per week with an additional two hours per week of individual work in the language laboratory. No credit for students who have earned credit for a more advanced Arabic language course. Prerequisite: 2201. [4] (INT)

**ARTS 3101. Advanced Arabic.** [Formerly ARA 230a] Further development of listening, reading, speaking, and writing skills in the Arabic language. Emphasis on grammar and literary techniques. Offered on a graded basis only. No credit for students who have earned credit for a more advanced Arabic language course. Prerequisite: 2202. [3] (INT)

**ARTS 3102. Advanced Arabic.** [Formerly ARA 230b] Continuation of 3101. Further development of listening, reading, speaking, and writing skills in the Arabic language. Emphasis on grammar and literary techniques. Offered on a graded basis only. No credit for students who have earned credit for a more advanced Arabic language course. Prerequisite: 3101. [3] (INT)

**ARTS 3201. Media Arabic.** [Formerly ARA 240] Listening to, discussing, simulating, and analyzing Arabic media materials. Coverage of current and historical events, such as TV broadcasts, headline news, documentaries, and public discussions on political, religious, and cultural issues. Offered on a graded basis only. Prerequisite: 3102. [3] (INT)

**ARTS 3301. Arabic of the Qur'an and Other Classical Texts.** [Formerly ARA 250] Syntaxical and morphological features of Classical Arabic. Differences and similarities with Modern Standard Arabic in vocabulary usage, semantic extensions, and context; vocabulary borrowing. Texts drawn from the Qur'an, Hadith, and Sira (biographical) literature. Offered on a graded basis only. Prerequisite: 3201. [4] (INT)

### Art Studio

**ARTS 1001. Commons Seminar.** [Formerly ARTS 99] Topics vary. General Elective credit only. [1] (No AXLE Credit)

**ARTS 1099. Maymester Contemporary Art Blitz.** [Formerly ARTS 285] Intensive review of contemporary art through excursions to museums, galleries, and artists' studios. Insights from curators, dealers, and films. Cities vary each year. May be repeated for credit more than once if there is no duplication in topic. [3] (HCA)

**ARTS 1101. Introduction to Studio Art.** [Formerly ARTS 101] Processes, fundamental elements, and principles of art. Drawing, painting, printmaking, sculpture, photography, installation, and time-based art. [3] (HCA)

**ARTS 1102. Drawing and Composition I.** [Formerly ARTS 102] Introduction to drawing; visual problems related to observation, idea formation, composition, media, and various forms of expression. Figure and landscape may be included. [3] (HCA)

**ARTS 1111. First-Year Writing Seminar.** [Formerly ARTS 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3: maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


**ARTS 1400. Ceramics.** [Formerly ARTS 140] Introduction to ceramic design and preparation of clay objects. Hand-building, wheel-throwing, ceramic sculpture, surface enrichment, glazing, and kiln-firing. [3] (HCA)


**ARTS 1502. Installation Art.** [Formerly ARTS 152] Historical survey from 1900 to present; studio practice; formal and conceptual issues. [3] (HCA)


**ARTS 1600. Printmaking I: Relief and Intaglio.** [Formerly ARTS 110] Introduction to printmaking media, including relief and etchings. Traditional and experimental approaches. Prerequisite: 1102. [3] (HCA)

**ARTS 1601. Printmaking I: Screen Printing and Lithography.** [Formerly ARTS 111] Introduction to printmaking media, including screen printing and lithography. Traditional and experimental approaches. Prerequisite: 1102. [3] (HCA)


**ARTS 1702. Interactive Portable Media and Cell Phone Art I.** [Formerly ARTS 173] Use of inexpensive media devices such as cell phones, music players, and other portable electronics to create campus-wide participatory events, including art projects, web interactive movements, unexpected musical environments, and grass roots media campaigns. Collaborative and solo projects. [3] (HCA)


**ARTS 1900. Social Collective Art Practice.** [Formerly ARTS 190] History and practice of making art within the social collective experience. Small group projects based on everyday living in The Commons. No credit for students who have taken 1111 section 1. [3] (HCA)

**ARTS 2100. Drawing and Composition II.** [Formerly ARTS 202] Prerequisite: 1102. [3] (HCA)


ARTS 2300. Painting II. [Formerly ARTS 230] Prerequisite: 1300. [3] (HCA)

ARTS 2400. Ceramics II. [Formerly ARTS 240] Development of ceramic design, both traditional and contemporary, functional and sculptural. Projects develop technical and aesthetic goals. Instruction includes demonstrations, slide presentations, field trips, guest artists, reports. Demonstrations include advanced throwing, complex constructions, glaze development with applications, and kiln-firing. Prerequisite: 1400. [3] (HCA)

ARTS 2401. Concept and Clay: Composite Forms. [Formerly ARTS 241] Technical ability in handling clay and conceptual and interpretive elements in functional and/or sculptural forms. Individual solutions in form and surface. Prerequisite: 1400 or 1401. [3] (HCA)

ARTS 2500. Sculpture II. [Formerly ARTS 250] Prerequisite: 1500, 1501, or 1502. [3] (HCA)


ARTS 2600. Printmaking II. [Formerly ARTS 210] Advanced study in traditional and experimental printmaking processes. Prerequisite: 1600 or 1601. [3] (HCA)


ARTS 2702. Interactive Portable Media and Cell Phone Art II. [Formerly ARTS 273] Working with laptops and web cams, midi keyboards and digital music players, cell phones, video cameras, and other personal media devices to create art projects. Prerequisite: 1700, 1701, or 1702. [3] (HCA)

ARTS 3100. Drawing and Composition III. [Formerly ARTS 203] Prerequisite: 1102 and 2100. [3] (HCA)

ARTS 3101. Life Drawing II. [Formerly ARTS 206] Prerequisite: 2101. [3] (HCA)

ARTS 3102. Drawing: Color Media II. [Formerly ARTS 208] Prerequisite: 2102. [3] (HCA)

ARTS 3200. Photography III. [Formerly ARTS 221] Personal projects and critiques. Interdisciplinary possibilities. Issues in contemporary art. Prerequisite: 2200 or 2202. [3] (HCA)

ARTS 3300. Painting III. [Formerly ARTS 231] Prerequisite: 2300. [3] (HCA)


ARTS 3851. Independent Research. [Formerly ARTS 289] Supervised work beyond regular offerings in the curriculum. Students may only register with consent of instructor involved and with written approval of the director of undergraduate studies. May be repeated for a total of 6 credits if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1-3; maximum of 6 credits total for all semesters of ARTS 3851] (No AXLE credit)

ARTS 3891. Selected Topics. [Formerly ARTS 288] May be repeated for a total of 9 credits if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3; maximum of 9 credits total for all semesters of ARTS 3891] (HCA)

ARTS 3970. Directed Study: Senior Show and Contemporary Practices. [Formerly ARTS 290] Theoretical and practical concerns including professional practices for artists. Students visit exhibitions and discuss contemporary art with directed readings and lectures, participate in critiques, and exhibit their work. Seniors with a concentration in art only. [3] (HCA)

ARTS 3971. Independent Research: Senior Show. [Formerly ARTS 291] Research conducted under faculty supervision specifically in preparation for the Senior Show. Open only to senior majors in their final term. [3] (No AXLE credit)

ARTS 4998. Senior Honors Research. [Formerly ARTS 299a] Research conducted in consultation with a faculty member in Art. Offered on a graded basis only. Open only to honors majors. [3] (No AXLE credit)

ARTS 4999. Senior Honors Thesis. [Formerly ARTS 299b] Research conducted in consultation with a faculty member in Art. Offered on a graded basis only. Open only to senior honors majors. [3] (No AXLE credit)

Asian Studies

ASIA 1001. Commons Seminar. [Formerly ASIA 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

ASIA 1111. First-Year Writing Seminar. [Formerly ASIA 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111 (AXLE credit category varies by section)

ASIA 1201. Writing Southeast Asia. [Formerly ASIA 150] Literary representations, including novels and personal memoirs, of the history of Southeast Asia. Colonial and postcolonial periods. Representations of pluralistic cultures, diverse languages, religions, and indigenous and national identities. Indonesia, Myanmar, Philippines, Thailand, and Vietnam. All texts in English translation. [3] (HCA)

ASIA 1680. Inside China. [Formerly ASIA 236] First-hand experience of China’s dynamic society and expanding economy. Guided exploration of famous historical sites and contemporary institutions such as hospitals, businesses, factories, and art galleries in Beijing and Shanghai. Interviews with individuals from many different walks of life, including physicians, entrepreneurs, migrant workers, and college students. No knowledge of Chinese is required. Offered on a graded basis only. [3] (INT)

ASIA 2100W. Fashioning the Self: Coming of Age and Asian Modernities. [Formerly ASIA 200W] The coming-of-age novel (Bildungsroman) as a literary form in twentieth-century Asia. Travails of modernity and colonialism; the effects of crossing national, racial, and cultural boundaries; the experiences of traveling to urban centers, foreign countries, and ancestral lands. Texts from China, Indonesia, Japan, Philippines, and Vietnam. Taught in English. [3] (INT)

ASIA 2210W. Hollywood Hanoi. [Formerly ASIA 250W] Cultural narratives of the Vietnam War, including novels and films. War and representation, international, minority, and antiflaw perspectives on the violence and aftermath. Muhammad Ali, Werner Herzog, Jean Genet, Graham Greene, and Dinh Linh. All texts in English translation. No credit for students who have earned credit for 1111 section 4. [3] (INT)

ASIA 2511. Popular Culture in Modern Japan. [Formerly ASIA 211] Popular culture in Japan from 1900 to the present. The rise of mass culture and media, song, sports, food, fashion, and popular film genres. [3] (INT)

ASIA 2512. Explorations of Japanese Animation. [Formerly ASIA 212] Introduction to the form and content of Japanese animation as globalized popular entertainment and as a speculative artistic medium that explores history and memory, nature and technology, human identity, carnivalesque comedy, and gender relations. [3] (INT)

ASIA 2560. Current Japan-U.S. Relations. [Formerly ASIA 240] Similarities and differences in theory and practice in the United States and Japan on public policy issues such as trade, defense, environment, education, medical care, and racial prejudice. [3] (INT)


ASIA 3633. Self-Cultivation in Ancient China. [Formerly ASIA 233] 300 B.C.E. to 500 C.E. Methods, goals, and contexts of self-cultivation in antiquity. Breathing exercises, meditation, visualization, sexual arts, sacrifice, alchemy, and other practices in their religious, cultural, and social contexts. [3] (INT)

ASIA 3851. Independent Study. [Formerly ASIA 289a] Designed primarily for majors who want to study Asian topics not regularly offered in the curriculum. Must have consent of instructor. May be repeated for credit more than once, but students may earn only up to 3 credits per semester of enrollment. [1–3] (No AXLE credit)

ASIA 3852. Independent Study. [Formerly ASIA 289b] Designed primarily for majors who want to study Asian topics not regularly offered in the curriculum. Must have consent of instructor. May be repeated for credit more than once, but students may earn only up to 3 credits per semester of enrollment. [1–3] (No AXLE credit)

ASIA 3891. Special Topics. [Formerly ASIA 294a] Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [1–3] (No AXLE credit)

ASIA 3892. Special Topics. [Formerly ASIA 294b] Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [1–3] (No AXLE credit)

ASIA 3980. Junior Honors Readings. [Formerly ASIA 297] May be repeated for credit more than once. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

ASIA 4998. Honors Research. [Formerly ASIA 299a] Research conducted in consultation with a member of the faculty or affiliated faculty of the program. Open only to senior honors majors. [1–3] (No AXLE credit)

ASIA 4999. Honors Research. [Formerly ASIA 299b] Research conducted in consultation with a member of the faculty or affiliated faculty of the program. Open only to senior honors majors. Prerequisite: 4998. [1–3] (No AXLE credit)

Astronomy

ASTR 1001. Commons Seminar. [Formerly ASTR 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

ASTR 1010. Introductory Astronomy: Stars and Galaxies. [Formerly ASTR 102] Observed and physical properties of stars. Supernovae, neutron stars, and black holes. Our Milky Way galaxy and other galaxies. Cosmology, dark matter, dark energy, and the Big Bang. No credit for students who have earned credit for 1210 or 3000. [3] (MNS)

ASTR 1010L. Introductory Nighttime Astronomy Laboratory. [Formerly ASTR 103] Motion of the celestial sphere and apparent and real motions of celestial bodies as viewed from inside the Milky Way. Observations of meteor showers, comets, and artificial satellites. Telescopic observations of astronomical objects. Stellar spectra. Laboratory ordinarily accompanied by 1010 or 3000. Satisfies the AXLE lab course requirement when completed with 1010 or 3000. No credit for students who have earned credit for 1020L or 1210. [1] (No AXLE credit)

ASTR 1020L. Introductory Daytime Astronomy Laboratory. [Formerly ASTR 104] Phases of the Moon, colors of stars, shapes and motions of galaxies, properties of exoplanets, and ages of star clusters. Telescopic observations of the Sun. Laboratory ordinarily accompanied by 1010 or 3000. Satisfies the AXLE lab course requirement when completed with 1010 or 3000. No credit for students who have earned credit for 1010L or 1210. [1] (No AXLE credit)

ASTR 1111. First-Year Writing Seminar. [Formerly ASTR 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

ASTR 1210. Introduction to Observational Astronomy. [Formerly ASTR 122] Telescopic and naked eye observations. Light, optics, telescopes, and CCD cameras. Motions of the sky. Kepler’s laws. Phases and topology of the Moon. Distances, temperatures, and brightnesses of stars. Star clusters. Dark matter. Taught entirely at Dyer Observatory using 24-inch telescope. Satisfies the AXLE lab course requirement. Students who have earned credit for 1010 or 3000 will earn one credit hour for this course. Students who have earned credit for 1010L or 1020L will earn three credit hours for this course. Students who have earned credit for 1010L or 1020L and either 1010 or 3000 will earn no credit hours for this course. [4] (MNS)

ASTR 2110. The Solar System. [Formerly ASTR 201] The sky, ancient astronomy, orbits and gravity; seasons, the calendar, phases and motions of the moon; tides, eclipses, light and telescopes, the terrestrial planets, the giant planets and their moons and rings, asteroids, comets, meteors, extra-solar planets, formation of planetary systems, the sun. [3] (MNS)

ASTR 2130. Theories of the Universe. [Formerly ASTR 203] The interdependence of cosmological theories and religious teachings from the eighth century BCE to the end of the seventeenth century. Examines scientific works and religious texts, including those of Aristotle, Thomas Aquinas, Copernicus, Luther, Galileo, and Newton. [3] (P)

ASTR 2600. Undergraduate Seminar. [Formerly ASTR 250] Directed readings and discussions of current topics in astronomy. Normally limited to juniors and seniors with preference to majors. Prerequisite: 1010 or one semester of calculus-based physics. May be repeated for credit more than once, but students may earn only 1 credit per semester of enrollment. [1] (No AXLE credit)

ASTR 3000. Principles of Astrophysics. [Formerly ASTR 205] Origin and evolution of matter. The tools and methods of astrophysics, including light and telescopes. Cosmology and the Big Bang. Galaxies and star formation; physics of stars, including nucleosynthesis and stellar death; the solar system and the search for other worlds. Prerequisite: either PHYS 1501, 1601 or 1901 and either MATH 1200 or 1300. [3] (MNS)

ASTR 3600. Stellar Astrophysics. [Formerly ASTR 252] Physics of stellar structure and evolution, including nuclear energy generation, equations of state, and heat transfer by radiation and convection. Numerical stellar models. Observational aspects of stellar astrophysics. Prerequisite: either MATH 2400, 2420, or 2610; either PHYS 3200 or 3207; and either PHYS 2250 or 2250W. [3] (MNS)

ASTR 3700. Galactic Astrophysics. [Formerly ASTR 253] Interstellar matter and gaseous nebulae, the structure and evolution of normal galaxies, active galactic nuclei and quasars, and observational cosmology. No
credit for students who have earned credit for 8040. Prerequisite: MATH 2420 and either PHYS 2250 or 2250W. [3] (MNS)

ASTR 3800. Structure Formation in the Universe. [Formerly ASTR 254] Observational and theoretical aspects of extragalactic astronomy. Measurements of galaxies and of the large-scale structure of the universe from galaxy surveys. Expansion history of universe; roles of dark matter and energy. Growth of density fluctuations in universe due to gravity. Cosmological N-body simulations and formation of dark matter halos. Physics of galaxy formation. Experimental probes of dark matter and energy. Prerequisite: One of PHYS 1501, 1601, or 1901; and one of PHYS 1502, 1602, or 1902; and one of MATH 2400, 2420, or 2610; and one of CS 1101 or 1103. [3] (MNS)

ASTR 3840. Directed Studies. [Formerly ASTR 289] Individual research or readings under close faculty supervision. May be repeated for a total of 10 credits, but students may earn only up to 5 credits per semester of enrollment. [1–5; maximum of 10 credits total for all semesters of ASTR 3840] (No AXLE Credit)

ASTR 3880. Independent Study. [Formerly ASTR 291] Introduction to independent research and scholarly investigation under faculty supervision. May be repeated for a total of 10 credits, but students may earn only up to 6 credits per semester of enrollment. [1–6; maximum of 10 credits total for all semesters of ASTR 3880] (No AXLE Credit)

ASTR 3900. General Relativity and Cosmology. [Formerly ASTR 260] Introduction to Einstein’s theory describing gravity as a curvature of spacetime. Tensor analysis, special relativity, differential geometry, space-time curvature, the Einstein field equations, the Schwartzschild metric for stars and black holes, and the Friedmann-Robertson-Walker metric for cosmology. Prerequisite: PHYS 2270 and 2290. [3] (MNS)

ASTR 4998. Honors Research and Senior Thesis. [Formerly ASTR 298] Independent experimental or theoretical investigations of basic problems under faculty supervision which culminate in a written thesis submitted to the faculty. Required for departmental honors. Open to senior majors with departmental approval. May be repeated for a total of 10 credits, but students may earn only up to 6 credits per semester of enrollment. [1–6; maximum of 10 credits total for all semesters of ASTR 4998] (No AXLE credit)

Biology

BSCI 1001. Commons Seminar. [Formerly BSCI 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

BSCI 1100. Biology Today. [Formerly BSCI 100] Broad coverage of the biological sciences presenting evolution as the unifying concept. Particular emphasis on basic biological processes in cells and the relationships/interactions between organisms and their environment. Topics include cell structure and function, genetics and inheritance, evolution and diversity, populations, communities and ecosystems, and topics related to biology and society. Students who take 1510–1511 shall not receive credit for 1100. Corequisite: 1100L. [3] (MNS)

BSCI 1100L Biology Today Laboratory. [Formerly BSCI 101aa] Laboratory investigations of the genetics, physiology, and ecology of plants and animals. One three-hour laboratory per week to accompany 1100. Students who take 1510L, 1511L or 1512L shall not receive credit for 1100L. Corequisite: 1100L. Satisfies the AXLE lab course requirement when completed with 1100L. [1] (No AXLE credit)

BSCI 1103. Green Earth: The Biodiversity and Evolution of Plants. [Formerly BSCI 118] Biodiversity of plants, their adaptations to the environment, and their evolutionary and ecological relationships. Basic biology of plant form and function and the importance of plants for life on Earth. Not intended for students planning to major in biological sciences. Three hours of lecture and one laboratory period per week. [4] (MNS)

BSCI 1105. Human Biology. [Formerly BSCI 105] Recent advances in genetics, reproduction, and biotechnology. Social, legal, and ethical implications. Three lectures and one laboratory period per week. Not intended for students majoring in Biological Sciences. Students who take 1510–1511 may not receive credit for 1105. [4] (MNS)

BSCI 1111. First-Year Writing Seminar. [Formerly BSCI 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

BSCI 1510. Introduction to Biological Sciences. [Formerly BSCI 110a] An integrative approach to the science of life for science and engineering students. Macromolecular structure and function. Cell structure, reproduction, metabolism, and energy production. Genomes, replication, gene structure, RNA, and protein synthesis. Students who have completed 1100 or 1105 will forfeit full credit for 1100 or three hours of credit for 1105 upon completion of this course. Prerequisite or corequisite: CHEM 1601. [3] (MNS)

BSCI 1510L. Biological Sciences Laboratory. [Formerly BSCI 111a] Laboratory to accompany 1510. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1510. Students who have completed 1100L or 1105 will forfeit full credit for 1100L or one hour of credit for 1105 upon completion of this course. Prerequisite or corequisite: 1510. [1] (No AXLE credit)

BSCI 1511. Introduction to Biological Sciences. [Formerly BSCI 110b] Continuation of 1510. Cell communication, Physiology, organ function and development. Mendelian and population genetics. Evolution, ecology, and speciation. Populations, ecosystems, and conservation biology. Students who have completed 1100 or 1105 will forfeit full credit for 1100 or three hours of credit for 1105 upon completion of this course. Prerequisite: 1510. [3] (MNS)

BSCI 1511L. Biological Sciences Laboratory. [Formerly BSCI 111b] Laboratory to accompany 1511. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1511. No credit for students who have earned credit for 1512L. Students who have earned credit for 1100L or 1105 will forfeit full credit for 1100L or one hour of credit for 1105 upon completion of this course. Prerequisite or corequisite: 1511L. [1] (No AXLE credit)

BSCI 1512L. Biological Sciences Laboratory. [Formerly BSCI 111c] Alternative to 1511L. Directed research projects with emphasis on experimental design and analysis. Satisfies the AXLE lab course requirement when completed with 1511. Offered on a graded basis only. No credit for students who have earned credit for 1512L. Students who have earned credit for 1100L or 1105 will forfeit full credit for 1100L or one hour of credit for 1105 upon completion of this course. Prerequisite or corequisite: 1511L. Prerequisite: 1510L. [2] (No AXLE credit)

BSCI 2056. Non-Equivalent Credit (BSCI Introductory Lab). [Formerly 71CT] This course has no Vanderbilt equivalent. Credit is eligible to count toward the Introductory Lab requirement of the BSCI major or minor.

BSCI 2201. Introduction to Cell Biology. [Formerly BSCI 201] Structure and function of cells, subcellular organelles, and macromolecules. Fundamentals of organelle function, membrane transport, energy production and utilization, cell motility, cell division, intracellular transport and mechanisms of signal transduction. Prerequisite: 1510. [3] (MNS)

BSCI 2201L. Cell Biology Laboratory. [Formerly BSCI 202] One three-hour laboratory and discussion period per week. Satisfies the AXLE lab course requirement when completed with 2201. Prerequisite or corequisite: 2201. [1] (No AXLE credit)

BSCI 2205. Evolution. [Formerly BSCI 205] Evolutionary theory, with emphasis on evolutionary mechanisms. Microevolutionary processes of adaption and speciation and macro-evolutionary patterns. Evidence from genetics, ecology, molecular biology, and paleontology in the historical context of the neo-Darwinian synthesis. Three lectures per week. No credit for graduate students in Biological Sciences. Prerequisite: 1511. [3] (MNS)


BSCI 2210L. Genetics Laboratory. [Formerly BSCI 211] One three-hour laboratory and discussion period per week. Satisfies the AXLE lab course
BSCI 2218. Introduction to Plant Biology. [Formerly BSCI 218] Diversity of plants within the framework of their evolution and environmental adaptations. Biomes from the tropical rain forest to the Vanderbilt arboretum. Three lectures and one laboratory per week. Prerequisite: 1511. [4] (MNS)

BSCI 2219. Introduction to Zoology. [Formerly BSCI 219] A structural and functional study of the major animal groups. The problems presented to animals by their environments, and the anatomical and physiological mechanisms by which they adapt. Three lectures and one laboratory period per week. Prerequisite: 1511. [4] (MNS)

BSCI 2238. Ecology. [Formerly BSCI 238] Population biology, evolutionary ecology, community structure, with emphasis on species interactions, including competition, predation, and symbiosis. Prerequisite: 1511. [3] (MNS)

BSCI 2238L. Ecology Lab. [Formerly BSCI 237] One three-hour laboratory and discussion period or field trip per week. Satisfies the AXLE lab course requirement when completed with 2238. Prerequisite or corequisite: 2239. [1] (No AXLE credit)


BSCI 3239. Behavioral Ecology. [Formerly BSCI 239] Theoretical and empirical research on shaping the evolution of behavior. The role of behavior in population regulation, habitat selection and spacing, foraging behavior, predatory-prey interactions, sexual selection, evolution of mating systems, new approaches to animal communication, game theory. Prerequisite: 1511 and 2205. [3] (MNS)


BSCI 3247. Molecular Evolution. [Formerly BSCI 247] The theory of evolution at the molecular level. The evolution of DNA and RNA sequences, proteins, and genome structures will be studied using models from population genetics and comparative approaches. Molecular clocks, the evolution of gene regulation and globin genes, molecular phylogeny, and human evolution. Prerequisite: 2210 and 2205. [3] (MNS)


BSCI 3272. Genome Science. [Formerly BSCI 272] Aims and importance of the science. Retrieval of genome data from public databases; experimental and computational methods used in analysis of genome data and their annotation. Functional aspects of genomics, transcriptomics, and proteomics; use of phylogenetics and population genomics to infer evolutionary relationships and mechanisms of genome evolution. Prerequisites: 1511. [3] (MNS)

BSCI 3850. Independent Reading. [Formerly BSCI 282] Reading and discussion of research papers with a member of the faculty. Prerequisite: consent of Biological Sciences 3850 coordinator before the end of the previous semester. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [1; maximum of 2 credits total for all semesters of BSCI 3850] (No AXLE credit)

BSCI 3860. Introduction to Research. [Formerly BSCI 280] Work in the laboratory of a member of the Biological Sciences faculty. Term paper required. Consent of course coordinator and enrollment by arrangement before the end of the previous semester is required. Prerequisite: 1510. Prerequisite or corequisite: 1511. [1] (No AXLE credit)

BSCI 3861. Directed Laboratory Research. [Formerly BSCI 283] Directed student research on a project conceived by a member of the Biological Sciences faculty. Enrollment by arrangement before the end of the previous semester. May be taken only once, and participants ordinarily expected to have overall grade point average of B or better. Offered on a graded basis only. Prerequisite: 1511, one intermediate BSCI course appropriate to the major or 3860, and consent of Biological Sciences 3861 coordinator. [2–4] (No AXLE credit)

BSCI 3890. Special Topics in Biological Sciences. [Formerly BSCI 290] Topics vary. May be repeated for credit more than once by permission of the director of undergraduate studies. Students may enroll in more than one section of this course each semester. Prerequisite: 1511. [3] (MNS)

BSCI 3961. Independent Laboratory Research. [Formerly BSCI 286] Original student research on a defined problem in Biological Sciences and under the supervision of Biological Sciences faculty. Some independence in the design and execution of the problem. Enrollment by arrangement before the end of the previous semester. Prerequisite: 3861, consent of Biological Sciences 3861 coordinator, cumulative grade point average of B. May be repeated for credit more than once, but students may earn only up to 6 credits per semester of enrollment. [2–6] (No AXLE credit)
CHEM 1001. Commons Seminar. [Formerly CHEM 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

CHEM 1010. Introductory Chemistry. [Formerly CHEM 101a] General principles for non-science majors or those not planning on taking additional chemistry courses. The periodic table, chemical reactions, properties of solutions, and atmospheric chemistry with connections to global environmental issues. No prior chemistry experience required. Not a prerequisite for advanced courses in chemistry. No credit for students who have earned credit for 1601, 2211, or 2221. [3] (MNS)

CHEM 1010L. Introductory Chemistry Laboratory. [Formerly CHEM 100a] Laboratory to accompany 1010. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1010. No credit for students who have earned credit for 1601L or 2221L. Corequisite: 1010. [1] (No AXLE credit)

CHEM 1020. Introductory Chemistry. [Formerly CHEM 101b] General principles for non-science majors or those not planning on taking additional chemistry courses. Chemistry of water, basic nuclear chemistry, organic and biochemistry, with discussion of the chemistry of common medicines and nutritional chemistry. No prior chemistry experience required. Not a prerequisite for advanced courses in chemistry. No credit for students who have earned credit for 1602, 2212, or 2222. [3] (MNS)

CHEM 1020L. Introductory Chemistry Laboratory. [Formerly CHEM 100b] Laboratory to accompany 1020. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1020. No credit for students who have earned credit for 1602L or 2222L. Corequisite: 1020. [1] (No AXLE credit)

CHEM 1111. First-Year Writing Seminar. [Formerly CHEM 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3] maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)
CHEM 2222L. Organic Chemistry Laboratory. [Formerly CHEM 219b] Laboratory to accompany 2212 or 2222. One four-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 2212 or 2222. Prerequisite or corequisite: 2212 or 2222. [1] (No AXLE credit)


CHEM 3010. Inorganic Chemistry. [Formerly CHEM 203] A survey of modern inorganic chemistry including coordination compounds and the compounds of the main-group elements. Representative reactions and current theories are treated. Prerequisite or corequisite: 3300 or 3310. [3] (MNS)

CHEM 3020. Introduction to Bioinorganic Chemistry. [Formerly CHEM 202] Functions of inorganic elements in living cells. The manner in which coordination can modify the properties of metallic ions in living systems. Prerequisite: 2212 or 2222. [3] (MNS)

CHEM 3120. Instrumental Analytical Chemistry. [Formerly CHEM 211] Chemical and physical principles of modern analytical chemistry instrumentation. Prerequisite: 2100 and either 2212 or 2222. [3] (MNS)

CHEM 3135W. Forensic Analytical Chemistry. [Formerly CHEM 227W] Techniques, methodologies, data collection, and interpretation. Laboratory experience with drug analysis, toxicology, trace, and arson analysis. Two hours of lecture and one four-hour laboratory per week. Prerequisite: 2100 and 2100L. [3] (MNS)

CHEM 3220. Spectroscopic Identification of Organic Compounds. [Formerly CHEM 225] Theoretical and practical aspects of spectroscopic methods, with an emphasis on NMR spectroscopy, for structural characterization of organic compounds. Prerequisite: 2212 or 2222. [3] (MNS)

CHEM 3300. Physical Chemistry: Quantum Mechanics, Spectroscopy, and Kinetics. [Formerly CHEM 230] Chemical kinetics and principles of quantum chemistry applied to molecular structure, bonding, and spectroscopy. Prior study of multivariable calculus is expected. No credit for graduate students in chemistry. Prerequisite or corequisite: PHYS 1501, 1601, or 1901. Prerequisite: MATH 1201 or 1301. [3] (MNS)

CHEM 3310. Biophysical Chemistry: Thermodynamics in Chemical and Biological Systems. [Formerly CHEM 231] Chemical thermodynamics and equilibrium, their statistical foundation, and applications to chemical and biological phenomena in biomedical research. Prerequisite or corequisite: PHYS 1501, 1601, or 1901. Prerequisite: MATH 1201 or 1301. [3] (MNS)

CHEM 3315. Physical Chemistry Laboratory. [Formerly CHEM 236] Experiments in chemical thermodynamics and kinetics. Data analysis and presentation. No credit for graduate students in chemistry. One three-hour laboratory or one lecture per week. Calculus through Math 2300 recommended. Prerequisite: 2222L and either MATH 1201 or 1301. [1] (No AXLE credit)

CHEM 3600. Chemical Literature. [Formerly CHEM 250] Assigned readings and problems in the nature and use of the chemical literature. Prerequisite: 2212 or 2222. [1] (No AXLE credit)


CHEM 3710. Bioorganic Chemistry. [Formerly CHEM 224] Essential metabolites including vitamins, steroids, peptides, and nucleotides. Consideration of phosphate esters and the synthesis of oligodeoxyribonucleotides. Three lectures per week. Prerequisite: 2212 or 2222. [3] (MNS)

CHEM 3841. Readings for Honors. [Formerly CHEM 291a] Open only to students in the departmental honors program. General reading supervised by research adviser. [2] (No AXLE credit)

CHEM 3842. Readings for Honors. [Formerly CHEM 291b] Open only to students in the departmental honors program. Continuation of 3841, with emphasis on research planned. [2] (No AXLE credit)

CHEM 3860. Undergraduate Research. [Formerly CHEM 282] Open to students who have earned at least 8 hours of credit and a minimum GPA of 2.7 in chemistry, with consent of the director of undergraduate studies and the sponsoring faculty member. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3] (No AXLE credit)

CHEM 3980. Honors Research. [Formerly CHEM 292a] Open only to students in the departmental honors program. Original research supervised by research adviser, to be reported in thesis form with oral examination thereon. [2] (No AXLE credit)

CHEM 4050. Introduction to Organometallic Chemistry. [Formerly CHEM 207] A general description of the preparation, reaction chemistry, molecular structure, bonding, and spectroscopic identification of organometallic compounds of the transition metals. Prerequisite: 3010. [3] (MNS)

CHEM 4210. Organic Chemistry Structure and Mechanism. [Formerly CHEM 220c] Stereochromic and conformational analysis; mechanisms of organic reactions; linear free-energy relationships; reactive intermediates. Three lectures and one recitation hour per week. No credit for students who have earned credit for 5210. Students who have earned credit for 5209 will earn only two credits for this course. Prerequisite: either 2212 or 2222 and either 3300 or 3311. [4] (MNS)


CHEM 4720. Drug Design and Development. [Formerly CHEM 226] Concepts of drug design; physical chemistry of drug interactions with receptors, enzymes, and DNA; drug absorption and distribution. Organic chemistry of drug metabolism; mechanism of action for selected therapeutical classes. Prerequisite: 3710 or BSCI 2520. [3] (MNS)

CHEM 4965. Advanced Integrated Laboratory. [Formerly CHEM 295a] Multidisciplinary laboratory projects. Experimental design, synthetic techniques, chemical analysis, spectroscopy, and computational methods. Offered on a graded basis only. Limited to senior majors. Prerequisite: 2100, 2100L. [3] (No AXLE credit)

CHEM 4966. Advanced Integrated Laboratory. [Formerly CHEM 295b] Continuation of 4965. Offered on a graded basis only. Limited to senior majors. Prerequisite: 4965. [3] (No AXLE credit)

CHEM 4980. Honors Research. [Formerly CHEM 292b] Open only to students in the departmental honors program. Original research supervised by research adviser, to be reported in thesis form with oral examination thereon. [2] (No AXLE credit)

CHEM 4999. Honors Research. [Formerly CHEM 292c] Open only to students in the departmental honors program. Original research supervised by research adviser, to be reported in thesis form with oral examination thereon. [2] (No AXLE credit)

Chinese

CHIN 1011. Basic Chinese. [Formerly CHIN 200a] Designed exclusively for students with no previous exposure to the language. The basic pronunciation, grammar, and writing system of Mandarin Chinese. Simple conversation, the pinyin Romanization system, basic Chinese characters, and cultural elements embedded in the language. No credit for students who have earned credit for 1101 or a more advanced Chinese language course. [3] (No AXLE credit)
CHIN 1012. Basic Chinese. [Formerly CHIN 206] Continuation of 1011. No credit for students who have earned credit for 1101 or a more advanced Chinese language course. Prerequisite: 1011. [3] (No AXLE credit)

CHIN 1101. Elementary Chinese I. [Formerly CHIN 201] Introduction to Modern Chinese pronunciation, grammar, conversation, reading, and writing. Two hours of lecture and three hours of drill per week. No credit for students who have earned credit for 1012 or a more advanced Chinese language course. [5] (No AXLE credit)

CHIN 1102. Elementary Chinese II. [Formerly CHIN 202] Continuation of 1101. Introduction to Modern Chinese pronunciation, grammar, conversation, reading, and writing. Two hours of lecture and three hours of drill per week. No credit for students who have earned credit for a more advanced Chinese language course. Prerequisite: 1012 or 1101. [5] (INT)


CHIN 2201. Intermediate Chinese I. [Formerly CHIN 211] Oral and written language training. Two hours of lecture and three hours of drill per week. Repeat credit for students who completed 214. No credit for students who have earned credit for a more advanced Chinese language course. Prerequisite: 1102. [5] (INT)

CHIN 2202. Intermediate Chinese II. [Formerly CHIN 212] Continuation of 2201. Language training in oral and written Chinese. Two hours of lecture and three hours of drill per week. Serves as repeat credit for 216. No credit for students who have earned credit for a more advanced Chinese language course. Prerequisite: 2201. [5] (INT)

CHIN 2211. Chinese for Heritage Learners I. [Formerly CHIN 225] Intended for students who have some informal training in listening and speaking Mandarin Chinese. Basic literacy and other aspects of language proficiency. Offered on a graded basis only. No credit for students who have earned credit for a more advanced Chinese language course. [3] (INT)

CHIN 2212. Chinese for Heritage Learners II. [Formerly CHIN 226] Continuation of 2211. Intended for students who have some informal training in listening and speaking Mandarin Chinese. Basic literacy and other aspects of language proficiency. Offered on a graded basis only. No credit for students who have earned credit for a more advanced Chinese language course. Prerequisite: 2211. [3] (INT)

CHIN 3301. Advanced Chinese I. [Formerly CHIN 241] Readings in Chinese culture to enhance proficiency in oral and written Chinese. No credit for students who have earned credit for a more advanced Chinese language course. Prerequisite: 2202. [3] (INT)

CHIN 3302. Advanced Chinese II. [Formerly CHIN 242] Continuation of 3301. Readings in Chinese culture to enhance proficiency in oral and written Chinese. No credit for students who have earned credit for a more advanced Chinese language course. Prerequisite: 3301. [3] (INT)

CHIN 3302W. Advanced Chinese II. [Formerly CHIN 242W] Reading and writing essays about modern Chinese culture and society. Repeat credit for 3302. No credit for students who have earned credit for a more advanced Chinese language course. Graded basis only. Prerequisite: 3301. [3] (INT)

CHIN 3851. Independent Study. [Formerly CHIN 289a] Designed primarily for majors who want to study Chinese not regularly offered in the curriculum. Must have consent of instructor. May be repeated for a total of 12 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum 12 credits total for all semesters of CHIN 3851 and 3852] (No AXLE credit)

CHIN 3852. Independent Study. [Formerly CHIN 289b] Designed primarily for majors who want to study Chinese not regularly offered in the curriculum. Must have consent of instructor. May be repeated for a total of 12 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum 12 credits total for all semesters of CHIN 3851 and 3852] (No AXLE credit)

CHIN 4401. Business Chinese I. [Formerly CHIN 255] Language skills for listening, speaking, reading, and writing in business environments. Modern China from economic and business perspectives. No credit for students who have earned credit for a more advanced Chinese language course. Prerequisite: 3302 or 3302W. [3] (INT)


CHIN 4403. Readings in Modern Chinese Media. [Formerly CHIN 251] Books, newspapers, Internet, and television documents and productions pertaining to political, social, and economic issues in China, including foreign trade-related issues. Prerequisite: 3302. [3] (INT)

CHIN 4404. Readings in Modern Chinese Media. [Formerly CHIN 252] Continuation of 4403. Books, newspapers, and Internet sources pertaining to political, social, and cultural issues. Prerequisite: 3302. [3] (INT)


Cinema and Media Arts

CMA 1001. Commons Seminar. [Formerly CMA 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

CMA 1002W. Moving Images and Analytical Thinking. Moving images and new media from various genres, periods, and national contexts. May be repeated for credit once if there is no duplication in topic. Offered on a graded basis only. [3] (HCA)

CMA 1111. First-Year Writing Seminar. [Formerly CMA 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

CMA 1500. Fundamentals of Film and Video Production. [Formerly CMA 105] Technologies and techniques of filmmaking. Digital video cameras, staging and lighting, sound recording, post-production sound, and image editing. Offered on a graded basis only. [3] (No AXLE credit)

CMA 1600. Introduction to Film and Media Studies. [Formerly CMA 125] Stylistic tendencies and narrative strategies, genres, and theoretical approaches. Live-action cinema, animation, experimental cinema, television, and computer-generated moving images. [3] (HCA)

CMA 2100. Intermediate Filmmaking: Alternate Forms. [Formerly CMA 175] Topics vary. Motion picture production and analysis of nonfiction and experimental forms. Development of conceptual and technical skills for making individual and collaborative film projects. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Offered on a graded basis only. Prerequisite: 1500. [3] (No AXLE credit)

CMA 2200. Intermediate Filmmaking: The Fiction Film. [Formerly CMA 176] Topics vary. Motion picture production and analysis of the fiction form and cinematic storytelling. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Offered on a graded basis only. Prerequisite: 1500. [3] (No AXLE credit)

CMA 2300. Film and Media Theory. [Formerly CMA 201] Historical overview of the major analytical and critical approaches to the study of film as an aesthetic and cultural form. Contemporary perspectives on cinema, video, and new media. Prerequisite: 1600. [3] (F)

CMA 2400. History of World Cinema. [Formerly CMA 211] Survey of world film history from 1895 to the present. Key films and filmmakers.
Historical, aesthetic, national, and political contexts of films and film movements. No credit for students who have earned credit for HART 272a or 272b. Prerequisite: 1600. [3] (HCA)

CMA 2500W. Screenwriting. [Formerly CMA 227W] Techniques of screenwriting. Serves as repeat credit for students who have completed THTR 227, 227W. [3] (HCA)

CMA 2600W. Advanced Screenwriting. [Formerly FILM 275W] Story structure, character development, and dialogue. Serves as repeat credit for THTR 275 and 275W. Prerequisite: 2500W or THTR 227W. [3] (HCA)

CMA 3850. Independent Study. [Formerly CMA 289a] Projects are arranged with individual professors and must be confirmed by the director of Cinema and Media Arts within two weeks of the beginning of classes; otherwise the student will be dropped from the rolls. [Variable credit: 1–3 each semester. Limit of 6 hours for 3850 and 3851 combined for majors.] (No AXLE credit)

CMA 3851. Independent Study. [Formerly FILM 289b] Projects are arranged with individual professors and must be confirmed by the director of Cinema and Media Arts within two weeks of the beginning of classes; otherwise the student will be dropped from the rolls. [Variable credit: 1–3 each semester. Limit of 6 hours for 3850 and 3851 combined for majors.] (No AXLE credit)

CMA 3880. Internship Training. [Formerly CMA 280b] Under faculty supervision, students from any discipline can gain experience working on projects related to film and media in public or private organizations. Responsibilities include conducting background research and developing skills in film and media study and production. Hours for background readings and research will be completed in CMA 3881 concurrently with 3880. Normally a 2.90 grade point average, 6 hours of prior work in Cinema and Media Arts, and approval of the student’s plan by the director of undergraduate studies are required. A research paper and report must be submitted at the end of the semester during which the internship training is completed. Offered on a Pass/Fail basis only and must be taken concurrently with 3881. Hours of 3880 will not count toward the Film Studies Major or minor. Corequisite: 3881. [Variable credit: 1–9] (No AXLE credit)

CMA 3881. Internship Readings and Research. [Formerly CMA 280a] Under faculty supervision, students from any discipline can gain experience working on projects related to film and media in public or private organizations. Responsibilities include conducting background research and developing skills in film and media study and production. Hours for background readings and research will be completed in CMA 3881 concurrently with 3880. Normally a 2.90 grade point average, 6 hours of prior work in Cinema and Media Arts, and approval of the student’s plan by the director of undergraduate studies are required. A research paper and report must be submitted at the end of the semester during which the internship training is completed. Readings and research conducted under the supervision of a member of the Cinema and Media Arts program and a substantial research paper or written project (such as a screenplay, treatment, or production plan related to the Training component) is required. Corequisite: 3880. [Variable credit: 1–6] (No AXLE credit)

CMA 3891. Special Topics in Film and Video Production. [Formerly CMA 288a] Topics vary. May be repeated more than once if there is no duplication of topic. Prerequisite: 1500. [3] (No AXLE credit)

CMA 3892. Special Topics in the Study of Film. [Formerly CMA 288b] Topics vary. May be repeated more than once if there is no duplication of topic. Prerequisite: 1600. [3] (No AXLE credit)

CMA 4961. Senior Seminar on Criticism, Theory, and History. [Formerly CMA 290a] Advanced reading and research in film. Offered on a graded basis only. Prerequisite: 1600 and senior standing. [3] (No AXLE credit)

CMA 4962. Senior Seminar on Film Practice. [Formerly CMA 290b] Advanced independent filmmaking, portfolio assembly, and professionalism. Offered on a graded basis only. Prerequisite: 1500 and senior standing. [3] (No AXLE credit)

CMA 4998. Senior Honors Research. [Formerly CMA 299a] Acquisition, reading, and analysis of primary source research material. Open only to senior honor students. [3] (No AXLE credit)

CMA 4999. Senior Honors Thesis. [Formerly CMA 299b] Writing a thesis under the supervision of the thesis advisor. Open only to senior honor students. Prerequisite: 4998. [3] (No AXLE credit)

Classics

CLAS 1001. Commons Seminar. [Formerly CLAS 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

CLAS 1111. First-Year Writing Seminar. [Formerly CLAS 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

CLAS 1120. Greek Civilization. [Formerly CLAS 130] A survey of the history and achievements of Greece from its Mycenaean origins to the Roman domination. Topics include literature, art, athletics, Periclean Athens, the conquest of Alexander, and the Hellenistic age. [3] (INT)

CLAS 1130. The Greek Myths. [Formerly CLAS 150] A study of the nature of the Greek myths, with consideration of the related Near Eastern myths and the early history of myths in Greece. Both the divine and the heroic myths, with some attention to the development of these myths in Italy and to their influence upon art and literature. [3] (HCA)

CLAS 1150. Roman Civilization. [Formerly CLAS 146] Ancient Roman civilization from mythical foundations to the fall of the empire. A historical survey of topics including art and architecture, city life, agriculture, religion, law, slavery, public entertainment, and literature. [3] (INT)

CLAS 2100. History of the Ancient Near East. [Formerly CLAS 207] From the neolithic period to the conquests of Alexander the Great, in the geographical area from Persia to Troy and Egypt. Special attention to the history of Israel. [3] (INT)

CLAS 2110. History of Greece to Alexander the Great. [Formerly CLAS 208] The Greek world from the beginning of the Mycenaean Age (1650 B.C.) to the end of the Classical period. Special attention to the relationship between political history and the development of Hellenism. [3] (INT)

CLAS 2120. Greece and the Near East from Alexander to Constantine. [Formerly CLAS 209] From Alexander’s conquest of the Persian Empire to the ascendency of Christianity in the fourth century. Social, cultural, and religious transformations within the framework of political history. [3] (INT)


CLAS 2160. History of the Roman Empire. [Formerly CLAS 213] The Roman world from Augustus to the collapse of the western empire in the fifth century. Political, military, social, and religious history. Special attention given to problems arising from use of the primary sources as well as to controversies in modern scholarship. [3] (INT)

CLAS 2180. The Mediterranean World from Late Antiquity to the Middle Ages. [Formerly CLAS 223] Eastern Roman Empire from Constantine to Arab conquests. Political, social, cultural, and religious history, including monasticism, barbarian invasions, changing roles of Emperor and Church, and birth of Islam. Developments in urban life and landscape. [3] (INT)

CLAS 2200. Archaic and Classical Greek Art and Architecture, 1000 to 400 B.C.E. [Formerly CLAS 204] Sculpture, vase painting, architecture, and the minor arts. Formal and stylistic developments in relation to changing cultural background. No credit for students who have earned credit for HART 225. [3] (HCA)
CLAS 2210. Late Classical Greek and Hellenistic Art and Architecture. [Formerly CLAS 205] Sculpture, vase painting, architecture, and the minor arts from after the Parthenon to the Roman Empire. Media that developed significantly in this period, such as wall painting and mosaic. No credit for students who have earned credit for HART 2220. Repeat credit for students who have completed HART 258. [3] (HCA)

CLAS 2250. Roman Art and Architecture. [Formerly CLAS 206] Sculpture, architecture, and painting from the tenth century B.C.E. to the early fourth century C.E. Daily life of the Romans as seen in excavations of the towns of Pompeii and Herculaneum. [3] (HCA)

CLAS 3000. Classical Tradition in America. [Formerly CLAS 222] Influences of classical Greece and Rome on the literature, politics, architecture, and values of the United States from the colonial period to the present. [3] (US)

CLAS 3010. The Ancient Origins of Religious Conflict in the Middle East. [Formerly CLAS 224] Religious oppositions in the eastern Mediterranean world from the Maccabean revolt to the Muslim conquests of the seventh century; beginnings of religious militancy; challenges of monotheism to Greco-Roman civilization; conversion, persecution, and concepts of heresy and holy war in Christianity, Judaism, and Islam. [3] (P)


CLAS 3110. Warfare in the Ancient Mediterranean. [Formerly CLAS 226] Continuity and change in ancient Greek and Roman warfare 800 B.C. to A.D. 120. Social, political, and religious aspects of war. Effects of war, imperialism, and militarism on internal and external populations. [3] (INT)


CLAS 3150. Roman Law. [Formerly CLAS 260] The relationship between law and society as illustrated by cases drawn from Roman legal and literary sources. The development of legal reasoning and the rise of an autonomous legal profession at Rome. [3] (SBS)

CLAS 3160. Roman Law and Social History. Relationship of law and society as illustrated by legal, literary, epigraphic, and papyrological evidence. Views and methodologies of leading modern scholars. Focus on methodology. Marriage, family, personal status, the economy, and judicial system. Basic familiarity with Roman history or law is expected. [3] (SBS)

CLAS 3190W. Augustan Rome. [Formerly CLAS 296W] Social, administrative, religious, and military reforms. Common themes in art, architecture, and literature; changes in national identity in the transition from Republic to Empire. Prerequisite: 1150, 2150, or 2160. [3] (HCA)

CLAS 3200. The Greek City. [Formerly CLAS 211] The example of ancient Athens. The stoa, the theatre, the house, and fortifications. Institutions such as the courts, the public assembly, and the family. Literary, historical, archaeological, and philosophical sources. Serves as repeat credit for students who have completed HART 263. [3] (SBS)

CLAS 3210. The Archaeology of Greek Sanctuaries. [Formerly CLAS 245] Study of ancient Greek religious worship through an examination of temples, altars, cult images, votives, priests, and processions. Panhellenic sanctuaries and oracular and mystery cults. No credit for students who have earned credit for 3700. [3] (INT)

CLAS 3220. The Trojan War in History, Art, and Literature. [Formerly CLAS 240] Representations in Classical Greek art, literature, and archaeological evidence. The composition of the Homeric epics; the meaning of the Trojan War to later audiences. [3] (HCA)

CLAS 3230. Alexander the Great. [Formerly CLAS 243] Alexander’s rise to power and conquests in Europe, Asia, and Africa; the legacy of his introduction of Greek culture to the East; his significance to later audiences. Offered on a graded basis only. [3] (HCA)

CLAS 3300. Akkadian. [Formerly CLAS 231] Introduction to the cuneiform script and to the grammar of Akkadian, the language of ancient Mesopotamia. Selected readings in Old Babylonian (CODEX Hammurabi, Mari letters) and Neo-Assyrian texts (Creation Poem, Gilgamesh Epic). [3] (INT)

CLAS 3301. Akkadian. [Formerly CLAS 232] Continuation of 3300. Introduction to the cuneiform script and to the grammar of Akkadian, the language of ancient Mesopotamia. Selected readings in Old Babylonian (CODEX Hammurabi, Mari letters) and Neo-Assyrian texts (Creation Poem, Gilgamesh Epic). [3] (INT)

CLAS 3310. Culture of the Ancient Near East. [Formerly CLAS 236] A survey of highly sophisticated Near East cultures of the last three millennia before the common era (B.C.). Discussion of political histories, and the social, religious, and intellectual heritage of Mesopotamia, Egypt, and Anatolia through excavated artifacts and written documents. [3] (INT)

CLAS 3320. The Amarna Age. [Formerly CLAS 238] The Amarna period from the sixteenth through the twelfth centuries B.C.E., as illuminated by excavations of palaces and temples in Egypt, Anatolia, Canaan, and Mesopotamia as well as the vast historical, legal, and literary documents of the period. Focus on the internationalism and theological speculation of the period as seen through the powerful personalities and accomplishments of leaders such as Thutmoses III, Suppiluliumas, Ramses II, and the spiritually influential Akhenaten. [3] (INT)


CLAS 3710. Archaeology, History, and Culture in Greece: Kenchreai Field School. [Formerly CLAS 242] Archaeological field school at the site of Kenchreai with seminars and excursions in southern Greece. Basic techniques in excavation, survey, and the analysis of architecture, artifacts, and bones. Explorations of churches, temples, houses, and tombs. Focus on Greece during the Roman Empire and late antiquity. Landscape settlement, cult practice, cultural and social diversity, and funerary rituals. Offered on a graded basis only. [3] (INT)

CLAS 3720. History and Art of Ancient Rome. [Formerly CLAS 244] The mid-second century BCE to the mid-second century CE. Investigating significant sites, monuments, and museum collections in Rome and locations throughout southern Italy. Monumental and domestic architecture, wall paintings, sculpture, coins, and ancient sources. [3] (INT)

CLAS 3850. Independent Study. [Formerly CLAS 289] Completion of a substantial research paper in either classics or the classical tradition under the direction of a faculty sponsor. Consent of both the faculty sponsor and the director of undergraduate studies is required. May be repeated for a total of 6 credits if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1-3; maximum of 6 credits for all semesters of CLAS 3850] (No AXLE credit)

CLAS 4998. Senior Honors Thesis. [Formerly CLAS 299A] Open only to seniors in the departmental honors program. [3] (No AXLE credit)

CLAS 4999. Senior Honors Thesis. [Formerly CLAS 299B] Open only to seniors in the departmental honors program. [3] (No AXLE credit)

Communication of Science and Technology

CSET 2100. Science Communication Tools and Techniques. [Formerly CSET 201] Translating technical research for a general readership. Benefits and limitations of different formats, texts, and media for telling stories about science. Repeat credit for students who completed 150 in fall 2011 or fall 2012. No credit for students who earned credit for CMST 237 before fall 2013. [3] (HCA)

CSET 3840. Directed Study. [Formerly CSET 289] Individual research and scholarly investigation in science, engineering, or medicine. Usually conducted in a laboratory setting. May be repeated for credit more than
once, but students may earn only up to 3 credits per semester of enrollment. [1–3] (No AXLE credit)

CSET 3841. Project in Science Writing and Communicating. [Formerly CSET 290] Presentation of scientific, engineering, or medical research, including biographical and historical background where appropriate, in one or more presentation styles (written, visual, web), under faculty supervision. May be repeated for credit more than once, but students may earn only up to 3 credits per semester of enrollment. Prerequisite: 3840 and approval of the program director. [1–3] (No AXLE credit)

CSET 3890. Special Topics. [Formerly CSET 150] Topics as announced. May be repeated for credit more than once if there is no duplication of topic, but students may earn only 3 credits per semester of enrollment. [3] (No AXLE credit)

CSET 4998. Honors Thesis. [Formerly CSET 296] Limited to students admitted to the Communication of Science and Technology Honors program. May be repeated for credit once, but students may earn only up to 3 credits per semester of enrollment. Prerequisite: 3840 and 3841. [1–3] (No AXLE credit)

Communication Studies

CMST 1001. Commons Seminar. [Formerly CMST 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

CMST 1111. First-Year Writing Seminar. [Formerly CMST 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


CMST 1850. Interpersonal Communication. [Formerly CMST 101] A study of both the theory and application of verbal and nonverbal communication as they occur in relatively unstructured person-to-person and small group settings. [3] (SBS)


CMST 2110. Persuasion. [Formerly CMST 201] The theory and practice of persuasion with particular emphasis on speech composition, the use of language and its relationship to oral style, structure, and the relationship of structure to the process of speech preparation. Prerequisite: 1500. [3] (HCA)

CMST 2120. Organizational and Managerial Communication. [Formerly CMST 204] Theory and practice of communication in relation to organizations and management with application to leadership, values and ethics, organizational communication theory, and organizational conflict. Prerequisite: 1500. [3] (HCA)


CMST 2900. Values in Modern Communication. [Formerly CMST 223] An examination of values, explicit and implicit, in communication situations in modern American society. The course begins with the discovery and analysis of values and applies this process to technological innovation and rhetorical choice, interpersonal communication, advertising and consumerism, and mass-media persuasion. [3] (P)

CMST 2950. Rhetoric of Mass Media. [Formerly CMST 241] A study of the nature, effects, reasons for the effects, ethics, regulation, and criticism of contemporary mass media communication. Political causes, news reporting, commercial advertising, and similar sources of rhetoric are included. [3] (HCA)

CMST 3000. Rhetoric of the American Experience, 1640–1865. [Formerly CMST 220] A critical and historical examination of the methods and effects of public debate and other attempts to influence the attitudes, affective response, and behavior of the American people. Attention to the rhetorical features of selected issues and speakers from colonial times through the Civil War. [3] (US)

CMST 3001. Rhetoric of the American Experience, 1865 to 1945. [Formerly CMST 221] Critical and historical examination of the methods and effects of public debate and other attempts to influence the attitudes, affective response, and behavior of the American people. Attention to the rhetorical features of selected issues and speakers from 1865 to 1945. [3] (US)

CMST 3002. Rhetoric of the American Experience, 1945–Present. [Formerly CMST 225] Critical and historical examination of the methods and effects of public debate and other attempts to influence the attitudes, affective response, and behavior of the American people. Attention to the rhetorical features of selected issues and speakers from 1945 to the present. Serves as repeat credit for students who completed 294 section 3 in fall 2009. [3] (US)

CMST 3100. Rhetoric of Social Movements. [Formerly CMST 224] The role of communication in the creation, development, and function of social movements. The analysis of specific rhetorical acts. The study of the arguments, patterns of persuasion, and communication strategies of selected social movements. [3] (US)


CMST 3620. Rhetoric, Culture, and Critique. [Formerly CMST 254] Rhetorical criticism of cultural texts and artifacts, including oratory, mass media, and other forms of public discourse. Fundamentals of effective rhetorical analysis and writing. Repeat credit for students who have completed 3620W. [3] (HCA)

CMST 3620W. Rhetoric, Culture, and Critique. [Formerly CMST 254W] Rhetorical criticism of cultural texts and artifacts, including oratory and mass media. Fundamentals of rhetorical analysis and writing. Repeat credit for students who have completed 3620. [3] (HCA)


CMST 3710. Cultural Rhetorics of Film. [Formerly CMST 243] Film as rhetorical response to historical and cultural change. Filmic treatment of historical trauma; related genres, such as horror and melodrama. [3] (HCA)


CMST 3840. Directed Readings. [Formerly CMST 290] Supervised reading and writing in a selected field of the discipline under the guidance of a faculty supervisor. Consent of both the faculty supervisor and the director of undergraduate studies required. Normally open only to majors in communication studies. May be repeated for a total of 6 credits in 3850 and 3840 combined, but students may earn only up to 3 credits per semester of
enrollment. [3; maximum of 6 credits total for all semesters of CMST 3850 and 3840] (No AXLE credit)

CMST 3850. Independent Study. [Formerly CMST 289] A research project in rhetorical criticism to be arranged with the individual instructor. Designed for students who have taken either 3000 or 3001. May be repeated for a total of 6 credits in 3850 and 3840 combined, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of CMST 3850 and 3840] (No AXLE credit)

CMST 3890. Selected Topics in Communication Studies. [Formerly CMST 294] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

CMST 4940. Seminars in Selected Topics. [Formerly CMST 295] Topics of special interest. May be repeated for a total of 6 credits in 4940 and 4941 combined if there is no duplication in topic. Students may enroll in more than one section of this course per semester of enrollment. Prerequisite: 15 hours of Communication Studies. [3; maximum of 6 credits total for all semesters of CMST 4940 and 4941] (No AXLE credit)

CMST 4941. Seminars in Selected Topics. [Formerly CMST 296] Topics of special interest. May be repeated for a total of 6 credits in 4940 and 4941 combined if there is no duplication in topic. Students may enroll in more than one section of this course per semester of enrollment. Prerequisite: 15 hours of Communication Studies. [3; maximum of 6 credits total for all semesters of CMST 4940 and 4941] (No AXLE credit)

Earth and Environmental Sciences

EES 1001. Commons Seminar. [Formerly EES 99] Topics vary. General Elective credit only. [1] (No AXLE credit)


EES 1030L. Oceanography Laboratory. [Formerly EES 113] Laboratory to accompany 1030. Corequisite: 1030. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1030. [1] (No AXLE credit)

EES 1070. Volcanoes: Impacts on Earth and Society. [Formerly EES 107] How magmas form and volcanoes erupt; eruption processes and their hazards to society. Volcanic influence on human history and the evolution of the Earth. No credit for students who have earned credit for 1111 section 3. [3] (MNS)

EES 1080. Earth and Atmosphere. [Formerly EES 108] The science of the atmosphere: principles of weather and climate; the atmosphere as part of the Earth system; weather forecasting; hurricanes, tornadoes, and severe storms; human impacts, such as air pollution and climate change. [3] (P)

EES 1111. First-Year Writing Seminar. [Formerly EES 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


EES 1400. Iceland's Geology. [Formerly EES 140] Processes that shape Icelandic landscapes. Volcanoes, glaciers, rivers, ocean, climate. History of interaction between the environment and Icelanders. Introduction at Vanderbilt, two weeks Icelandic field experience; laboratory includes both classroom and field work. Prerequisite: 1510, 1070, or 1111. [4] (MNS)

EES 1510. The Dynamic Earth: Introduction to Geological Sciences. [Formerly EES 101] Processes that have changed the earth. Relation between these processes and their products (e.g., earthquakes, minerals and rocks, mountains, oceanic features); interactions between processes affecting the solid, liquid, and gaseous components of earth; impact on humans. [3] (MNS)

EES 1510L. Dynamic Earth Laboratory. [Formerly EES 111] Laboratory to accompany 1510. Corequisite: 1510. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1510. [1] (No AXLE credit)

EES 2110. Global Climate Change. [Formerly EES 201] Science and policy of global climate change: history and causes of climate change in Earth’s past, with emphasis on the last 2 million years; evidence of human impacts on climate since 1850; future climate change and its economic, social, and ecological consequences; economic, technological, and public policy responses. Prerequisite: 1510 or 1080. [3] (MNS)

EES 2150. Science, Risk, and Policy. [Formerly EES 205] Assessment and management of deadly risks: comparison of markets, regulatory agencies, and courts for managing risks; cultural and scientific construction of risk; psychology of risk perception; case studies such as Hurricane Katrina, mad cow disease, and air pollution. [3] (P)

EES 2510. Earth Systems through Time. [Formerly EES 220] Ecological, geological, and biological processes in the biosphere, and their global and regional implications. Prerequisite: 1510 or 1080. [3] (MNS)

EES 2520. Science, Risk, and Policy. [Formerly EES 205] Assessment and management of deadly risks: comparison of markets, regulatory agencies, and courts for managing risks; cultural and scientific construction of risk; psychology of risk perception; case studies such as Hurricane Katrina, mad cow disease, and air pollution. [3] (P)


EES 3220. Life Through Time. [Formerly EES 220] Ecology, classification, and evolution of important groups of fossils, emphasizing vertebrates. Change in marine ecosystems through geologic time. Causes and effects of rapid evolution events and mass extinctions. Three hours of lecture and one laboratory period per week. Prerequisite: 1510, BSCI 1100, or BSCI 1111. [4] (MNS)

EES 3250. Earth Materials. [Formerly EES 225] Solid materials that make up the earth; rock, soil, and sediment - with emphasis on the minerals that are their major constituents. Hand specimen, optical, and X-ray methods of description and identification. Physical and chemical processes that form and modify earth materials and the use of these materials in interpreting earth processes of the past and present. Field trips. Three lectures and one laboratory period per week. Prerequisite: 1510. [4] (MNS)


EES 3330. Sedimentology. [Formerly EES 230] The origin and composition of sedimentary particles, their transportation to the site of deposition, actual deposition, and the processes involved in lithifying sediments into solid rock. Emphasis on interpretation of ancient source areas and depositional environments. Terrigenous, carbonate, and other rock types will be studied. Field trips. Three lectures and one laboratory period. No credit for graduate students in EES. Prerequisite or corequisite: 2510.[4] (MNS)

EES 3340. Structural Geology and Rock Mechanics. [Formerly EES 240] Principles of rock deformation; mechanics, fractures, folds, foliation, primary structures, applications of principles. Interactions and feedbacks between tectonics, climate, and erosion. Field trips. Two lectures and one laboratory period per week. Prerequisite: 2510. [4] (MNS)

EES 3841. Directed Study. [Formerly EES 289A] Readings in related fields and/or laboratory research in pursuit of a scholarly project conceived and executed under the supervision of a faculty member. Open to senior majors and graduate students or by consent of the department chair. Does not count toward minimum requirements for the major. May be repeated for credit more than once if there is no duplication in topic,
but students may earn only up to 2 credits per semester of enrollment. [1–2] (No AXLE credit)

EES 3842. Directed Study. [Formerly EES 289b] Readings in related fields and/or laboratory research in pursuit of a scholarly project conceived and executed under the supervision of a faculty member. Open to senior majors and graduate students or by consent of the department chair. Does not count toward minimum requirements for the major. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 2 credits per semester of enrollment. [1–2] (No AXLE credit)

EES 3851. Independent Study. [Formerly EES 291a] Readings with related field and/or laboratory research in pursuit of a scholarly project conceived and executed under the supervision of a faculty member. Open to senior majors and graduate students. Other students must have consent of department chair. Does not count toward minimum requirements for the major. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3] (No AXLE credit)

EES 3852. Independent Study. [Formerly EES 291b] Readings with related field and/or laboratory research in pursuit of a scholarly project conceived and executed under the supervision of a faculty member. Open to senior majors and graduate students. Other students must have consent of department chair. Does not count toward minimum requirements for the major. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3] (No AXLE credit)

EES 3865. Field Investigations. [Formerly EES 210] Content varies according to location and disciplinary focus. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (MNS)

EES 3891. Special Topics. [Formerly EES 290] Topics vary. May be repeated for credit more than once by permission of the director of undergraduate studies. Students may enroll in more than one section of this course each semester. Prerequisite: 1510. [3] (No AXLE credit)

EES 4420. Geomorphology. [Formerly EES 261] Analysis of the Earth’s landforms, their morphology, history, and the processes that form them. The building of relief and its subsequent transformation by geologic processes on hillslopes, rivers, coasts, wetlands, and glaciers. The natural history and human impacts on land forms. Field trips. Familiarity with basic physics (mechanics) is expected. Prerequisite: 1510. [3] (MNS)

EES 4550. Transport Processes in Earth and Environmental Systems. [Formerly EES 255] Principles of conservation and constitutive transport laws; classic and emerging styles of modeling natural systems. Prior study of basic calculus (functions, derivatives, integrals) and physics (mechanics) is expected. Prerequisite: senior or graduate standing with a major in Earth and Environmental Sciences, Biological Sciences, Chemistry, Mathematics, Physics, or the School of Engineering. [3] (MNS)

EES 4600. Geochemistry. [Formerly EES 260] Application of chemistry to study the distribution and cycling of elements in the crust of the earth. Includes chemical bonding and crystalization, phase rules and phase diagrams, chemical equilibria, theories on the origin of elements, earth, ocean, atmosphere, and crust. Prerequisite: 3250 and CHEM 1602. [3] (MNS)

EES 4680. Paleoclimates. [Formerly EES 268] Fluctuations in Earth’s climate with an emphasis on the past 700 million years. Forcings and feedback that influence climate and drive change. Techniques used to reconstruct past climate change using marine and terrestrial geologic deposits and geochronologic methods. Prerequisite: 1510 and 2510. [3] (MNS)

EES 4750. Sustainable Systems Science. [Formerly EES 275] A systems dynamics approach to examining principles, problems, and solutions pertaining to the links among the environment, society, and economy. Components of sustainable systems. No credit for students who earned credit for 390 section 3 in spring 2010. Prerequisite: at least junior standing with a major in Earth and Environmental Sciences, Biological Sciences, Chemistry, Physics, or the School of Engineering. [3] (MNS)

EES 4760. Agent- and Individual-Based Computational Modeling. Applications in natural, social, and behavioral sciences and engineering. Designing, programming, and documenting models. Using models for experiments. Examples from environmental science, ecology, economics, urban planning, and medicine. Familiarity with basic statistics and proficiency in algebra are expected. [3] (MNS)

EES 4820. Paleoeocological Methods. [Formerly EES 282] Tools used to interpret past environments and climates, including plant microfossils, pollen and phytoliths, vertebrate morphology, and dental microwear and mesowear. Geochemical tools such as stable isotopes and rare earth elements. Integrating methods for paleontological and anthropological studies, including the use of databases and meta-analyses. Readings from primary sources. Serves as repeat credit for students who completed 390 section 4 in spring 2010. Prerequisite: 1510. [3] (MNS)


EES 4961. Senior Seminar. [Formerly EES 299] Integrating concepts and information from diverse fields. Offered on a graded basis only. Limited to seniors in the final semester of the major. [1] (No AXLE credit)

EES 4998. Senior Honors Research. [Formerly EES 292a] Independent research under faculty supervision that culminates in an oral presentation and written thesis submitted to the faculty. Open only to departmental honors candidates. Does not count toward minimum requirements for the major. [2] (No AXLE credit)

EES 4999. Senior Honors Research. [Formerly EES 292b] Independent research under faculty supervision that culminates in an oral presentation and written thesis submitted to the faculty. Open only to departmental honors candidates. Does not count toward minimum requirements for the major. [2] (No AXLE credit)

Economics

ECON 1001. Commons Seminar. [Formerly ECON 99] Topics vary. General Elective credit only. [1] (No AXLE credit)


ECON 1111. First-Year Writing Seminar. [Formerly ECON 115f] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

ECON 1500. Economic Statistics. [Formerly ECON 150] The use of quantitative data in understanding economic phenomena. Probability, sampling, inference, and regression analysis. No credit for students who have earned credit for 1510. Prerequisite: Math 1100, 1200, or 1300. [3] (SBS)

ECON 1510. Intensive Economic Statistics. [Formerly ECON 155] Quantitative techniques in economic analysis. Probability sampling, inference, and multiple regression. No credit for students who have earned credit for 1500. Prerequisite: MATH 1100, 1200 or 1300. [3] (SBS)

ECON 2100. Labor Economics. [Formerly ECON 212] Introduction to labor markets in the United States. Foundations and applications of labor supply and demand, immigration and immigration policies, investment in human capital, wage policies of employers, minimum wage legislation, labor
market discrimination and remedial programs, effects of labor unions, and unemployment. Prerequisite: 1010 and 1020. [3] (SBS)

ECON 2150. Economic History of the United States. [Formerly ECON 226] Economic development of the United States from the Colonial period to the present. Interrelated changes in economic performance, technology, institutions, and governmental policy. Prerequisite: 1010 and 1020. [3] (US)

ECON 2160. Strategic Analysis. [Formerly ECON 235] Introduction to sequential and simultaneous games. Backward induction, equilibrium, pure and mixed strategies. Cooperation and conflict, the prisoner’s dilemma, threats, promises, and credibility. Brinkmanship, uncertainty, the role of information, auction design, bidding strategies, and bargaining. Voting and agenda control. Prerequisite: 1010 and 1020. [3] (SBS)

ECON 2170. Environmental Economics. [Formerly ECON 228] Public policies to address market failures. Energy policy, climate change, biodiversity, globalization, and population growth. Sustainable economic activity, recycling, valuing environmental amenities, addressing ethical dilemmas, and resolving disputes. Offered on a graded basis only. Prerequisite: 1010 and 1020. [3] (SBS)

ECON 2180. Sports Economics. [Formerly ECON 242] Intercaliguelate and professional sports leagues. Competitive balance, player labor markets, and owner capital markets. Theories of league expansion, rival leagues, franchise relocation, and sports venue finance. Comparisons of international sports leagues. Offered on a graded basis only. No credit for students who have earned credit for 270. Prerequisite: 1010 and 1020. [3] (SBS)


ECON 2260. International Economics. Causes, consequences, and conduct of economic interactions among sovereign nations. Trade in goods and services; international monetary and financial interactions; winners and losers; exchange rates and the balance of payments; economic organizations. Offered on a graded basis only. Prerequisite: 1010 and 1020. [3] (SBS)

ECON 2300. Money and Banking. [Formerly ECON 209] A study of commercial banks and other intermediaries between savers and investors in the United States, including the government’s role as money creator, lender, and regulator of private credit, and the effects of financial institutions on aggregate economic activity. Prerequisite: 1010 and 1020. [3] (SBS)


ECON 2890. Special Topics. [Formerly ECON 249] Topics of special interest. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 1010 and 1020. [3] (No AXLE credit)


ECON 3020. Intermediate Macroeconomic Theory. [Formerly ECON 232] National income accounting and analysis. Classical, Keynesian, and contemporary models determining national income, employment, liquidity, price level, and economic growth. No credit for graduate students in economics. Prerequisite: 1010, 1020, and either MATH 1100, 1200, or 1300. [3] (SBS)

ECON 3050. Introduction to Econometrics. [Formerly ECON 253] Quantitative methods of economic analysis. Measurement, specification, estimation, and interpretation of economic models. Econometric computation using microcomputers. No credit for graduate students in economics. Prerequisite: 3010 and either 1500, 1510, or both MATH 2820L and either MATH 2810 or 2820. [3] (SBS)

ECON 3100. Wages, Employment, and Labor Markets. [Formerly ECON 251] Theories of wages and employment, dual labor markets, internal labor markets, and labor’s share of national income. Empirical studies of labor mobility, the effects of unions on relative wages and resource allocation, occupational and industrial wage differentials, and selected labor markets. Prerequisite: 3010. [3] (SBS)


ECON 3160. Economic History of Europe. [Formerly ECON 271] Sources of Western European economic progress. Organization of overseas merchant empires, origins of the Industrial Revolution, the role of property rights, demographic patterns, and changing living standards. Prerequisite: 3010. [3] (SBS)

ECON 3180. History of Economic Thought. [Formerly ECON 262] Evolution of economic ideas from the ancient Greeks to the contemporary world with attention to the seminal thoughts of Adam Smith, David Ricardo, J. S. Mill, Alfred Marshall, and J. M. Keynes. Prerequisite: 3010 and 3020. [3] (SBS)


ECON 3230. Urban Economics. [Formerly ECON 279] Urban growth, development of suburbs, location of firms, housing markets, transportation, property taxes, and local government services. Offered on a graded basis only. Prerequisite: 3010. [3] (SBS)

ECON 3250. Industrial Organization. [Formerly ECON 274] Models of market structure and behavior from monopoly and oligopoly to perfect competition. Strategic interaction between a firm and its customers and between a firm and its competitors. Firm practices and government policies that promote or hinder the efficient operation of markets. Offered on a graded basis only. Prerequisite: 3010 [3] SBS


ECON 3600. International Trade. [Formerly ECON 263] International trade in goods and services. Patterns of trade; gains and losses from trade, tariffs, and other commercial policies; economic integration; and
ECON 3610. International Finance. [Formerly ECON 264] Economics of international monetary, financial, and macroeconomic relationships. Effects of monetary and fiscal policies in open economies, balance of payments, exchange rate determination, and international monetary institutions. Prerequisite: 3020. [3] (SBS)

ECON 3650. Development Economics. [Formerly ECON 288] Determinants of national economic growth for pre-industrial and newly industrial countries. Inequality and poverty. Imperfect credit markets and microfinance. Political constraints and corruption. Policy issues relevant to developing economics. Prerequisite: 3010 and either 1500, 1510, 3050, or MATH 2821. [3] (INT)

ECON 3698. Junior Honors Research.Honors thesis proposal under the supervision of a thesis adviser and the Director of Honors. Open only to junior majors with the approval of the Director of Honors. Prerequisite: 3010. [1] (No AXLE credit)


ECON 3851. Independent Study in Economics. [Formerly ECON 291a] A program of independent reading in economics, arranged in consultation with an adviser. Limited to students having written permission from an instructor and the director of undergraduate studies. Prerequisite: 3010. [Variable credit: 1–3 each semester, or 1–6 for departmental honors candidates; maximum of 12 hours in 3851 and 3852 combined for departmental honors students; maximum of 6 hours in 3851 and 3852 combined for other students] (No AXLE credit)

ECON 3852. Independent Study in Economics. [Formerly ECON 291b] A program of independent reading in economics, arranged in consultation with an adviser. Limited to students having written permission from an instructor and the director of undergraduate studies. Prerequisite: 3010. [Variable credit: 1–3 each semester, or 1–6 for departmental honors candidates; maximum of 12 hours in 3851 and 3852 combined for departmental honors students; maximum of 6 hours in 3851 and 3852 combined for other students] (No AXLE credit)

ECON 3893. Selected Microeconomic Topics. [Formerly ECON 293] Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 3010. [3] (No AXLE credit)

ECON 3894. Selected Macroeconomic Topics. [Formerly ECON 294] Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 3020. [3] (No AXLE credit)

ECON 4050. Topics in Econometrics. [Formerly ECON 284] Emphasis on applications. May include generalized method of moments, empirical likelihood, resampling methods, and nonparametric techniques. Prerequisite: 3050. [3] (SBS)


ECON 4210. Law and Economics. [Formerly ECON 285] The influence of legal rules and institutions on the behavior of individuals and on economic efficiency and equity. Applications from civil procedure as well as property, contract, tort, and criminal law. Offered on a graded basis only. Prerequisite: 3010 and either 1500, 1510, 3050, or MATH 2821. [3] (SBS)

ECON 4220. Social Choice Theory. [Formerly ECON 255] Strategic and non-strategic social choice theory. Preference aggregation, formal models of voting, and matching. Prerequisite: 3010 or PHIL 3003 or any Mathematics course numbered 2500 or above. [3] (SBS)

ECON 4260. Game Theory with Economic Applications. [Formerly ECON 273] Rational decision-making in non-cooperative, multi-person games. Single play and repeated games with complete and incomplete information. Economic applications of games, such as auctions, labor-management bargaining, pricing and output decisions in oligopoly, and common property resources. Prerequisite: 3010. [3] (SBS)

ECON 4510. Seminar in Macroeconomic Policy. [Formerly ECON 256] Intensive study of three or four current problems in economic policy. Studies in topics such as macroeconomic policy for the year ahead, financial market issues, international economic policy issues. Repeat credit for students who have completed 4510W. Limited to majors in economics and public policy. Prerequisite: 3010 and 3020. [3] (SBS)

ECON 4510W. Seminar in Macroeconomic Policy. [Formerly ECON 256W] Intensive study of three or four current problems in economic policy. Studies in topics such as macroeconomic policy for the year ahead, financial market issues, international economic policy issues. Repeat credit for students who have completed 4510. Limited to majors in economics and public policy. Prerequisite: 3010 and 3020. [3] (SBS)


ECON 4530. Seminar in Microeconomic Policy. [Formerly ECON 257] Intensive study of three or four current problems in microeconomic policy. Repeat credit for students who have completed 4530W. Limited to majors in economics and public policy. Prerequisite: 3010. [3] (SBS)

ECON 4540W. Economics of Conflict. [Formerly ECON 277W] Economic relationships that appropriate value from other parties. War, crime, litigation, family quarrels, and rent-seeking. The visible hand, principal-agent problems, and negative sum games. Serves as repeat credit for students who completed 257W section 3 in spring 2010 and section 1 in fall 2010. Prerequisite: 3010. [3] (SBS)

ECON 4550. Seminar in Sports Economics. [Formerly ECON 280] Issues and debates. Offered on a graded basis only. Prerequisite: 2180, 3010. [3] (SBS)

ECON 4981. Honors Seminar. [Formerly ECON 295a] Discussion of selected topics and senior thesis research. Open only to seniors in the departmental honors program. Prerequisite: 3010. [1] (No AXLE credit)

ECON 4982. Honors Seminar. [Formerly ECON 295b] Discussion of selected topics and senior thesis research. Open only to seniors in the departmental honors program. Prerequisite: 3010. [1] (No AXLE credit)

ECON 4998. Senior Thesis. [Formerly ECON 292a] Limited to and required of all candidates for departmental honors. Prerequisite: 3010. [1–3] (No AXLE credit)

ECON 4999. Senior Thesis. [Formerly ECON 292b] Limited to and required of all candidates for departmental honors. Prerequisite: 3010. [1–3] (No AXLE credit)

English

ENGL 1001. Commons Seminar. [Formerly ENGL 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

ENGL 1100. Composition. [Formerly ENGL 100] For students who need to improve their writing. Emphasis on writing skills, with some analysis of modern nonfiction writing. [3] (No AXLE credit)

ENGL 1111. First-Year Writing Seminar. [Formerly ENGL 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral
presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

ENGL 1210W. Prose Fiction: Forms and Techniques. Formerly ENGL 104W] Close study of short stories and novels and written explication of these forms. [3] (HCA)

ENGL 1220W. Drama: Forms and Techniques. Formerly ENGL 105W] Close study of representative plays of the major periods and of the main formal categories (tragedy, comedy) and written explication of these forms. [3] (HCA)

ENGL 1230W. Literature and Analytical Thinking. Formerly ENGL 102W] Close reading and writing in a variety of genres drawn from several periods. Productive dialogue, persuasive argument, and effective prose style. Offered on a graded basis only. [3] (HCA)


ENGL 1260W. Introduction to Literary and Cultural Analysis. Formerly ENGL 118W] Analysis of a range of texts in social, political, and aesthetic contexts. Interdisciplinary study of cultural forms as diverse as poetry, advertisement, and film. [3] (HCA)

ENGL 1270W. Introduction to Literary Criticism. Formerly ENGL 117W] Selected critical approaches to literature. [3] (HCA)

ENGL 1280. Beginning Fiction Workshop. Formerly ENGL 122] Introduction to the art of writing prose fiction. [3] (HCA)

ENGL 1290. Beginning Poetry Workshop. Formerly ENGL 123] Introduction to the art of writing poetry. [3] (HCA)

ENGL 1300W. Intermediate Composition. Formerly ENGL 120W] A writing course including the analysis of essays from a variety of disciplines. [3] (HCA)

ENGL 2200. Foundations of Literary Study. Formerly ENGL 199] Fundamentals of literary study; close reading; analytic writing; historical context; abstract reasoning in theory; creative expression. [3] (HCA)

ENGL 2310. Representative British Writers. Formerly ENGL 208a] Selections from British literature with attention to contexts and literary periods. From the beginnings to 1660. Provides a broad background for more specialized courses and is especially useful for students considering advanced studies in literature. [3] (HCA)

ENGL 2311. Representative British Writers. Formerly ENGL 208b] Selections from British literature with attention to contexts and literary periods. From 1660 to the present. Provides a broad background for more specialized courses and is especially useful for students considering advanced studies in literature. [3] (HCA)

ENGL 2316. Representative American Writers. Formerly ENGL 211] Selections from the entire body of American literature with attention to contexts and literary periods. Provides a broad background for more specialized courses and is especially useful for students considering advanced studies in literature. Repeat credit for students who have completed 2316W. [3] (US)

ENGL 2316W. Representative American Writers. Formerly ENGL 211W] Selections from the entire body of American literature with attention to contexts and literary periods. Provides a broad background for more specialized courses and is especially useful for students considering advanced studies in literature. Repeat credit for students who have completed 2316W. [3] (US)

ENGL 2318. World Literature, Classical. Formerly ENGL 236] Great Books from the points of view of literary expression and changing ideologies: Classical Greece through the Renaissance. Repeat credit for students who have completed 2318W. [3] (HCA)

ENGL 2318W. World Literature, Classical. Formerly ENGL 236W] Great Books from the points of view of literary expression and changing ideologies: Classical Greece through the Renaissance. Repeat credit for students who have completed 2318W. [3] (HCA)

ENGL 2319. World Literature, Modern. Formerly ENGL 237] Great Books from the points of view of literary expression and changing ideologies: The 17th century to the contemporary period. Repeat credit for students who have completed 2319W. [3] (HCA)

ENGL 2319W. World Literature, Modern. Formerly ENGL 237W] Great Books from the points of view of literary expression and changing ideologies: The 17th century to the contemporary period. Repeat credit for students who have completed 2319W. [3] (HCA)

ENGL 2320. Southern Literature. Formerly ENGL 212] The works of Southern writers from Captain Smith to the present. Topics such as the Plantation Myth, slavery and civil war, Agrarianism, and “post-southerness.” Authors may include Poe, Twain, Cable, Faulkner, Welty, Percy, Wright. [3] (HCA)

ENGL 3210. Intermediate Nonfiction Writing. Formerly ENGL 200] Instruction in the forms and techniques of nonfiction writing. Admission by consent of instructor. May be repeated once for credit. [3] (HCA)

ENGL 3220. Advanced Nonfiction Writing. Formerly ENGL 201] Further instruction in the form and techniques of nonfiction writing. Admission by consent of instructor. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3; maximum of 6 credits total for all semesters of ENGL 3220] (HCA)

ENGL 3230. Intermediate Fiction Workshop. Formerly ENGL 204] Instruction in fiction writing. Supplementary readings that illustrate traditional aspects of prose fiction. Admission by consent of instructor. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3; maximum of 6 credits total for all semesters of ENGL 3230] (HCA)

ENGL 3240. Advanced Fiction Workshop. Formerly ENGL 205] Continuing instruction in fiction writing. Admission by consent of instructor. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3; maximum of 6 credits total for all semesters of ENGL 3240] (HCA)

ENGL 3250. Intermediate Poetry Workshop. Formerly ENGL 206] Instruction in poetry writing. Supplementary readings illustrating traditional aspects of poetry. Admission by consent of instructor. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3; maximum of 6 credits total for all semesters of ENGL 3250] (HCA)

ENGL 3260. Advanced Poetry Workshop. Formerly ENGL 207] Continuing instruction in poetry writing. Admission by consent of instructor. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3; maximum of 6 credits total for all semesters of ENGL 3260] (HCA)


ENGL 3316. Medieval Literature. Formerly ENGL 221] The drama, lyrics, romance, allegory, and satire of the fourteenth and fifteenth centuries, studied in the context of the period’s intellectual climate and social change. [3] (HCA)


ENGL 3336. Shakespeare. [Formerly ENGL 209a] About twenty of the major plays considered in chronological order over two terms, with emphasis on Shakespeare’s development as a dramatic artist. Primarily comedies and histories. [3] (HCA)

ENGL 3337. Shakespeare. [Formerly ENGL 209b] About twenty of the major plays considered in chronological order over two terms, with emphasis on Shakespeare’s development as a dramatic artist. Primarily tragedies and romances. [3] (HCA)

ENGL 3340. Shakespeare: Representative Selections. [formerly ENGL 210] A representative selection of plays, including histories, tragedies, comedies, and romances, designed to give the student a sense of the full range of Shakespeare’s work in one semester. Repeat credit for students who have completed 3340W. [3] (HCA)

ENGL 3340W. Shakespeare: Representative Selections. [formerly ENGL 210W] A representative selection of plays, including histories, tragedies, comedies, and romances, designed to give the student a sense of the full range of Shakespeare’s work in one semester. Repeat credit for students who have completed 3340. [3] (HCA)

ENGL 3346. Seventeenth-Century Literature. [formerly ENGL 249] Poetry and prose from 1600 to the English Civil War, such as Metaphysical and Cavalier poetry, essays, romances, and satires. Authors may include Bacon, Cavendish, Donne, Herbert, Jonson, Lanier, Marvell, and Wroth. [3] (HCA)

ENGL 3348. Milton. [formerly ENGL 251] The early English poems; Paradise Lost, Paradise Regained, and Samson Agonistes; the major prose. [3] (HCA)

ENGL 3360. Restoration and the Eighteenth Century. [formerly ENGL 252a] Explorations of the aesthetic and social world of letters from the English Civil War to the French Revolution. Drama, poetry, and prose, including Restoration plays, political poetry, satire, travel narratives, and tales. Authors may include Behn, Dryden, Congreve, Addison, Swift, Finch, Pope, Fielding, Burney, Johnson, and Inchbald. Earlier writers. [3] (HCA)

ENGL 3361. Restoration and the Eighteenth Century. [formerly ENGL 252b] Explorations of the aesthetic and social world of letters from the English Civil War to the French Revolution. Drama, poetry, and prose, including Restoration plays, political poetry, satire, travel narratives, and tales. Authors may include Behn, Dryden, Congreve, Addison, Swift, Finch, Pope, Fielding, Burney, Johnson, and Inchbald. Later writers. [3] (HCA)


ENGL 3370. The Bible in Literature. [formerly ENGL 282] An examination of ways in which the Bible and biblical imagery have functioned in literature and fine arts, in both “high culture” and popular culture, from Old English poems to modern poetry, drama, fiction, cartoons, and political rhetoric. Readings include influential biblical texts and a broad selection of literary texts drawn from all genres and periods of English literature. [3] (HCA)

ENGL 3367. The Romanic Period. [formerly ENGL 254a] Prose and poetry of the Wordsworths, the Shelleys, Byron, Keats, and others. [3] (HCA)

ENGL 3368. The Romantic Period. [formerly ENGL 254b] Continuation of 3360. Prose and poetry of the Wordsworths, the Shelleys, Byron, Keats, and others. [3] (HCA)

ENGL 3364. The Victorian Period. [formerly ENGL 255] Works of Tennyson, Browning, Arnold, Hardy, and others. [3] (HCA)

ENGL 3368. The Nineteenth-Century English Novel. [formerly ENGL 231] The study of selected novels of Dickens, Thackeray, Emily Brontë, George Eliot, George Meredith, Thomas Hardy, and other major novelists of the period. [3] (HCA)

ENGL 3620. Nineteenth-Century American Literature. [formerly ENGL 266] Explorations of themes, forms, and social and cultural issues shaping the works of American writers. Authors may include Cooper, Poe, Hawthorne, Douglass, Jacobs, Stowe, Melville, Dickinson, Alcott, Whitman, and Twain. [3] (HCA)


ENGL 3630. The Modern British Novel. [formerly ENGL 233] The British novel from the beginning of the twentieth century to the present. Conrad, Joyce, Lawrence, Virginia Woolf, Forster, and other novelists varying at the discretion of instructor. [3] (HCA)

ENGL 3634. Modern Irish Literature. [formerly ENGL 264] Major works from the Irish literary revival to the present, with special attention to the works of Yeats, Synge, Joyce, O’Casey, and Beckett. [3] (HCA)

ENGL 3640. Modern British and American Poetry: Yeats to Auden. [formerly ENGL 256] A course in the interpretation and criticism of selected modern masters of poetry, British and American, with the emphasis on poetry as an art. Poets selected may vary at discretion of instructor. [3] (HCA)

ENGL 3642. Film and Modernism. [formerly ENGL 265] Film in the context of the major themes of literary modernism: the divided self, language and realism, nihilism and belief, and spatialization of time. [3] (HCA)


ENGL 3646. Poetry Since World War II. [formerly ENGL 258] Poets studied vary at discretion of instructor. Offered on a graded basis only. [3] (HCA)

ENGL 3650. Ethnic American Literature. [formerly ENGL 279] Texts and theory relevant to understanding race, culture, and ethnicity in the formation of American culture. Literature from at least three of the following groups: African Americans, Native Americans, Asian Americans, Chicano/ Latino Americans, Caribbean Americans, and European Americans. [3] (P)

ENGL 3650W. Ethnic American Literature. [formerly ENGL 279W] Texts and theory relevant to understanding race, culture, and ethnicity in the formation of American culture. Literature from at least three of the following groups: African Americans, Native Americans, Asian Americans, Chicano/ Latino Americans, Caribbean Americans, and European Americans. [3] (P)

ENGL 3654. African American Literature. [formerly ENGL 263] Examination of the literature produced by African Americans. May include literary movements, vernacular traditions, social discourses, material culture, and critical theories. Repeat credit for students who have completed 3654W. [3] (US)

ENGL 3654W. African American Literature. [formerly ENGL 263W] Examination of the literature produced by African Americans. May include literary movements, vernacular traditions, social discourses, material culture, and critical theories. Repeat credit for students who have completed 3654. [3] (US)

ENGL 3658. Latino-American Literature. [formerly ENGL 275] Texts and theory relevant to understanding constructs of Latino identity, including race, class, gender, and basis for immigration, in the context of
American culture. The course focuses on the examination of literature by Chicano, Puerto Rican, Cuban, Dominican, and Latin American writers in the United States. [3] (P)

ENGL 3662. Asian American Literature. [Formerly ENGL 277] Diversity of Asian American literary production with specific attention to works after 1965. Topics such as gender and sexuality, memory and desire, and diaspora and panethnicity in the context of aesthetics and politics of Asian American experience. [3] (P)

ENGL 3662W. Asian American Literature. [Formerly ENGL 277W] Diversity of Asian American literary production with specific attention to works after 1965. Topics such as gender and sexuality, memory and desire, and diaspora and panethnicity in the context of aesthetics and politics of Asian American experience. [3] (P)


ENGL 3670. Colonial and Post-Colonial Literature. [Formerly ENGL 279] Literature exploring European colonialism and its aftermath from the eighteenth century to the present: language, gender, and agency in the colonial encounter; anti-colonial resistance movements; and postcolonial cultures. Topics may vary; course may be taken more than once with permission of the Director of Undergraduate Studies. [3] (HCA)

ENGL 3670W. Colonial and Post-Colonial Literature. [Formerly ENGL 279W] Literature exploring European colonialism and its aftermath from the eighteenth century to the present: language, gender, and agency in the colonial encounter; anti-colonial resistance movements; and postcolonial cultures. Topics may vary; course may be taken more than once with permission of the Director of Undergraduate Studies. [3] (HCA)

ENGL 3674. Caribbean Literature. [Formerly ENGL 271] Caribbean literature from 1902 to the present. Emphasis on writing since 1952, which marks the beginning of West Indian nationalism and the rise of the West Indian novel. [3] (INT)

ENGL 3678. Anglophone African Literature. [Formerly ENGL 278] From the Sundiata Epic to the present with emphasis on the novel. Attention to issues of identity, post coloniality, nationalism, race, and ethnicity in both Sub-Saharan and Mahgrib literatures. Such authors as Achebe, Ngugi, Gordimer, Awoonor, and El Saadaw. [3] (INT)

ENGL 3680. Twentieth-Century Drama. [Formerly ENGL 286a] Topics in twentieth century drama drawn from the American, British, and/or world traditions. Formal structures of dramatic literature studied within contexts of performance, theatrical production, and specific dramatic careers. Authors may include O’Neill, Albee, Hansberry, Hellman, Stoppard, Wilson, and Churchill. Emphasizes American drama. [3] (US)

ENGL 3681. Twentieth-Century Drama. [Formerly ENGL 286b] Topics in twentieth century drama drawn from the American, British, and/or world traditions. Formal structures of dramatic literature studied within contexts of performance, theatrical production, and specific dramatic careers. Authors may include O’Neill, Albee, Hansberry, Hellman, Stoppard, Wilson, and Churchill. Emphasizes British and world drama. [3] (US)


ENGL 3692. Desire in America: Literature, Cinema, and History. [Formerly ENGL 267] The influence of desire and repression in shaping American culture and character from the mid-nineteenth century to the present. [3] (US)


ENGL 3695. America on Film: Performance and Culture. [Formerly ENGL 268b] Film performance in the construction of identity and gender, social meaning and narrative, public image and influence in America. [3] (US)

ENGL 3710. Literature and Intellectual History. [Formerly ENGL 214a] Fiction, poetry, and prose writings that represent overarching themes in English and/or American literature across conventional historical periods in order to define and trace their genealogy and evolution. [3] (HCA)

ENGL 3711. Literature and Intellectual History. [Formerly ENGL 214b] The emergence of modern consciousness in the nineteenth and twentieth centuries. [3] (HCA)

ENGL 3720. Literature, Science, and Technology. [Formerly ENGL 243] The relationship of science and technology to literature, film, and popular media. Focus on such topics as digital technology, genetics, and the representation of science in particular periods, genres, movements, and critical theories. Repeat credit for students who have completed 3720W. [3] (P)

ENGL 3720W. Literature, Science, and Technology. [Formerly ENGL 243W] The relationship of science and technology to literature, film, and popular media. Focus on such topics as digital technology, genetics, and the representation of science in particular periods, genres, movements, and critical theories. Repeat credit for students who have completed 3720W. [3] (P)

ENGL 3726. New Media. [Formerly ENGL 259] History, theory, and design of digital media. Literature, video, film, online games, and other interactive narratives. [3] (HCA)

ENGL 3728. Science Fiction. [Formerly ENGL 242] Social and historical developments within the genre. Works from the late nineteenth century to the present. Cultural issues, including race, gender, sexuality, violence, and the representation of science. Repeat credit for students who have completed 3728W. [3] (P)

ENGL 3728W. Science Fiction. [Formerly ENGL 242W] Social and historical developments within the genre. Works from the late nineteenth century to the present. Cultural issues, including race, gender, sexuality, violence, and the representation of science. Repeat credit for students who have completed 3728W. [3] (P)

ENGL 3730. Literature and the Environment. [Formerly ENGL 245] Environmental issues from British, American, and global perspectives. Methodological approaches such as ecocriticism, environmental and social justice, ethics, and activism. The role of literature and the imagination in responding to ecological problems and shaping environmental values. [3] (HCA)

ENGL 3734. Literature and Law. [Formerly ENGL 262] Study of the relationship between the discourses of law and literature. Focus on such topics as legal narratives, metaphor in the courts, representations of justice on the social stage. Repeat credit for students who have completed 3734W. [3] (HCA)

ENGL 3734W. Literature and Law. [Formerly ENGL 262W] Study of the relationship between the discourses of law and literature. Focus on such topics as legal narratives, metaphor in the courts, representations of justice on the social stage. Repeat credit for students who have completed 3734W. [3] (HCA)

ENGL 3736. Words and Music. [Formerly ENGL 218] An investigation of works of literature that have inspired musical settings and the musical settings themselves. Emphasis on literary and musical analysis and interpretation. No musical background assumed. Repeat credit for students who have completed MUSL 2330. [3] (HCA)

ENGL 3740. Critical Theory. [Formerly ENGL 244] Major theoretical approaches that have shaped critical discourse, the practices of reading, and the relation of literature and culture. [3] (HCA)

ENGL 3742. Feminist Theory. [Formerly ENGL 246] An introduction to feminist theory. Topics include cross-cultural gender identities; the development of “masculinity” and “femininity”; racial, ethnic, class, and national differences; sexual orientations; the function of ideology; strategies of resistance; visual and textual representations; the nature of power. [3] (P)


ENGL 3746. Workshop in English and History. [Formerly ENGL 280] (Also listed as History 3746) Team-taught by a historian and an interdisciplinary scholar. Explores intersection of disciplines through close examination of texts in historical context. Preference to students majoring in the
English-History program. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)


ENGL 3851. Independent Study. [Formerly ENGL 289a] Designed primarily for majors. Projects are arranged with individual professors and must be confirmed with the director of undergraduate studies within two weeks of the beginning of classes; otherwise the student will be dropped from the 3851 rolls. May be repeated for a total of 6 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1-3; maximum of 6 credits total for all semesters of ENGL 3851 and 3852] (No AXLE credit)

ENGL 3852. Independent Study. [Formerly ENGL 289b] Designed primarily for majors. Projects are arranged with individual professors and must be confirmed with the director of undergraduate studies within two weeks of the beginning of classes; otherwise the student will be dropped from the 3852 rolls. May be repeated for a total of 6 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1-3; maximum of 6 credits total for all semesters of ENGL 3851 and 3852] (No AXLE credit)

ENGL 3890. Movements in Literature. [Formerly ENGL 272] Studies in intellectual currents that create a group or school of writers within a historical period. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

ENGL 3890W. Movements in Literature. [Formerly ENGL 272W] Studies in intellectual currents that create a group or school of writers within a historical period. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

ENGL 3891. Special Topics in Creative Writing. [Formerly ENGL 291] Advanced instruction in creative writing in emerging modes and hybrid genres. [3] (HCA)

ENGL 3892. Problems in Literature. [Formerly ENGL 273] Studies in common themes, issues, or motifs across several historical periods. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

ENGL 3892W. Problems in Literature. [Formerly ENGL 273W] Studies in common themes, issues, or motifs across several historical periods. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

ENGL 3894. Major Figures in Literature. [Formerly ENGL 274] Studies in the works of one or two writers with attention to the development of a writer’s individual canon, the biographical dimension of this work, and critical responses to it. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

ENGL 3894W. Major Figures in Literature. [Formerly ENGL 274W] Studies in the works of one or two writers with attention to the development of a writer’s individual canon, the biographical dimension of this work, and critical responses to it. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

ENGL 3896. Special Topics in Investigative Writing in America. [Formerly ENGL 287] Course will be taught by a distinguished visiting journalist from a major U.S. newspaper or magazine. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [1-3; maximum of 6 credits total for all semesters of ENGL 287] (No AXLE credit)

ENGL 3896W. Special Topics in English and American Literature. [Formerly ENGL 287W] Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

ENGL 3899. Special Topics in Film. [Formerly ENGL 269] Theory and practice of cinema as an aesthetic and cultural form. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3; maximum of 6 credits total for all semesters of ENGL 3899] (HCA)

ENGL 4960. Senior Year Capstone. [Formerly ENGL 299] Topic chosen by the instructor. Prerequisite: 2200. [3] (No AXLE credit)

ENGL 4998. Honors Colloquium. [Formerly ENGL 290a] Background for writing the honors thesis. Emphasis on research methods, critical approaches, and the students’ own projects. Limited to seniors admitted to the English Honors Program. [3] (No AXLE credit)

ENGL 4999. Honors Thesis. [Formerly ENGL 290b] Prerequisite: 4998. [3] (No AXLE credit)

Environmental and Sustainability Studies

ENVS 1001. Commons Seminar. [Formerly ENVS 99] Topics vary. General Elective credit only. [1] (No AXLE credit)


ENVS 4961. Special Topics. Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

European Studies

EUS 1001. Commons Seminar. [Formerly EUS 99] Topics vary. General Elective credit only. [1] (No AXLE credit)


EUS 2203. The Idea of Europe. [Formerly EUS 203] European identity from ancient ideals to its reality as the European Union. Emphasis on Europe as cultural construct and definable space. Historical, political, religious, philosophical, and cultural movements for Europe’s claim to legitimacy. [3] (INT)


EUS 2240. Topics in European Studies. [Formerly EUS 240] Topics of special interest on modern European culture or society. May be repeated for credit when topics vary. [3] (No AXLE credit)

EUS 2260. European Cities. [Formerly EUS 260] The history, politics, society, or culture of important European cities. Content varies according to location and disciplinary focus. The course is taught during the May Session in Europe with the cities themselves complementing daily lectures and site visits. Course requirements include preliminary work on campus, a research paper, and one or more examinations. May be repeated for credit in different cities. [3] (INT)

EUS 3850. Independent Readings and/or Research. [Formerly EUS 289a] Independent readings and/or research on approved topics relating to modern European society and culture. [Variable credit: 1-3 each semester, maximum of 6 hours in 3850 and 3851 combined] (No AXLE credit)

EUS 3851. Independent Readings and/or Research. [Formerly EUS 289b] Independent readings and/or research on approved topics relating to modern European society and culture. [Variable credit: 1-3 each semester, maximum of 6 hours in 3850 and 3851 combined] (No AXLE credit)

EUS 4960. Senior Tutorial. [Formerly EUS 250] Supervised readings, joint discussions, and independent research on a modern European topic to be selected in consultation with the director of European Studies. Open only to juniors and seniors. [3] (No AXLE credit)

EUS 4988. Senior Honors Research. [Formerly EUS 299a] Open only to seniors who have been admitted to the European Studies department honors program. [3] (No AXLE credit)

Financial Economics


FNEC 2600. Managerial Accounting. [Formerly FNEC 220] Selected topics in managerial accounting. No credit for graduate students. Prerequisite: 1600. [3] (SBS)

FNEC 2700. Corporate Finance. [Formerly FNEC 240] Investment and financial decisions faced by firms. Theoretical basis of corporate decision-making. Various accounting documents and the alternative objectives of firms, their management, and their owners. Attributes of firms that affect market value. How investment decisions and methods used by firms to finance these investments affect firm value. Prerequisite: 1600 and either ECON 1500, 1510, MATH 2820, PSY 2100, or PSY-PC 1400. [3] (SBS)


FNEC 3851. Independent Study in Financial Economics. [Formerly FNEC 291A] A program of independent readings in financial economics arranged in consultation with an adviser. Prerequisite: written permission of an instructor and the program director. No credit for graduate students. May be repeated for a total of 6 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment, [1-3; maximum of 6 credits total for all semesters of FNEC 291a and 291b] (No AXLE credit)

FNEC 3852. Independent Study in Financial Economics. [Formerly FNEC 291B] A program of independent readings in financial economics arranged in consultation with an adviser. Prerequisite: written permission of an instructor and the program director. No credit for graduate students. May be repeated for a total of 6 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment, [1-3; maximum of 6 credits total for all semesters of FNEC 3851 and 3852] (No AXLE credit)

French

FREN 1001. Commons Seminar. [Formerly FREN 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

FREN 1101. Introduction to French in the World. [Formerly FREN 101A] Reading, writing, speaking, and listening through an exploration of the French-speaking world. For students who have studied little or no French. No credit for students who have earned credit for a more advanced French language course. [3] (No AXLE credit)

FREN 1102. Introduction to French in the World. [Formerly FREN 101B] Continuation of 101A. Study of the language through an exploration of the French-speaking world. No credit for students who have earned credit for a more advanced French language course. [3] (INT)

FREN 1103. Accelerated Introduction to French in the World. [Formerly FREN 102] Intensive course for students who have studied one to three years of French. No credit for students who have earned credit for 1101, 1102, or a more advanced French language course. [3] (INT)

FREN 1111. First-Year Writing Seminar. [Formerly FREN 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

FREN 2203. Intermediate French. [Formerly FREN 103] Review of grammar with emphasis on conversation and readings about the French-speaking world. No credit for students who have earned credit for a more advanced French language course. [3] (INT)

FREN 2501W. French Composition and Grammar. [Formerly FREN 201W] Prerequisites: 2203 or the equivalent. No graduate credit. No credit for students who have earned credit for a more advanced French language course. [3] (INT)


FREN 3101. Texts and Contexts: Middle Ages to the Enlightenment. [Formerly FREN 211] Literature and culture in historical contexts. Offered on a graded basis only. Prerequisite: 2501W. [3] (HCA)

FREN 3102. Texts and Contexts: Revolution to the Present. [Formerly FREN 212] Literature and culture in historical contexts. Offered on a graded basis only. Prerequisite: 2501W. [3] (HCA)


FREN 3180. La Provence. [Formerly FREN 215] Geography, history, politics, architecture, and other cultural elements of Provence. Offered at Vanderbilt in France. Prerequisite: 2501W. [3] (INT)

FREN 3181. Contemporary France. [Formerly FREN 209] The culture of France today; social, economic, and political issues; literature and the arts. Offered at Vanderbilt in France. Prerequisite: 2501W. [3] (INT)


FREN 3222. The Early Modern Novel. [Formerly FREN 237] Development of the novel as a genre in the seventeenth and eighteenth centuries;
its changing social, intellectual, and political context. Prerequisite: 2501W. [3] (HCA)

FREN 3223. The Querelles des femmes. [Formerly FREN 232] Debates around the status of medieval and Renaissance women, including the Roman de la rose. Alain Chartier, Christine de Pisan, the Des Roches, Montaigne, and Marie de Gournay. Prerequisite: 2501W. [3] (P)

FREN 3224. Medieval French Literature. [Formerly FREN 234] Theoretical exploration of chronicles, romance, poetry, and theatre of medieval France and the history and culture that surrounded these literary productions. Prerequisite: 2501W. [3] (HCA)

FREN 3230. French and Francophone Cinema. [Formerly FREN 210] The themes and art of film in France and the French-speaking world. Offered in French at Vanderbilt in France and in English at Nashville. When offered in English, this course does not count toward the minor, and writing must be done in French to count toward the major. [3] (INT)

FREN 3232. Introduction to Francophone Literature. [Formerly FREN 222] The geopolitical, linguistic, and literary dimensions of the notion “La Francophonie.” Readings will be chosen from fictional and nonfictional works from Africa, Canada, the Caribbean, countries bordering the Indian Ocean, and Vietnam. Prerequisite: 2501W. [3] (P)


FREN 3286. Cultural Study Tour. [Formerly FREN 216] Preparation for excursions; discussions, readings, and presentations. Offered each summer in the Vanderbilt in France program. [1] (No AXLE credit)

FREN 3620. Age of Louis XIV. [Formerly FREN 261] Literature and society in the reign of Louis XIV. Authors include Mme de Lafayette, La Fontaine, Molèire, Pascal, Racine, and Mme de Sévigné. Prerequisite: 2501W. [3] (HCA)


FREN 3623. The Twentieth-Century Novel. [Formerly FREN 238] The novel as a genre in the context of modernity and post modernity. Readings will focus on narrative techniques. Prerequisite: 2501W. [3] (HCA)

FREN 3730. The Beat Generation’s French Connection. [Formerly FREN 266] The Beats’ ties to Paris and to Quebec through French-Canadian Jack Kerouac, Antonin Artaud, Jean Genet, Arthur Rimbaud, and Marquis de Sade. No credit for students who earned credit for ENGL 288 section 3 in fall 2008 or ENGL 272 section 4 in spring 2010. Prerequisite: 2501W. [3] (INT)


FREN 3850. Independent Study. [Formerly FREN 289] Content varies according to the needs of the individual student. Primarily designed to cover pertinent material not otherwise available in the regular curriculum. May be repeated for a total of 12 credits over a four-semester period, but students may earn only up to 3 credits per semester of enrollment. [1-3; maximum of 12 credits total for four semesters of FREN 3850] (No AXLE credit)

FREN 3880. Internship Training in France. [Formerly FREN 287b] Under faculty supervision, students intern in public or private organizations, and complete research and readings. Offered on a pass/fail basis only and must be taken concurrently with 3881. Corequisite: 3881. [1] (No AXLE credit)

FREN 3881. Internship Readings and Research in France. [Formerly FREN 287a] Under faculty supervision, students intern in public or private organizations, and complete research and readings. Must be taken concurrently with 3880. Corequisite: 3880. [3] (No AXLE credit)

FREN 3891. Special Topics in Traditions. [Formerly FREN 294] Topics vary. Prerequisite: 2501W. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

FREN 3892. Special Topics in Communications and Intersections. [Formerly FREN 295] Topics vary. Prerequisite: 2501W. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

FREN 4023. The African Novel. [Formerly FREN 239] The postcolonial Francophone novel of Sub-Saharan Africa illustrating topics such as tradition and modernity, the identity of Africa, the representation of women, and the ideology of language. Prerequisite: 2501W. [3] (INT)

FREN 4025. From Carnival to the “Carnivalesque.” [Formerly FREN 240] Carnival themes of transgression, the grotesque, feasting, and the “fool.” Rabelais to contemporary works. Offered on a graded basis only. Prerequisite: 2501W. [3] (P)


FREN 4029. Twentieth-Century French Literature. [Formerly FREN 267] Critical readings of representative works organized thematically with emphasis on their contextual and intertextual relationships. Prerequisite: 2501W. [3] (HCA)

FREN 4030. French and Italian Avant-garde. [Formerly FREN 271] Italian authors writing in French in the international and experimental atmosphere of Paris before World War I. D’Annunzio’s “Le martyre de Saint Sébastien” to Marinetti’s “Manifeste du Futurisme.” Offered on a graded basis only. Prerequisite: 2501W. [3] (HCA)


FREN 4322. Literature and Law. [Formerly FREN 252] Confessions, murder, argumentation, interpretation, and the representation of “the criminal” in literary and legal texts from traditional French writings. Offered on a graded basis only. Prerequisite: 2501W. [3] (P)

FREN 4284. Art and Literature of the Nineteenth Century. [Formerly FREN 224] Romanticism, realism, and symbolism in French art and literature. Prerequisite: 2501W. Offered at Vanderbilt in France. [3] (HCA)

FREN 4285. Art and Literature of the Twentieth Century. [Formerly FREN 225] Literary and artistic movements of the twentieth century in France. Prerequisite: 2501W. Offered at Vanderbilt in France. [3] (HCA)


FREN 4322. Adultery and Transgressions in Literature. [Formerly FREN 272] Comparative and historical study of texts from the Middle Ages to the present on the theme of adultery and transgressive behavior.
through the twentieth century. Offered on a graded basis only. Prerequisite: 2501W. [3] (P)


GER 4998. Senior Honors Thesis. [Formerly FREN 299a] [3] (No AXLE credit)

GER 4999. Senior Honors Thesis. [Formerly FREN 299b] [3] (No AXLE credit)

German

GER 1001. Commons Seminar. [Formerly GER 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

GER 1101. Elementary German I. [Formerly GER 101] Development of the four language skills of reading, listening, speaking, and writing. No credit for students who have earned credit for a more advanced German language course. [3] (No AXLE credit)

GER 1102. Elementary German II. [Formerly GER 102] Continuation of 1101. No credit for students who have earned credit for a more advanced German language course. Prerequisite: 1101. [3] (INT)

GER 1111. First-Year Writing Seminar. [Formerly GER 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic; but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

GER 1482. Borders and Crossings: German Literature and Culture from Romanticism to the Present. [Formerly GER 172] Textual and visual contributions to German culture from the nineteenth and twentieth centuries in English translation. Borders - physical, ideological, intellectual, and metaphorical - and crossing these borders, as passages to more creative or liberated states of being, or as acts of transgress. Taught in English. [3] (HCA)

GER 2201. Intermediate German I. [Formerly GER 103] Intensive review of German grammar as a basis for reading, conversation, and composition. Texts and discussions address issues in contemporary German society. No credit for students who have earned credit for a more advanced German language course. Prerequisite: 1102. [3] (INT)

GER 2202. Intermediate German II. [Formerly GER 104] Practice in reading, listening, speaking, and writing. Short stories, one longer work (Kafka), and discussions examine aspects of modern life from a German perspective. No credit for students who have earned credit for a more advanced German language course. Prerequisite: 2201. [3] (INT)

GER 2216. Business German. [Formerly GER 216] The culture of the German business community; differences that hinder communication between German-speakers and non-German-speakers in the business setting; development of aural/oral and written skills. Business practices, policies, and laws in German-speaking countries; advertising and marketing strategies, letters, vitae, phone calls, and personal interviews. [3] (INT)

GER 2217. Advanced Grammar. [Formerly GER 220] Study of word formation and sentence structure in modern German, supplemented by contemporary readings, with discussion. Not open to students who have participated in the Regensburg exchange program. [3] (INT)

GER 2281. Intensive German in Regensburg. [Formerly GER 105] Grammatical and syntactic structures. Prerequisite: 2201; corequisite: 2282. [3] (No AXLE credit)

GER 2282. Intensive German in Regensburg. [Formerly GER 106] Landeskunde and communicative skills. Prerequisite: 2201; corequisite: 2281. [3] (No AXLE credit)

GER 2310W. Introduction to German Studies. [Formerly GER 201W] Literature, history, philosophy, and science of German-speaking countries presented through contemporary and multidisciplinary critical concepts and practices. Technology, theorizing mass culture, forms of cultural production, tradition and modernity. Reading and discussions in German. Prerequisite: 2202. [3] (INT)

GER 2320. Conversation and Composition: Current Events. [Formerly GER 213] Advanced German language course focusing on oral and writing proficiency. Topics on current events and societal developments. Prerequisite: 2202. [3] (INT)

GER 2321. Conversation and Composition: Contemporary Culture. [Formerly GER 214] Advanced German language course focusing on oral and writing proficiency. Topics on contemporary media and culture. Prerequisite: 2202. [3] (INT)

GER 2341. German Culture and Literature. [Formerly GER 221] Introduction to major periods and genres of German cultural production from the middle ages to the present; overview of major social and political developments. Literary, philosophical, and other texts. Readings and discussions in German. [3] (INT)

GER 2342. German Culture and Literature. [Formerly GER 222] Continuation of 2341. Introduction to major periods and genres of German cultural production from the middle ages to the present; overview of major social and political developments. Literary, philosophical, and other texts. Readings and discussions in German. [3] (INT)

GER 2441. Great German Works in English. [Formerly GER 183] German literature and culture from 1750 to present. The relationship of culture and history, changing notions of individual and community, modern sensibilities expressed in various genres. Goethe, Nietzsche, Freud, Kafka, and Jelinek. Knowledge of German not required. [3] (INT)

GER 2442. War on Screen. [Formerly GER 182] Representations of World War II and the fight against Nazi Germany in Hollywood and other cinemas, contemporary video games, television, and installation art. How current modes of warfare and the global war on terror have changed the conventions of depicting war. [3] (HCA)

GER 2443. German Cinema: Vampires, Victims, and Vamps. [Formerly GER 270] An analysis of representative German film with special emphasis on its sociocultural and historical context. Discussion will include pertinent theories of cinematography and cinematic narration. Taught in English. [3] (INT)

GER 2444. German Fairy Tales: From Brothers Grimm to Walt Disney. [Formerly GER 244] The German fairy tale tradition and its role in American culture. Taught in English. [3] (INT)


GER 3323. From Language to Literature. [Formerly GER 223] Continuing practice in reading, listening, speaking, and writing; emphasis on literary terminology and techniques for critical reading of German. Recommended as preparation for more advanced literary study, prose, poetry, and drama. Prerequisite: 2320. [3] (HCA)

GER 3343. The Aesthetics of Violence: Terror, Crime, and Dread in German Literature. [Formerly GER 243] The “dark” side of imagination in twentieth-century German literature including history and theory of modern art, emphasis on literary representation, mutual influences between aesthetic reflection and political action. No knowledge of German required. [3] (P)

GER 3344. Women at the Margins: German-Jewish Women Writers. [Formerly GER 271] Examination of themes, forms, and sociocultural issues shaping the work of German-Jewish women writers from the Enlightenment to the present. Readings and discussions in English. [3] (HCA)


GER 3378. Dreams in Literature. [Formerly GER 278] The difference between sleeping and being awake. Literary and philosophical texts. Novels, short stories, diaries, poems, and drama written within the last two hundred years. Prerequisite: 2202. [3] (HCA)

GER 3851. Independent Readings. [Formerly GER 289a] Designed for majors and qualified undergraduates. Projects are carried out under the supervision of a member of the department. All projects must be approved by the department. May be repeated for a total of 6 credits over a four-quarter period in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for four semesters of GER 3851 and 3852] (No AXLE credit)

GER 3852. Independent Readings. [Formerly GER 289b] Designed for majors and qualified undergraduates. Projects are carried out under the supervision of a member of the department. All projects must be approved by the department. May be repeated for a total of 6 credits over a four-quarter period in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for four semesters of GER 3851 and 3852] (No AXLE credit)

GER 3890. Selected Topics. [Formerly GER 294a] May be repeated for a total of 12 credits in 3890 and 3891 combined if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3; maximum of 12 credits total for all semesters of GER 3890 and 3891] (No AXLE credit)

GER 3891. Selected Topics. [Formerly GER 294b] May be repeated for a total of 12 credits in 3890 and 3891 combined if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3; maximum of 12 credits total for all semesters of GER 3890 and 3891] (No AXLE credit)

GER 4535. German Romanticism. [Formerly GER 235] The contributions of Schlegel, Tieck, Novalis, Eichendorff, and others to literature, philosophy, and theory. Intellectual, social, and political currents. [3] (INT)

GER 4537. Women and Modernity. [Formerly GER 237] Women in German literature from the eighteenth century to the present, focusing on questions of sexuality, political emancipation, and artistic identity. No knowledge of German required. [3] (INT)

GER 4548. German Lyric Poetry-Form and Function. [Formerly GER 248] Lyric forms as a reaction to personal trauma, collective desire, scientific and technological advances, and social change since the Thirty Years’ War. Love, loss, liberation. Students compose poems in imitation of classical examples of the folk song, ballad, sonnet. [3] (INT)

GER 4563. The Age of Goethe-Weimar 1775 to 1805. [Formerly GER 263] Rational pragmatism, aesthetic innovation in response to Kant and French Revolution. Readings drawn from Goethe’s Iphigenia, Hermann und Dorothea, Schiller’s Maria Stuart and Walenstein, and Wieland’s Oberon. [3] (INT)

GER 4564. Pleasures and Perils in Nineteenth-Century Theatre. [Formerly GER 264] The German drama and dramatic theory from Romanticism up to Naturalism with emphasis on selected works by Kleist, Büchner, Grillparzer, and Hebbel. [3] (INT)


GER 4574. Who Am I? German Autobiographies. [Formerly GER 274] Canonical and non-canonical texts from the nineteenth and twentieth centuries constructing cultural, religious, and gender identities. Taught in English. [3] (HCA)

GER 4576. Tales of Travel in Modern German Culture. [Formerly GER 276] German curiosity about other cultures from the late eighteenth century to the present. The role of travel in German culture. The ways in which German poets, artists, and filmmakers have embraced different social and natural settings as sites of inspiration, self-discovery, and transformation. All readings and discussion in German. Prerequisite: 2310W. [3] (INT)

Greek

GRK 1101. Beginning Greek I. [Formerly GRK 201] Classical Greek. Reading of simplified texts from authors of the fifth and fourth centuries BCE. No credit for students who have earned credit for a more advanced Greek language course. Graded basis only. [3] (No AXLE credit)

GRK 1102. Beginning Greek II. [Formerly GRK 202] Readings from classical authors. Introduction to Homeric and Hellenistic Greek. No credit for students who have earned credit for a more advanced Greek language course. Graded basis only. Prerequisite: 1101. [3] (INT)

GRK 2201. Intermediate Greek I: Classical and Koiné Greek. [Formerly GRK 203] Review of Greek grammar, and reading from classical and biblical texts. Prerequisite: 1102. No credit for students who have earned credit for a more advanced Greek language course. Graded basis only. Prerequisite: 2201. No credit for students who have earned credit for a more advanced Greek language course. [3] (INT)

GRK 2202. Intermediate Greek II: Homer’s Iliad. [Formerly GRK 204] Selected reading and interpretation; history and literary characteristics of the Homeric epic; practice in reading of meter. Prerequisite: 2201. No credit for students who have earned credit for a more advanced Greek language course. [3] (INT)

GRK 3010. The Greek Orators. [Formerly GRK 210] Classical Athenian orators, with a focus on Lysias and Demosthenes. Historical context, rhetorical technique, and prose style. Prerequisite: 2202. [3] (HCA)

GRK 3020. The Greek Historians. [Formerly GRK 212] Selections from the major Greek historians, especially Herodotus and Thucydides, and study of their philosophy of history; investigation of the development of historical prose writing. Prerequisite: 2201. [3] (HCA)

GRK 3040. Readings in Plato and Aristotle. [Formerly GRK 216] Selected readings from the dialogues of Plato and from the ethical writings of Aristotle. Corollary readings and discussions of the pre-Socratic philosophers and the post-Aristotelian schools. Prerequisite: 2202. [3] (HCA)

GRK 3100. The Greek Tragedians. [Formerly GRK 215] Selections from the plays of Aeschylus, Sophocles, and Euripides. Survey of the development of tragedy. May be repeated for credit with change of subject matter. Prerequisite: 2202. [3] (HCA)

GRK 3110. Greek Lyric Poetry. [Formerly GRK 218] The Greek melic, elegiac, and iambic traditions, with an introduction to the Greek dialects and special emphasis on Archilochus, Tyrtaeus, Alcaeus, and Sappho. Prerequisite: 2202. [3] (HCA)

GRK 3850. Independent Study. [Formerly GRK 289] Designed for majors wanting to familiarize themselves with works and authors not covered in the regular curriculum. Prerequisite: 6 hours above 2202. May be repeated for a total of 6 credits if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of GRK 3850] (No AXLE credit)

GRK 3890. Special Topics in Greek Literature. [Formerly GRK 294] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (HCA)

Haitian Creole Language

CREO 1101. Elementary Creole I (Duke). Haitian Creole or Kreyòl lan-
guage. Vocabulary and idioms. Haitian culture. Understanding, speaking, reading, and writing in contexts of health care, Haitian women’s rights, and unpaid child servants (restavèk). Offered on a graded basis only. [3] (No AXLE credit)


Creole

Haitian Creole Language

HEBR 1101. Elementary Hebrew. [Formerly HEBR 111a] Introduction to alphabet, the basics of grammar, and elementary conversation. Classes meet three times per week with an additional two hours a week required in the language laboratory. No credit for students who have earned credit for a more advanced Hebrew language course. [4] (No AXLE credit)

HEBR 1102. Elementary Hebrew. [Formerly HEBR 111b] Continuation of 1101. Greater stress upon conversation and grammar. Classes meet three times a week with an additional two hours a week required in the language laboratory. No credit for students who have earned credit for a more advanced Hebrew language course. Prerequisite: 1101. [4] (INT)

HEBR 2201. Intermediate Hebrew. [Formerly HEBR 113a] Introduction to modern Hebrew reading, conversation, advanced grammar, and conversation. Classes meet three times a week with an additional three hours a week spent in independent work in the language laboratory. No credit for students who have earned credit for a more advanced Hebrew language course. Prerequisite: 1102. [3] (INT)

HEBR 2202. Intermediate Hebrew. [Formerly HEBR 113b] Continuation of 2201. Greater emphasis on reading and writing. Classes meet three times a week with an additional three hours a week spent in independent work in the language laboratory. No credit for students who have earned credit for a more advanced Hebrew language course. Prerequisite: 2201. [3] (INT)

HEBR 2301. Advanced Hebrew Grammar. [Formerly HEBR 201] Emphasis on syntax and grammar supplemented by listening, speaking, and reading. No credit for students who have earned credit for a more advanced Hebrew language course. Prerequisite: 2202. [3] (INT)

HEBR 2302W. Advanced Hebrew Composition. [Formerly HEBR 2302W] Development of writing skills through the study of short stories, poems, articles, television, and web materials. Prerequisite: 2301. [3] (INT)

HEBR 3851. Independent Study in Modern Hebrew. [Formerly HEBR 289a] May be repeated for a total of 6 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total in HEBR 3851 and 3852] (No AXLE credit)

HEBR 3852. Independent Study in Modern Hebrew. [Formerly HEBR 289b] May be repeated for a total of 6 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total in HEBR 3851 and 3852] (No AXLE credit)

History

HIST 1001. Commons Seminar. [Formerly HIST 99] Topics vary. General Elective credit only. [1] (No AXLE credit)


HIST 1060. Premodern China. [Formerly HIST 106] The development of Chinese civilization from ancient times to the seventeenth century. The birth and development of the Chinese identity: Confucianism, Taoism and Buddhism; the moral, military, and bureaucratic foundations of the imperial institution; the Silk Road; eunuchs and concubines; the commercial revolution. [3] (INT)

HIST 1070. China from Empire to the People’s Republic. [Formerly HIST 107] From the seventeenth century to the present. The establishment and expansion of the Qing empire and its clashes with European empires. Twentieth-century revolutions and war with Japan. Mao and the making of the Communist state; post-Mao economic and social reforms. Tibet and ethnic minority issues. [3] (INT)


HIST 1090. Modern Japan. [Formerly HIST 109] The political, social, economic, and cultural history of Japan in the nineteenth century to the present. Radical changes in the state, society, and economy and the effects of these changes on Japan’s place in the world. [3] (INT)

HIST 1111. First-Year Writing Seminar. [Formerly HIST 111F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


HIST 1190. A History of Islam. [Formerly HIST 119] Origins to the present, with emphasis on the modern era. Early and medieval Islam, modernism and fundamentalism. Arabia and the Wahhabis, Iran and Shi’ism, South Asian syncretism, Muslim minorities in Western Europe and the United States. Recent Islamic views on human rights, science, economics, and other religions. [3] (INT)

HIST 1200. The Arab Spring. [Formerly HIST 120] Roots of the movement and the course of events. The role played by the West and by print and other media. Ideologies throughout the Islamic world. Prospects for the future. [3] (INT)

HIST 1270. Sub-Saharan Africa: 1400–1800. [Formerly HIST 127] Precolonial history of West and Central Africa. The rise of early empires; cultural history of major groups, the spread of Islam; the Atlantic exchange, development of the Atlantic plantation complex, and the slave trade. [3] (INT)

HIST 1280. Africa since 1800: The Revolutionary Years. [Formerly HIST 128] Political, economic, and social patterns in Sub-Saharan Africa from 1800 to the present. The transition from traditional states and societies, through the colonial interlude and the quest for independence to the modern national setting with its problems of development. Emphasis on the peoples of Nigeria and South Africa. [3] (INT)

HIST 1360. Western Civilization since 1700. [Formerly HIST 136] European history from the age of the Enlightenment to the present day. [3] (INT)

HIST 1370. Colonial Latin America. [Formerly HIST 137] Survey of Latin American history from pre-Columbian times to the early nineteenth century, Iberian, Amerindian and African background; the conquest; construction of colonial society and institutions; wars for independence. [3] (INT)


HIST 1410. U.S. 1877–1945: Reconstruction through World War II. [Formerly HIST 141] Economic, political, and social history during the era of industrialization, mass immigration, the rise of mass culture, the Great Depression, and the two world wars. [3] (US)

HIST 1420. U.S. Post-1945: Cold War to the Present. [Formerly HIST 142] Political, international, social, and cultural currents that have shaped contemporary America. [3] (US)

HIST 1440. African American History since 1877. [Formerly HIST 144] The political, socioeconomic, and intellectual history of African American people from the end of Reconstruction to the present. Special emphasis on African American cultural and institutional history and the twentieth-century protest movements. [3] (US)


HIST 1500. History of Modern Sciences and Society. [Formerly HIST 150] The end of the Scientific Revolution to the present. Sciences arising from the fields of Natural Philosophy (physics, astronomy, mathematics, and chemistry) and Natural History (geology and the life sciences). The clockwork universe, atomism and the Chemical Revolution; evolutionary theory (physical, geological, and biological); thermodynamics; and quantum theory. Colonial empires, industry, professional specialization, cultural modernism, and nuclear fear. [3] (P)

HIST 1510. The Scientific Revolution. [Formerly HIST 151] The production and dissemination of knowledge of the natural world during the period of the Scientific Revolution, covering roughly from 1450 to 1700. Cosmology and astrology, navigation, alchemy, religion and philosophy, and medicine. [3] (P)


HIST 1580. Crime and Punishment in Early Modern Europe 1400–1800 CE. [Formerly HIST 158] Changing definitions of crime, the classification of criminals, and the nature of punishment. “Real” crimes such as vagrancy, theft, and murder; imaginary crimes such as Jewish ritual murder and witchcraft. Connections with long-term social, legal, and cultural transformations. [3] (HCA)


HIST 1640. History of American Capitalism. [Formerly HIST 164] The development of American capitalism from the colonial period to the twenty-first century. The reasons for and effects of capitalist growth; the ways in which a largely agrarian society emerged as an industrial and commercial leader and shaped the ways Americans produced and lived. The political, social, and cultural dimensions of economic change. The global context of American development. Serves as repeat credit for students who completed 294 section 3 in spring 2011. [3] (US)


HIST 1690. Sea Power in History. [Formerly HIST 169] An introductory survey of the U.S. Navy’s role in foreign and defense policies from the American Revolution to the present. The course also examines the broad principles, concepts, and elements of sea power throughout history. Key points will include technological advances, interservice relations, strategies, and governmental policies pertaining to sea power. This course is designed to meet the NROTC requirement. Does not count toward history major. No credit for students who have earned credit for NS 2311. [3] (No AXLE credit)

HIST 1691. Evolution of Warfare. [Formerly HIST 169C] Antiquity to the present. Evolution of strategic principles. Influence of technological, economic, moral, psychological, and political factors. Case studies from a soldier’s perspective. Repeat credit for students who have completed NS 2311. [3] (No AXLE credit)

HIST 1692. Amphibious Warfare. [Formerly HIST 169D] Broad aspects of warfare and their interactions with amphibious activities. Influence of previous campaigns upon current military policies and practices. Case studies. Repeat credit for students who have completed NS 2411. [3] (No AXLE credit)

HIST 1700. Western Military History to 1815. [Formerly HIST 170] War in culture, politics, and society; technology, the Military Revolution and state-formation. [3] (INT)


HIST 1740. The U.S. and the Vietnam War. [Formerly HIST 174] Origins of American involvement, the reasons for escalation, and the Vietnamese response to intervention. The impact on America’s domestic politics, the growth of the anti-war movement, and the economic, social, and cultural effects of the conflict. [3] (US)


HIST 1881. The Body in Modern Japanese Culture. [Formerly HIST 188a] The roles of human bodies and body image in the making of modern Japan. Bodies as a means of understanding the past and the present. Individuals, society, culture, and physical environment. Historical and literary writings and film from the twentieth century. [3] (INT)


HIST 2110. Crisis Simulation in East Asia. [Formerly HIST 204] Strategic motivations and behaviors of international actors. Simulations of the decision-making process during critical historical moments in the East Asian context through role-playing and video games. Offered on a graded basis only. [3] (INT)

HIST 2111. U.S.–Asia Relations. Eighteenth and Nineteenth century European empires in Asia and the Americas to present age of globalization. Trade and culture; migration and social contacts; sports and medicine; diplomacy and war. Focus on U.S. and East Asia. Offered on a graded basis only. No credit for students who have earned credit for HIST 294 01 spring 2015. [3] (P)

HIST 2115. Play and Pleasure in Early Modern Japan. [Formerly HIST 205] Cultural history of Tokugawa Japan (1603–1868), with emphasis on daily life and popular entertainment in the capital of the warrior government, Edo (present-day Tokyo). Woodblock prints, pleasure quarters, kabuki theatre, commoner carnivals, and popular literature. [3] (INT)

HIST 2119. The Pacific War in Cinematic Memory. Cinematic representations of the Pacific Theater in World War II. Formal and historical analyses. Film’s role in shaping war memories. [3] (INT)


HIST 2135. Russia: The U.S.S.R. and Afterward. [Formerly HIST 210] Russian history since the 1917 Revolution. Overview of the old regime; revolution and civil war; the Soviet “Roaring ‘20s”; Stalinism and the totalitarianized society; World War II. Postwar Soviet society and culture; de-Stalinization and the sixties generation; Gorbachev, perestroika, and disintegration; contemporary history. [3] (INT)


HIST 2138. Blood Diamonds, Blood Oil, Commodities, and Conflicts in Africa. 1870s to the present. Role of diamonds, gold, rubber, and oil in the resulting conflicts in modern Africa. Multinationals, mineral extraction, and politics. Poverty, war, child labor, and corruption. Local and international mining and mineral syndicates. Implications for Africans and their livelihoods. [3] (INT)


HIST 2145. Religion and Politics in South Asia. [Formerly HIST 211b] From pre-modern times to the present. The formation of religious identities in South Asia, including India, Pakistan, and Bangladesh. Religious and political identity during British colonialism. Post-1947 South Asian politics and debates on religious freedom and conflict. Offered on a graded basis only. [3] (INT)

HIST 2150. India and the Indian Ocean. [Formerly HIST 212a] Cultures along the Indian Ocean coastline from Roman times to 1800, especially South Asia. Coastal societies and politics, Islam, pilgrimage and trade, economic zones, and cultural ties. Pirates, seafarers and merchants; diasporas and genealogies. The entry of European trading companies and debates on trade and empire. [3] (INT)

HIST 2155. Muhammad and Early Islam. [Formerly HIST 213] Early Arabian society, Judaism and Christianity in Arabia; Muhammad and the birth of Islam, the conquests, Islamization, Arabization; Jewish influences in early Islam, the medieval Islamic world. [3] (INT)

HIST 2160. Medicine in Islam. [Formerly HIST 216] Emergence of medicine in the Islamic world. Links with other traditions. Doctors and society; conventional medical practice in hospitals; prophetic medicine; Jewish and Christian doctors in Islam; pharmacology; developments in the nineteenth-century. No credit for students who have earned credit for 1111 section 21. [3] (INT)

HIST 2170. Islam and the Crusades. [Formerly HIST 217] Ideology; successes and failures; history and character of Crusader enterprises in the Holy Land and elsewhere. Muslim religious, political, ideological, and social reactions. Islamic culture and the West; relations among Crusaders, Muslims, and Jews. [3] (P)

HIST 2180. Islamic Narratives: Narratives of Islam. History and historiography in Arab Islam. Aims and uses of historical writing in the religious context. Comparison with other pre-modern cultures. Islamic and non-Islamic sources for Islamic history. Examples from the ancient world, early Islam, Middle Ages, and the political entity known as the Islamic State. [3] (HCA)

HIST 2190. Last Empire of Islam. [Formerly HIST 219] The Ottoman “long nineteenth century,** 1789 to 1923. The Reforms (Tanzimat), state patriotism, intercommunal relations, national “awakenings,” and the emergence of a public sphere. Historiographical issues, such as perceptions of the empire as the “Sick Man of Europe” and debates over its decline. [3] (INT)


HIST 2230. Medieval Europe, 1000–1350. [Formerly HIST 223] Economic expansion and the formation of national states; the medieval Church and the revival of learning in the twelfth and thirteenth centuries. [3] (INT)

HIST 2250. Reformation Europe. [Formerly HIST 225] The political, intellectual, and social conditions underlying the Protestant revolt. The Reformation of Luther, Calvin, Zwingli, Loyola, and other religious reformers considered within the context of the general developments of sixteenth-century history. [3] (INT)

HIST 2260. Revolutionary Europe, 1789–1815. [Formerly HIST 226] Political, cultural, and economic upheavals in the late eighteenth and early nineteenth centuries; the French Revolution and Napoleon, romanticism, and early industrialization. Emphasis on Britain, France, and Germany. [3] (INT)


HIST 2280. Europe, 1900–1945. [Formerly HIST 228] Political, socioeconomic, cultural, and colonial history of Europe from 1914 to the fall of Hitler. [3] (INT)
HIST 2290. Europe since 1945. [Formerly HIST 229] Origins of the Cold War; political and social transformations, East and West; the breakup of colonial empires; ideological and military tensions; intellectual and cultural trends. [3] (INT)

HIST 2300. Twentieth-Century Germany. [Formerly HIST 230] The turbulent history of Germany, as it went from authoritarian state to volatile democracy, to National Socialist dictatorship, to divided country, and to reunification. Special emphasis placed on the Nazi dictatorship, its origins and legacy. [3] (INT)


HIST 2340. Modern France. [Formerly HIST 234] The fall of Napoleon in 1815 to the present. Emphasis on politics. Major economic, social, cultural, and intellectual developments. [3] (INT)

HIST 2380. Shakespeare's Histories and History. [Formerly HIST 238] Readings from a variety of plays by Shakespeare and his contemporaries. Significant political and cultural issues from the 1590s in early English history. No credit for students who earned credit for 294 section 2 in fall 2008. [3] (HCA)

HIST 2382. The Rise of the Tudors. [Formerly HIST 239b] Causes and course of the political crisis in the fifteenth century and the rise of the Tudor monarchy. Political and religious forces that drove the English Reformation and its immediate consequences. No credit for students who have completed 2385. [3] (HCA)

HIST 2383. A Monarchy Dissolved? From Good Queen Bess to the English Civil War. [Formerly HIST 239c] Creation of political stability out of the turmoil caused by the English Reformation and its dissolution only forty years later. The relationship between religion and politics, state and society. No credit for students who have earned credit for 2360. [3] (HCA)

HIST 2385. The Real Tudors. [Formerly HIST 239a] Marital, dynastic history of the Tudors in relation to religious and political change through and after the English Reformation. Court politics, ideological conflict, and the rise of an increasingly confessionnalized international politics. Offered on a graded basis only. [3] (HCA)


HIST 2450. Reform, Crisis, and Independence in Latin America, 1700–1820. [Formerly HIST 245] Reorganization of the Spanish and Portuguese empires; maturation of transatlantic societies; and revolutions for independence. [3] (INT)


HIST 2460. Colonial Mexico. [Formerly HIST 246] The cultural history of major pre-Columbian groups; the conquest and settlement by the Spaniards; colonial society through independence in 1821. [3] (INT)

HIST 2470. Revolutionary Mexico. [Formerly HIST 247] Revolutionary politics and radical expression in 20th century Mexico. Causes of popular unrest; violent political change; post-conflict state-building; government attempts to alter popular culture; radical muralism and graphic art; revolutionary expression and gender; literature and disenchantment. [3] (INT)

HIST 2480. Central America. [Formerly HIST 248] Iberian and Amerindian background, colonial society; independence; growth of the plantation economy; the U.S. presence; political and social revolutions in the twentieth century. [3] (INT)

HIST 2490. Brazilian Civilization. [Formerly HIST 249] From pre-Columbian times to the present. Clash and fusion of Portuguese, Amerindian, and African cultures; sugar and slavery; coffee and industrialization; race relations; dictatorship and democracy in the twentieth century. [3] (INT)

HIST 2510. Reform and Revolution in Latin America. [Formerly HIST 251] Comparative analysis of revolutions and reform movements in twentieth-century Latin America focusing on land tenure, social classes, political culture, economic structures, and foreign influences. [3] (INT)


HIST 2540. Race and Nation in Latin America. [Formerly HIST 254a] Late nineteenth century to the present. Social, political, and cultural constructions of belonging. Citizenship and state building. Immigration, education, urbanization, civil and international wars, and gender and sexuality. Case studies draw from the Andes, Spanish Caribbean, Southern cone, and Brazil. Serves as repeat credit for students who completed 294 section 2 in fall 2010 or section 1 in fall 2009. [3] (INT)


HIST 2580. American Indian History before 1850. [Formerly HIST 258] Indian nations’ interaction with each other and with European colonies. Resistance and adaptation to colonialism. Early development of United States Indian policy. [3] (US)


HIST 2620. The Old South. [Formerly HIST 262] The South’s origins in European expansion; the rise of the plantation economy and society, and its identification with slavery; the differing experiences of whites and blacks, planters and nonplanters; the relationship of the region to the larger United States; the Confederate attempt at independence and the collapse of the slave regime. [3] (US)

HIST 2630. The New South. [Formerly HIST 263] The aftermath of war and emancipation and the era of Reconstruction; social change and dislocation in the late nineteenth century; the Populist Revolt; the origins of segregation and one-party politics. Twentieth-century efforts to modernize the region; the economic, political, and Civil Rights revolutions of the mid-twentieth century; the South in modern American society and politics. [3] (US)

HIST 2640. Appalachia. [Formerly HIST 264] The region from first European intrusions to the present. Frontier-era white-indigenous contact, antebellum society and economy, relations with the slave South, the Civil War and postwar politics, increasing social straings, industrialization and

HIST 2655. Historic Black Nashville. From settlement through the Civil War. Secondary literature and archival research to identify significant black history sites in Nashville. Offered on a graded basis only. [3] (US)

HIST 2660. The Birth of Modern Capitalism and Human Trafficking. [Formerly HIST 266] Closure of the Atlantic slave trade in eighteenth and nineteenth-century Britain and the United States. State formation, the birth of modern human rights discourse, and ideas about compassionate capitalism. [3] (INT)


HIST 2710. The U.S. as a World Power. [Formerly HIST 271] From the origins of World War II, through the Cold War, to the present day. Relationships among foreign policy ideology, domestic politics, and social economic change. [3] (US)

HIST 2720. World War II. [Formerly HIST 172] Origins and causes of the global conflict; the six years of military campaigns; politics and diplomacy of war-making; race as a factor shaping the war in Europe and Asia. Impact of technological innovations; social and economic aspects of the struggle, as well as its moral and psychological implications. [3] (INT)


HIST 2725. Race, Power, and Modernity. [Formerly HIST 272c] Historical approaches to race as a modern system of power and difference. The United States experience in comparative and transnational perspective. Race as an historical and socially-constructed ideological system. Race intersecting with nationality, region, class and gender. Race in the making of space, citizenship, and economic institutions. [3] (US)

HIST 2730. American Masculinities. [Formerly HIST 272d] Changing definitions of manhood and masculinity from the colonial period to the post-9/11 era. The rise of democratic politics, industrialization, slavery and emancipation, feminist politics, and the growth of the global power of the United States. [3] (US)

HIST 2735. Debating America in the World, 1890-2010. [Formerly HIST 272e] Debates about the U.S. role in shaping the twentieth century. War; colonialism and anti-colonialism; immigration; participation in international institutions. [3] (US)


HIST 2800. Modern Medicine. [Formerly HIST 280] Scientific, social, and cultural factors influencing the rise of modern medicine. Europe and the U.S. 1750 to the present. [3] (P)

HIST 2810. Women, Health, and Sexuality. [Formerly HIST 281] Women as patients and healers in the U.S. from 1750 to the present. Topics include women’s diseases and treatments; medical constructions of gender, sexuality; childbirth, birth control, abortion; midwives, nurses, and doctors. [3] (US)

HIST 2830. Medicine, Culture, and the Body. [Formerly HIST 283] Also listed as Anthropology 3142 Concepts of the human body from historical and cross-cultural perspectives. Exploration of experiences, representations, and medical theories of the body in birth, death, health, and illness in Western and non-Western societies. Comparison of methodologies of anthropology and history. Repeat credit for students who have completed ANTH 3142. [3] (P)

HIST 2835. Sexuality and Gender in the Western Tradition to 1700. [Formerly HIST 183] Politics, war, and masculinity; Christianity and sexuality; changing ideas about gender roles and sexual practices. [3] (P)

HIST 2840. Sexuality and Gender in the Western Tradition since 1700. [Formerly HIST 184] Modern masculinity, femininity, and gender roles; origins of identity politics and changing sexual norms; contemporary feminist issues. [3] (P)

HIST 3000W. The History Workshop. [Formerly HIST 200W] Introduction to the “historian’s craft.” Reconstructing the past using primary documents, diaries, letters, memoirs, and declassified government papers. Methods of historical research and reasoning through individual projects. Open only to history majors. [3] (SBS)

HIST 3010. Pornography and Prostitution in History. [Formerly HIST 187] Commercialization of the sex trade, Renaissance to the present. Political scandal, capitalism, and globalization; effects of technological change, from the printing press to the Internet. Readings from anthropology, psychology, and feminist theory. [3] (P)

HIST 3030. Epidemics in History. [Formerly HIST 284a] How infectious diseases shape history. European and American responses to disease from the medieval Black Death to HIV/AIDS. Offered on a graded basis only. [3] (P)

HIST 3040. Health and the African American Experience. [Formerly HIST 284b] Disparities in the health care of African Americans, the training of black professionals, and the role of black medical institutions. The intersection between black civic involvement and health care delivery; the disproportionate impact of disease and epidemics within the African American population. [3] (US)


HIST 3070W. Science, Technology, and Modernity. [Formerly HIST 285W] Social, cultural, intellectual, and artistic responses to the challenges
posed by modern science and technology from the mid-nineteenth to the mid-twentieth centuries. Offered on a graded basis only. [3] (P)

**HIST 3075. Foundations of American Economic Development.** [Formerly HIST 286a] The emergence of the U.S. as an industrial power in the nineteenth century. Its growth from a marginal colonial outpost to a dominant political and economic leader. Globalization and international relations, democratic politics and public policy; transformation of the corporate form; development of infrastructure; war and territorial expansion; slavery and labor; control over natural resources. Serves as repeat credit for students who completed 294 section 4 in fall 2010. [3] (US)

**HIST 3080. U.S. and Caribbean Encounters.** [Formerly HIST 286b] The social, political, and cultural history of United States-Caribbean encounters from the Haitian Revolution to the Grenada invasion. Empire, expansion, and American exceptionalism; finance, debt, and banking; military strategy and small wars; gender, sexuality, and bio-politics; racial ideology and racial science; sovereignty and international law; African American and Afro-Caribbean interaction. Serves as repeat credit for students who completed 294 section 2 in spring 2011. [3] (INT)

**HIST 3090. Tokyo: History and Image.** [Formerly HIST 286c] Tokyo and its representation in various media from the mid-nineteenth century to the present and imaginings of the future. The city’s physical development and image in photographs, films, novels, essays, and other textual and visual materials produced within Japan and beyond. [3] (INT)

**HIST 3100. Pirates of the Caribbean.** [Formerly HIST 286d] Imperial competition for control of the Caribbean and state-sponsored piracy. The economic and political consequences of piracy in the Caribbean. The life of pirates aboard ship and in port. [3] (INT)


**HIST 3150. Cities of Europe and the Middle East.** [Formerly HIST 287c] Cities of “East” and “West” in the modern period; distinguishing characteristics and shared patterns of urban modernity across different geographies. Conceptions of the European, Middle Eastern, and Islamic metropolis. [3] (INT)


**HIST 3170. The Federalist Papers.** [Formerly HIST 287e] Classic works on constitutionalism and government and their views on human nature and republicanism. The framers’ rejection of democracy and fear of legislative abuses. The Constitution’s emphasis on institutional protections for liberty and checking abuses of power. [3] (US)

**HIST 3180. Making of Modern Paris.** [Formerly HIST 287g] The social and cultural history of Paris from the old regime to the present. Paris versus the French provinces; revolutionary upheavals; challenges of rapid urbanization. Paris as a literary, artistic, and consumer capital; its changing physical landscape. Immigration and the globalization of Paris. [3] (INT)

**HIST 3190. Religion, Culture, and Commerce: The World Economy in Historical Perspective.** [Formerly HIST 288a] Cross-cultural trade in a broad chronological and geographical framework. Pre-modern and modern times, western and non-western locales. The role of religion in economic exchange and the movement of commodities. Offered on a graded basis only. [3] (HCA)


**HIST 3210. Muslims, Christians, and Jews in Medieval Spain.** [Formerly HIST 288c] Coexistence and conflict from 711 to 1492. The blend of cultures, languages, religions, and societies under both Christian and Islamic rule. Offered on a graded basis only. No credit for students who have earned credit for JS 1111 section 1. [3] (INT)

**HIST 3220W. Images of India.** [Formerly HIST 288d] Images in and of South Asia as studied through maps, religious imagery, print culture, cinema, and architecture. The politics of visual stereotypes of India. The visual history of Orientalism, gender, and religion in South Asia. [3] (INT)

**HIST 3230. The Art of Empire.** [Formerly HIST 288e] Visual media in the establishment of modern empires, with emphasis on Western Europe. Image-making and power; art in cultural exchange and the definition of race, ethnicity, and gender. [3] (HCA)

**HIST 3240W. Culture of the Sixties in Europe and the U.S.** [Formerly HIST 288g] Youth, rock ‘n roll, sexual attitudes, black power, counterculture, and conservative reaction. Cultural revolution or myth. [3] (INT)

**HIST 3250W. Blacks and Money.** [Formerly HIST 288W] Social and cultural history of money, markets, and exchange in the black world in the twentieth century. Reparations and debt; wealth and class; black appropriations of Marxist thought and black endorsements of capitalism. Gifts and primitive money; informal economies and black markets. [3] (P)

**HIST 3260. Revolutionary England, 1603–1710.** [Formerly HIST 289a] Causes, nature, and consequences of the English Revolution and the Glorious Revolution. Religious struggle, the fiscal-military state; political thought; parliament and party politics. The Stuart dynasty; the English Republic; court culture and civil war. [3] (HCA)

**HIST 3270. Religion and the Occult in Early Modern Europe.** [Formerly HIST 289b] Popular and learned ideas about religion and the supernatural within the context of the religious reforms of the sixteenth century. Alchemical and astrological practices to ghosts, werewolves, fairies, and other supernatural beings. The witch craze phenomenon of 1560–1650. Offered on a graded basis only. No credit for students who earned credit for 295 section 1 in fall 2011. [3] (HCA)

**HIST 3275. Religion and Popular Culture in Nineteenth-Century Europe.** [Formerly HIST 289e] Popular religious beliefs and practices in their social, cultural, political, and gender contexts. Concentration on Britain, France, and Germany. Offered on a graded basis only. [3] (SBS)


**HIST 3746. Workshop in English and History.** [Formerly HIST 291] (Also listed as English 3746) Team-taught by a historian and an interdisciplinary scholar. Explores intersection of disciplines through close examination of texts in historical context. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Preference to students majoring in the English-History program. [3] (No AXLE credit)

**HIST 3850. Independent Study.** [Formerly HIST 296] A program of reading in one field of history to be selected in consultation with an adviser. Normally limited to qualified majors in history. Approval of faculty adviser...
and director of undergraduate studies required. May be repeated for credit once if there is no duplication in topic and not twice from the same instructor, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits for all semesters of HIST 3850] (No AXLE credit)

HIST 3880. Internship Training. [Formerly HIST 293a] Under faculty supervision, students from any discipline can gain experience in a broad range of public and private agencies, institutions, and programs. In some cases, such as historical societies or museums, history is a central part of the organization’s missions; in other cases, the student will play a role in managing the institution’s records or writing its history. Two options are available. (1) Full-time: 12–15 hours total, including 6–9 hours in 3880, 3 hours in 3882, and 3 hours in 3883. (2) Part-time: 6–9 hours total, including 3–6 hours in 3880 and 3 hours in either 3882 or 3883. To be accepted for either option, students must have a 2.90 grade point average and 6 hours of prior work in history; they must submit a specific plan for the internship to the director of undergraduate studies. After completing the internship, all students must write a thorough report. Must be taken Pass/Fail and concurrently with 3882 and/or 3883. These hours may not be included in the minimum hours required for the history major. Corequisite: 3882 and/or 3883. [3-9] (No AXLE credit)

HIST 3882. Internship Readings. [Formerly HIST 293c] Under faculty supervision, students from any discipline can gain experience in a broad range of public and private agencies, institutions, and programs. In some cases, such as historical societies or museums, history is a central part of the organization’s missions; in other cases, the student will play a role in managing the institution’s records or writing its history. Two options are available. (1) Full-time: 12–15 hours total, including 6–9 hours in 3880, 3 hours in 3882, and 3 hours in 3883. (2) Part-time: 6–9 hours total, including 3–6 hours in 3880 and 3 hours in either 3882 or 3883. To be accepted for either option, students must have a 2.90 grade point average and 6 hours of prior work in history; they must submit a specific plan for the internship to the director of undergraduate studies. After completing the internship, all students must write a thorough report. Readings and a substantial interpretative essay on topics related to the internship training, under the supervision of a member of the Vanderbilt Department of History. Corequisite: 3880. [3] (No AXLE credit)

HIST 3883. Internship Research. [Formerly HIST 293b] Under faculty supervision, students from any discipline can gain experience in a broad range of public and private agencies, institutions, and programs. In some cases, such as historical societies or museums, history is a central part of the organization’s missions; in other cases, the student will play a role in managing the institution’s records or writing its history. Two options are available. (1) Full-time: 12–15 hours total, including 6–9 hours in 3880, 3 hours in 3882, and 3 hours in 3883. (2) Part-time: 6–9 hours total, including 3–6 hours in 3880 and 3 hours in either 3882 or 3883. To be accepted for either option, students must have a 2.90 grade point average and 6 hours of prior work in history; they must submit a specific plan for the internship to the director of undergraduate studies. After completing the internship, all students must write a thorough report. Students will write a substantial research paper under the supervision of a member of the Vanderbilt Department of History. Corequisite: 3880. [3] (No AXLE credit)

HIST 3890. Selected Topics in History. [Formerly HIST 294] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

HIST 3980. Junior Honors Seminar in History. [Formerly HIST 297] The first semester of a three-semester sequence of honors study leading to the writing of an honors thesis in history. Introduction to historical thinking, research, and writing. Readings from the major fields of historical scholarship, representing the United States, Europe, Latin America, and Asia. Open to juniors beginning honors work in history, or to qualified history majors with the approval of the director of undergraduate studies. [3] (No AXLE credit)

HIST 4960. Majors Seminar. [Formerly HIST 295] Advanced reading, research, and writing. Topics vary. Offered on a graded basis only. Limited to juniors and seniors and intended primarily for history majors. Prerequisite: 3000W. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3; maximum of 6 credits total for all semesters of HIST 4960] (No AXLE credit)

HIST 4980. Senior Honors Research Seminar. [Formerly HIST 298a] Presentation and discussion of drafts and chapters of honors theses in progress. Offered on a graded basis only. Open only to senior departmental honors students. [3] (No AXLE credit)

HIST 4981. Senior Honors Research Seminar. [Formerly HIST 298b] Continuation of 4980. Offered on a graded basis only. Open only to seniors in the departmental honors program. Prerequisite: 4980. Corequisite: 4999. [3] (No AXLE credit)

HIST 4999. Senior Honors Thesis. [Formerly HIST 299] Writing an honors thesis under the supervision of a thesis adviser and the Director of Honors. Open only to seniors in the departmental honors program. Offered on a graded basis only. Prerequisite: 4980. Corequisite 4981. [3] (No AXLE credit)

History of Art

HART 1001. Commons Seminar. [Formerly HART 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

HART 1100. History of Western Art I. [Formerly HART 110] Visual and material culture of Europe and the Ancient Near East from the Paleolithic through the late Medieval period. Egypt, Greece, and Rome; early Christianity and Islam. Form, content, and meaning of works of art and architecture in their cultural context. [3] (HCA)

HART 1105. History of Western Art II. [Formerly HART 111] Major artistic movements from the Renaissance to the Modern era and the developments in painting, sculpture, and architecture. Works of specific artists and cultural factors that affect the visual arts from production to reception. [3] (HCA)

HART 1111. First-Year Writing Seminar. [Formerly HART 115f] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of HART 1111] (No AXLE credit category varies by section)

HART 1120. History of Western Architecture. [Formerly HART 112] Architecture in Europe, Western Asia, and North America from the early first millennium BCE to the present. Form and function; historical, social, and spatial contexts; architects and patrons. No credit for students who have earned credit for 112a. [3] (HCA)

HART 1121. History of Western Architecture I. [Formerly HART 112a] From prehistoric Europe and Western Asia to Renaissance Italy and the Ottoman Golden Age. Form and function; historical, social, spatial contexts; architects and patrons. No credit for students who have earned credit for 112a. [3] (HCA)


HART 1205. Arts of South and Southeast Asia. [Formerly HART 125] Second millennium BCE to present. Formation of political and social identities as reflected in artistic productions. Development of artistic traditions in response to cultural exchange and political dynamics. [3] (INT)

HART 1220. History of Asian Architecture. [Formerly HART 122] Cultural traditions of Asia from the first millennium BCE to the twentieth century through the study of architecture. Cities, temples, and domestic structures of China, Japan, Korea, South Asia (India and Pakistan), and Southeast Asia. [3] (INT)

HART 1300. Monuments and Masterpieces. [Formerly HART 130] The social and cultural history of the world in fourteen great works, including the Athenian Parthenon, the Pantheon in Rome, the Konjikido in Japan, Michelangelo’s Sistine Chapel, and the U.S. Capitol. Sculpture, painting, architecture, and the decorative arts. [3] (INT)
HART 1400. U.S. Icons and Monuments. [Formerly HART 140] From 1776 to present. How and why images of people, historical events, and symbols are revered. Implications for national identity, historical memory, consumerism, and political ideologies. The U.S. Capitol, Statue of Liberty, Mount Rushmore, Marilyn Monroe, and Michael Jordan. No credit for students who have earned credit for 1111 section 13. [3] (US)

HART 2110. Arts of China. [Formerly HART 252] Artistic production from the Neolithic period through the Qing dynasty in relation to religious and cultural contexts. [3] (HCA)

HART 2130. Arts of Japan. [Formerly HART 253] Artistic production from the Neolithic through Meiji periods in relation to religious and cultural contexts. [3] (HCA)

HART 2150. East Asian Architecture and Gardens. [Formerly HART 251] East Asian religious, vernacular, and garden architecture from the second century CE to the present. Influence of Buddhism on East Asian architecture, fengshui, and site selection, garden as religious landscape, Asia in modern architecture. [3] (HCA)

HART 2170. Religion and Politics in South and Southeast Asian Art. [Formerly HART 246] Use of Buddhist, Hindu, and Jain images as political communication in South and Southeast Asia from the time of Buddha (480–400 BC) to the present. The original patronage of temples and religious icons, and their reappearance in ancient and modern times. [3] (INT)

HART 2180. Islamic Art and Architecture. [Formerly HART 244] Visual and building traditions from the seventh through twentieth centuries. Cultural, sacred, political, and historical forces shaping art from Islamic Spain and Turkey to Iran and India. Dome of the Rock, the Alhambra, the Suleymaniye mosque, Persian illustrated manuscripts, and the Taj Mahal. [3] (INT)


HART 2210. Art and Architecture of Ancient Egypt. [Formerly HART 268] Art, architecture, and culture of Egypt from the fourth millennium through the Old, Middle, and New Kingdoms. Sculpture, wall painting, architecture, and material culture. Serves as repeat credit for students who have completed CLAS 217. [3] (HCA)

HART 2220. Greek Art and Architecture. [Formerly HART 255] The Bronze Age, including the Minoans and Mycenaeans, through the Hellenistic period. The social and cultural contexts of material and visual culture. Vase-painting, sculpture, architecture, and more utilitarian artifacts. No credit for students who have earned credit for 2222, 257, 258, or CLAS 2200 or 2210. [3] (HCA)


HART 2285. Medieval Art. [Formerly HART 211] The development of architecture, sculpture, painting, and the minor arts in Europe from the eleventh through the fifteenth centuries. [3] (HCA)

HART 2286. The Art of Illumination. Material and visual composition of medieval manuscripts; working with medieval and contemporary artists’ books in Vanderbilt’s Special Collections. Audience, changing popularity of texts and illustrations, concerns of patron and artist. Exemplary works include the “Book of Kells,” “Luttrell Psalter,” and “Tres Riches Heures.” Offered on a graded basis only. [3] (HCA)

HART 2310. Italian Art to 1500. [Formerly HART 218] Early development of art and architecture primarily in central Italy from the late thirteenth through the fifteenth centuries. The works of Giotto, Duccio, Donatello, Masaccio, and Botticelli. The age of the Medici in Florence. No credit for students who have earned credit for 3320 or 3320W. [3] (HCA)


HART 2325. Great Masters of the Italian Renaissance. From the late Gothic to the High Renaissance. Landmarks in painting, sculpture, and architecture in central Italy. Trecento Siensese masters; Giotto, Donatello, Botticelli, and Leonardo in Florence; and Michelangelo and Raffaello in Rome. Tempera and fresco technique; civic, ecclesiastical, and domestic buildings; and stylistic progression. No credit for students who have earned credit for 2310. [3] (INT)

HART 2330. Italian Renaissance Art after 1500. [Formerly HART 219] High Renaissance and Mannerist art in sixteenth-century Italy, considering Florentine masters such as Leonardo, Michelangelo, and Pontormo, the Roman school of Raphael, and the Venetians from Giorgione and Titian to Tintoretto. [3] (HCA)

HART 2362. Fifteenth-Century Northern European Art. [Formerly HART 214] Painting, sculpture, prints, and court art in the Low Countries, France, and Germany. Historical, social, economic, religious, and technical analysis. Jan van Eyck, Rogier van der Weyden, and Hieronymus Bosch. No credit for students who have earned credit for 2360. [3] (HCA)


HART 2600. Eighteenth-Century Art. [Formerly HART 224] The history of European painting, sculpture, and printmaking from the Late Baroque era to the rise of Neoclassicism (1755–1775). Geographical focus on Italy and France. Artists include Maratti, Rusconi, Carriera, Tiepolo, Watteau, Chardin, Fragonard, and others. [3] (HCA)


HART 2622. Neoclassicism and Romanticism. [Formerly HART 226] A survey of major artists and monuments of visual culture considered in their political, social, economic, spiritual, and aesthetic contexts from 1760 to 1840. [3] (HCA)


HART 2660. American Art to 1865. [Formerly HART 240] Painting and sculpture of the United States from Colonial times to 1865 with an emphasis on iconography, social history, race, and gender. [3] (US)

HART 2708. Twentieth-Century British Art. [Formerly HART 223] Painting, sculpture, installation, film and video, and performance in the context of national culture and political history. [3] (HCA)

HART 2710. Twentieth-Century European Art. [Formerly HART 231] Painting, sculpture, and architecture; stressing a social-historical approach to the study of style. [3] (HCA)


HART 2750. African American Art. [Formerly HART 239] Colonial Era to the present. Artwork and artists in their political, cultural, social, historical, and aesthetic contexts. Relationship between race and representation. [3] (P)


HART 2780. History of Western Urbanism. [Formerly HART 270] Urban form and planning from antiquity to the present. The integration of architecture and landscape. Diachronic surveys, Case studies, including Nashville. [3] (P)


HART 3164W. Art of Buddhist Relic and Reliquary. [Formerly HART 245W] From second century BCE to present. Relic veneration and construction of reliquaries from a visual perspective. Beautification, ritualization, use and abuse, and bodily issues spanning India, China, Korea, Japan, and Southeast Asia. [3] (INT)


HART 3224. Greek Sculpture. [Formerly HART 264] Style, materials, and techniques ca. 900-31 B.C. Sculptors’ “craft” and their reasons for the creation of both free-standing and architectural sculpture. Serves as repeat credit for students who have completed CLAS 216. [3] (HCA)

HART 3226. Greek Vases and Society. [Formerly HART 265] Ancient Greek vases as social documents. Interdisciplinary approaches, including historiographic, stylistic, semiotic, contextual, and scientific. Production, trade, and the functions of vases in funerary and ritual contexts, particularly the symposium. The development of black- and red-figure vase painting and iconography. [3] (HCA)

HART 3228W. Gender and Sexuality in Greek Art. [Formerly HART 262W] Iconography of vase-painting and sculpture, from the Archaic through the Hellenistic periods. Visual constructions of bodies, poses, gestures, and dress, reflecting cultural attitudes towards courtship, marriage, rape, prostitution, and homosexuality. Emphasis on methodological approaches and comparisons with modern societies. Offered on a graded basis only. [3] (HCA)


HART 3252. Cities of the Roman East. [Formerly HART 266] Provincial centers, sanctuaries, and monuments from Greece to Arabia. Major centers and case studies of public and private commissions. Architectural reflections of Romanization and resistance; local and imperial patronage; patrimony and memory; borderland architecture. [3] (HCA)

HART 3272. Portraits in Late Antiquity. [Formerly HART 206] Social, political, and religious functions of portraits from the first century through the sixth century CE. Issues of representation, including the construction of identity, social status, mediation of presence through image, and what constitutes a likeness. Portraits as memorials, as objects of veneration, and idealized models. Influences on later portraiture. [3] (HCA)

HART 3274. Art and Empire from Constantinian to Justinian. [Formerly HART 208] An interdisciplinary study of Roman social, political, religious, and art historical developments in the fourth through sixth centuries CE. [3] (HCA)

HART 3320. Early Renaissance Florence. [Formerly HART 217] Painting and sculpture in fifteenth-century Florence. Ghiberti, Donatello, Masaccio, Fra Angelico, and Botticelli. Stylistic progression, iconographic interpretation and meaning, the role of patronage and audience, original physical and cultural context, and the Italian Renaissance workshop. Offered on a graded basis only. No credit for students who have earned credit for 2310. Repeat credit for students who have completed 3320W. [3] (HCA)

HART 3320W. Early Renaissance Florence. [Formerly HART 217W] Painting and sculpture in fifteenth-century Florence. Ghiberti, Donatello, Masaccio, Fra Angelico, and Botticelli. Stylistic progression, iconographic interpretation and meaning, the role of patronage and audience, original physical and cultural context, and the Italian Renaissance workshop. Offered on a graded basis only. No credit for students who have earned credit for 2310. Repeat credit for students who have completed 3320. [3] (HCA)


HART 3735. History of Photography. [Formerly HART 233] Uses and meanings of photography from its invention (c. 1839) to the present. Ways
HART 3740. History of Sound Art. [Formerly HART 243] From twentieth century to present. Use of sound as artistic medium. Experimental practices; the relationship of art and technology; sound art’s position between music, performance and installation art. Cage, Cardif, Paik, Rosenfeld, and Trimpin. [3] (HCA)


HART 3840. Directed Study. [Formerly HART 290] Registration only with agreement of instructor involved and with written approval of the director of undergraduate studies. May be repeated for a total of 6 credits, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of HART 3840] (No AXLE credit)

HART 3850. Independent Research. [Formerly HART 289] Supervised work in extension of regular offerings in the curriculum. Registration only with agreement of instructor involved and with written approval of the director of undergraduate studies. May be repeated for a total of 6 credits, but students may earn only up to 3 credits per semester of enrollment. [1–3] (No AXLE credit)

HART 3880. Internship Training. [Formerly HART 293b] Students gain experience in a broad range of arts-related programs, at public or private institutions, including museums, and/or federal agencies. Students may take 1–3 hours in 3883, which includes background research, done concurrently with a one-semester internship program (3880), leading to submission of a research paper at the end of that semester. A 3.0 grade point average, approval of a specific plan by the department, and at least 6 hours of prior work in History of Art is required. Offered only on a pass/fail basis only and must be taken concurrently with 3883. Will not count as part of the minimum hours for the History of Art major or minor. Corequisite: 3883. [Variable credit: 1–9] (No AXLE credit)

HART 3883. Internship Research. [Formerly HART 293a] Students gain experience in a broad range of arts-related programs, at public or private institutions, including museums, and/or federal agencies. Students may take 1–3 hours in 3883, which includes background research, done concurrently with a one-semester internship program (3880), leading to submission of a research paper at the end of that semester. A 3.0 grade point average, approval of a specific plan by the department, and at least 6 hours of prior work in History of Art is required. Offered only on a pass/fail basis only and must be taken concurrently with 3883. Will not count as part of the minimum hours for the History of Art major or minor. Corequisite: 3883. [Variable credit: 1–3] (No AXLE credit)

HART 3890. Selected Topics. [Formerly HART 288] May be repeated for credit twice if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3; maximum of 9 credits total for all semesters of HART 3890] (No AXLE credit)

HART 4960. Advanced Seminar. [Formerly HART 295] An undergraduate seminar involving advanced in-depth reading, research, and writing in a particular area of art history. Limited to juniors and seniors with preference to majors. May be repeated for credit once if there is no duplication in topic and not twice from the same instructor. Students may enroll in more than one section of this course each semester. Offered on a graded basis only. [3; maximum of 6 credits total for all semesters of 295; maximum of 9 credits for HART Honors candidates] (HCA)

HART 4998. Honors Research. [Formerly HART 298] Research to be done in consultation with a member of the faculty in history of art. Open only to those beginning honors work in history of art. May be repeated for a total of 6 credits. [1–6; maximum of 6 credits total for all semesters of HART 4998] (No AXLE credit)

HART 4999. Honors Thesis. [Formerly HART 299] Open only to seniors in the departmental honors program. Students completing this course with distinction, including a thesis and final examination, will earn honors in history of art. Prerequisite: 4998. May be repeated for a total of 6 credits. [1–6; maximum of 6 credits total for all semesters of HART 4999] (No AXLE credit)

Honors

HONS 1810W. College Honors Seminar in the Humanities and Creative Arts. [Formerly HONS 181] Offered on a graded basis only. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [3] (HCA)

HONS 1820W. College Perspectives Honors Seminar. [Formerly HONS 182] Offered on a graded basis only. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [3] (P)

HONS 1830W. College Honors Seminar in Behavioral and Social Sciences. [Formerly HONS 183] Offered on a graded basis only. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [3] (SBS)

HONS 1840W. College Honors Seminar in History and Culture of the United States. [Formerly HONS 184] Offered on a graded basis only. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [3] (US)

HONS 1850W. College Honors Seminar in Mathematics and Natural Science. [Formerly HONS 185] Offered on a graded basis only. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [3] (MNS)

HONS 1860W. College Honors Seminar in International Cultures. [Formerly HONS 186] Offered on a graded basis only. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [3] (INT)

Humanities

HUM 1610. Selected Topics. [Formerly HUM 161] Topics Vary. May be repeated more than once if there is no duplication of topic. [3] (No AXLE credit)

Interdisciplinary Studies

INDS 3831. Global Citizenship and Service. [Formerly INDS 270a] This course is offered by the Vanderbilt Initiative for Scholarship and Engagement (VISAGE). Graduate students may take this course for graduate credit. A service-learning course introducing students to themes and interpretations of global citizenship. Intended to be followed by 3832. [3] (INT)

INDS 3832. Global Community Service. [Formerly INDS 270b] This course is offered by the Vanderbilt Initiative for Scholarship and Engagement (VISAGE). Graduate students may take this course for graduate credit. Students will design and conduct research projects in collaboration with faculty mentors. Prerequisite: 3831. [1–3] (No AXLE credit)

INDS 3833. Seminar in Global Citizenship and Service. [Formerly INDS 270c] This course is offered by the Vanderbilt Initiative for Scholarship and Engagement (VISAGE). Graduate students may take this course for graduate credit. Project- and research-based seminar drawing on student experiences and learning in 3831 and 3832. Prerequisite: 3832. [3] (INT)

INDS 3880. Interdisciplinary Internship. [Formerly INDS 280a, 280b, 280c] Internship credit for work approved by the designated Associate Dean of Arts and Science. A written scholarly project must be produced in the internship. Must be taken P/F. Repeatable twice for a maximum of 3 credit hours in 3880 (and 3884) combined. [1] (No AXLE credit)

INDS 3884. Interdisciplinary Internship. [Formerly INDS 280d] Internship credit for summer work approved by the designated Associate Dean of Arts and Science. A written scholarly project must be produced in the internship. Course must be taken P/F. May be repeated for credit; maximum of 3 credit hours in 3881, 3882, 3883, and 3884 combined. [1] (No AXLE credit)
Italian

ITA 1001. Commons Seminar. [Formerly ITA 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

ITA 1101. Elementary Italian. [Formerly ITA 101a] Introduction to reading, writing, and speaking through an exploration of Italian culture. For students who have studied little or no Italian. No credit for students who have earned credit for a more advanced Italian language course. [3] (No AXLE credit)

ITA 1102. Elementary Italian. [Formerly ITA 101b] Study of the language through an exploration of Italian culture. No credit for students who have earned credit for a more advanced Italian language course. Prerequisite: 1101. [3] (INT)

ITA 1103. Intensive Elementary Italian. [Formerly ITA 102] One-semester intensive course for students who have some knowledge of Italian or of another romance language. No credit for students who have earned credit for 1101, 1102, or a more advanced Italian language course. [3] (INT)

ITA 1111. First-Year Writing Seminar. [Formerly ITA 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

ITA 2203. Italian Journeys. [Formerly ITA 200] Life and art in the diverse regions of Italy through an integrated four-skills approach of reading, writing, listening and speaking. No credit for students who have earned credit for a more advanced Italian language course. Prerequisite: 1102 or 1103. [3] (INT)

ITA 2501W. Grammar and Composition. [Formerly ITA 201W] Syntax, idiomatic expressions, and current usage. No credit for students who have earned credit for any 2501W or any 2502W. Prerequisite: 1102. [3] (INT)


ITA 3000. Introduction to Italian Literature. [Formerly ITA 220] Critical reading of major works of Italian literature from the beginning to the present. Prerequisite: 2501W. [3] (HCA)

ITA 3041. Italian Civilization. [Formerly ITA 230] The politics, intellectual, social, artistic, and economic history of Italy from 1300 to the present, with emphasis on major political and philosophical authors. Taught in English. [3] (INT)

ITA 3100. Literature from the Middle Ages to the Renaissance. [Formerly ITA 232] The ideas and forms of the Trecento, Quattrocento, and Cinquecento, as reflected in the philosophy, history, literature, and art history of these periods. Major writers and their influence on Western European literatures. Prerequisite: 2501W. [3] (HCA)

ITA 3240. Dante’s Divine Comedy. [Formerly ITA 231] Dante’s language and philosophical tenets through the study of style, characters, and themes. Taught in English. [3] (HCA)

ITA 3242. Dante in Historical Context. [Formerly ITA 288] Dante’s philosophical and critical works in their medieval historical context and his influence in building a modern Western civilization. Knowledge of Italian not required. [3] (HCA)


ITA 3500. Baroque, Illuminismo, and Romanticism in Italy. [Formerly ITA 233] Literature of the seventeenth through nineteenth centuries, with particular reference to the influence of European literatures in Italy. Prerequisite: 2501W. [3] (HCA)


ITA 3640. Classic Italian Cinema. [Formerly ITA 240] From the 1910s to the 1970s. Selected works from Neorealism to Art Film. Relationship between cinema and the other arts. Contrasting film styles, including abstraction and realism, and tradition and transgression. Knowledge of Italian is not required. [3] (INT)


ITA 3642. Italian Visual Culture. [Formerly ITA 280] Parallels between Italian literature and the visual arts, including painting, cinema, and intermediality. Focus on the representation of the visual arts in literature, the representation of literature in the visual arts, and Italy as the cradle of Western visual culture. Prerequisite: 2203. [3] (HCA)

ITA 3701. City Fictions. [Formerly ITA 238] Interdisciplinary exploration of how Italian authors, directors, and artists aspire to change the way readers and viewers understand and experience urban realities. Social, cultural, geographical, and architectural aspects of Italian cities as depicted in fiction, travel literature, cinematic images, the visual arts, and music. Prerequisite: 2203. [3] (P)

ITA 3702. Topics in Contemporary Italian Civilization. [Formerly ITA 239] Short stories, historical documents, and articles from the press. Prerequisite: 2501W. [3] (No AXLE credit)


ITA 3850. Independent Study. [Formerly ITA 289] A reading course, the content of which varies according to the needs of the individual student. Primarily designed to cover pertinent material not otherwise available in the regular curriculum. May be repeated for a total of 12 credits over a four-semester period, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 12 credits total for four semesters of ITA 3850] (No AXLE credit)

ITA 3890. Special Topics in Italian Literature. [Formerly ITA 294A] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 2501W. [3] (No AXLE credit)

Japanese

JAPN 1011. Basic Japanese I. [Formerly JAPN 200a] Simple conversation, writing system, and reading. Designed exclusively for students with little or no previous exposure to Japanese. No credit for students who have earned credit for 1101 or a more advanced Japanese language course. [3] (No AXLE credit)

JAPN 1012. Basic Japanese II. [Formerly JAPN 200b] No credit for students who have earned credit for 1101 or a more advanced Japanese language course. Prerequisite: 1011. [3] (No AXLE credit)

JAPN 1101. Elementary Japanese I. [Formerly JAPN 201] Acquisition of oral-aural skills and basic grammar. Introduction to reading and writing Japanese syllabaries and Chinese characters. Two hours of lecture and
three hours of drill per week. No credit for students who have earned credit for 1012 or a more advanced Japanese language course. [5] (No AXLE credit)

**JAPN 1102. Elementary Japanese II.** [Formerly JAPN 202] Two hours of lecture and three hours of drill per week. No credit for students who have earned credit for a more advanced Japanese language course. Prerequisite: 1012 or 1101. [5] (INT)

**JAPN 2201. Intermediate Japanese I.** [Formerly JAPN 211] Development of conversational skills and linguistic competence. Syntax, writing, and reading. Two hours of lecture and three hours of drill per week. No credit for students who have earned credit for a more advanced Japanese language course. Prerequisite: 1102. [5] (INT)

**JAPN 2202. Intermediate Japanese II.** [Formerly JAPN 212] Two hours of lecture and three hours of drill per week. No credit for students who have earned credit for a more advanced Japanese language course. Prerequisite: 2201. [5] (INT)

**JAPN 2232. Japanese through Manga.** [Formerly JAPN 232] Reading and analysis of Japanese comic books. Language skills and knowledge of contemporary Japanese popular culture. Basic knowledge of hiragana and katakana required. [1] (No AXLE credit)

**JAPN 3301. Advanced Japanese I.** [Formerly JAPN 241] Reading and writing in contemporary Japanese texts. Conversation, discussion, and development of pragmatic competence. No credit for students who have earned credit for a more advanced Japanese language course. Prerequisite: 2202. [3] (INT)

**JAPN 3302. Advanced Japanese II.** [Formerly JAPN 242] No credit for students who have earned credit for a more advanced Japanese language course. Prerequisite: 3301. [3] (INT)

**JAPN 3851. Independent Study.** [Formerly JAPN 289A] A reading course which may be repeated with variable content according to the needs of the individual student. Primarily designed to cover materials not otherwise available in the regular curriculum. May be repeated for a total of 12 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1-3; maximum of 12 credits total for all semesters of 3851 and 3852] (No AXLE credit)

**JAPN 3852. Independent Study.** [Formerly JAPN 289B] A reading course which may be repeated with variable content according to the needs of the individual student. Primarily designed to cover materials not otherwise available in the regular curriculum. May be repeated for a total of 12 credits in 3851 and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1-3; maximum of 12 credits total for all semesters of 3851 and 3852] (No AXLE credit)

**JAPN 3891. Special Topics in Advanced Japanese.** [Formerly JAPN 251] Reading, writing, and discussion in authentic Japanese cultural, literary, and historical texts. Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 3302. [3] (INT)

**Jewish Studies**

**JS 1001. Commons Seminar.** [Formerly JS 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

**JS 1002. Introduction to Jewish Studies.** [Formerly JS 180] Introduction to Judaism and Jewish history through philosophical, political, social, psychological, and artistic perspectives. Biblical studies; culture, philosophy, and literature. Antiquity and the medieval world; modern and contemporary experience. Repeat credit for students who have completed 1002W. [3] (INT)

**JS 1002W. Introduction to Jewish Studies.** [Formerly JS 180W] Introduction to Judaism and Jewish history through philosophical, political, social, psychological, and artistic perspectives. Biblical studies; culture, philosophy, and literature. Antiquity and the medieval world; modern and contemporary experience. Repeat credit for students who have completed 1002. [3] (INT)

**JS 1101. First-Year Writing Seminar.** [Formerly JS 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1101 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1101] (AXLE credit category varies by section)

**JS 1200. Classical Judaism: Jews in Antiquity.** [Formerly JS 122] History of the Jewish people from biblical origins through the 2nd century CE. The Hellenistic Age, the Age of the Maccabees, Roman rule, and the rise of the Rabbis and Rabbinic literature. [3] (HCA)


**JS 1240. Perspectives in Modern Jewish History.** [Formerly JS 124] Meaning and origins of modern Jewish history from 1492. The diverse experiences of Jewish communities across the globe. Men’s and women’s redefinition of Jewish identity as they confronted modernity. Rise of secular rights for Jews but also of new forms of persecution. [3] (P)

**JS 2100. The New Testament in Its Jewish Contexts.** [Formerly JS 219] Documents of the origin of Christianity and the social, literary, ideological, and theological contexts in which they emerged and which they reflect. Various critical methodologies employed in interpreting them. [3] (P)

**JS 2150. Issues in Rabbinic Literature.** [Formerly JS 233] History of Rabbinic thought from its origins to the Middle Ages through the reading of central Rabbinic texts. Capital punishment, women in Rabbinic culture, sectarianism, and the power structures of Roman Palestine and Sasanian Babylonia. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [3] (INT)


**JS 2240W. Black-Jewish Relations in Post-War American Literature and Culture.** [Formerly JS 137W] The historical relationship between African Americans and Jewish Americans and its portrayal in novels, short stories, and films by artists from both communities. [3] (US)


**JS 2260. Coming of Age in Jewish Literature and Film.** [Formerly JS 237] The transition of young Jewish protagonists into adulthood as portrayed in literary works and films from Europe, Africa, and the Americas. Repeat credit for students who have completed 2260W. [3] (INT)

**JS 2260W. Coming of Age in Jewish Literature and Film.** [Formerly JS 237W] The transition of young Jewish protagonists into adulthood as portrayed in literary works and films from Europe, Africa, and the Americas. Repeat credit for students who have completed 2260W. [3] (INT)

**JS 2270. Jewish Storytelling.** [Formerly JS 248] Twentieth-century short fiction and narrative traditions. The transition from religious to secular cultural forms. Immigration and ethnic literary forms. All works are in English or translation from Yiddish, Hebrew, and Russian. Repeat credit for students who have completed 2270W. [3] (HCA)

**JS 2270W. Jewish Storytelling.** [Formerly JS 248W] Twentieth-century short fiction and narrative traditions. The transition from religious to secular cultural forms. Immigration and ethnic literary forms. All works are in English or translation from Yiddish, Hebrew, and Russian. Repeat credit for students who have completed 2270W. [3] (HCA)
English or English translation from Yiddish, Hebrew, and Russian. Repeat credit for students who have completed 2270. [3] (HCA)


JS 2280W. Jewish Humor. [Formerly JS 138W] The flowering of Jewish humor, especially in the U.S. during the twentieth century, Vaudeville, radio comedy, and the Golden Age of television. The careers and works of influential comics, writers and filmmakers, and the development of stand-up comedy. The effect of Talmudic disputes, Yiddish wordplay, and the history of Diaspora life upon secular Jewish comedians, essayists, playwrights, and fiction writers. Repeat credit for students who have completed 2280. [3] (US)

JS 2290W. Imagining the Alien: Jewish Science Fiction. [Formerly JS 136W] Science fiction and speculative fiction by Jewish writers in cultural context. Aliens, robots, and secret identities; time travel; utopia and political critique; questions of Jewish identity. [3] (HCA)


JS 2320. Freud and Jewish Identity. [Formerly JS 244] Analysis of rhetoric and themes in selected writings of Sigmund Freud and his times, development of assimilation and of anti-Semitic repudiations. [3] (SBS)


JS 2340. Jewish Philosophy after Auschwitz. [Formerly JS 249] Critical responses to social and political institutions and the corresponding modes of thought that made Auschwitz possible and continue to sustain the barbarism that many leading philosophers have identified at the heart of culture. [3] (INT)


JS 2500. Modern Israel. [Formerly JS 125] Internal dynamics, debates, and conflicts within Israeli society. Political, social, and cultural transformations from the 1980s to the present. [3] (INT)


JS 2560. Social Movements in Modern Jewish Life. [Formerly JS 252] How social movements shape contemporary American Jewish culture and politics. Explores movements internal to Judaism and those bringing religion into the public sphere. [3] (SBS)

JS 2600. Islam and the Jews. [Formerly JS 120] Muslim-Jewish relations from the beginning of Islam to the present. Mohammed and the Jews, Jewish roles in Islamic cultures, status of Muslims in contemporary Israel, recent Jewish exodus from Muslim lands. [3] (INT)


JS 2640. Jews and Greeks. [Formerly JS 230] From the seventh century BCE to ca. 1500 CE. Sites of interaction, languages, cultural ties, religious tensions, political conflicts, and competing philosophies. Works by Elephantine, Alexander the Great, the Maccabees, the Septuagint, Aristeas, Josephus, Philo, the rabbis, the New Testament, Ezekiel the Tragedian, Byzantium. Serves as repeat credit for students who completed 257 section 1 in fall 2010. [3] (INT)


JS 3210. Reading Across Boundaries: Jewish and Non-Jewish Texts. [Formerly JS 234] Jewish and non-Jewish literary and historical texts studied in parallel so as to discover the differences between them. The course will consider texts from the ancient world to the early modern period and ask what constitutes Jewish writing and how it has been defined through time and geography. All readings will be in English. [3] (INT)

JS 3830. Contemporary Jewish Issues. [Formerly JS 280] Projects will vary according to the instructor. Service to community will be integral part of course. [3] (No AXLE credit)

JS 3840. Directed Readings. [Formerly JS 290] Advanced readings and research on a selected topic done under the supervision of a faculty mentor. [3] (No AXLE credit)

JS 3850. Independent Study. [Formerly JS 289] A research project carried out under the supervision of a faculty mentor. May be repeated for a total of 6 credits if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of JS 3850] (No AXLE credit)

JS 3880. Internship Training. [Formerly JS 288a] Under faculty supervision, students gain experience in any of a variety of settings, such as community, municipal, or government agencies. A thorough report and research paper are required. Must be taken on a Pass/Fail basis only and must be taken concurrently with 3883. Corequisite: 3883. [Variable credit: 1–3] (No AXLE credit)

JS 3883. Internship Research. [Formerly JS 288b] Under faculty supervision, students gain experience in any of a variety of settings, such as community, municipal, or government agencies. A thorough report and research paper are required. Students will write a research paper drawing on their experiences in 3880. Corequisite: 3880. [3] (No AXLE credit)

JS 3890. Special Topics. [Formerly JS 284] Topics as announced. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

JS 3892. Topics in Ancient and Medieval Jewish History. [Formerly JS 257] From antiquity to 1492. Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

JS 3894. Topics in Modern Jewish History. [Formerly JS 258] From 1492 to the present. Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

JS 4301. Jewish Language and Paleography. [Formerly JS 238] Advanced study in a language of the Jewish people with a particular focus
on the linguistic and palaeographic features that define its cultural context. Each section focuses on one of the following languages: Aramaic, Ladino, Juddao-Arabic, Rabbinic Hebrew, or Yiddish. May be repeated for credit up to two times when the language studied differs. Consent of instructor required. [3] (INT)

**JS 4960. Senior Seminar.** [Formerly JS 295] Advanced reading and research in a particular area of Jewish studies. [3] (No AXLE credit)

**JS 4970. Senior Project in Jewish Studies.** [Formerly JS 296] Readings and independent research. Prerequisite: senior standing. [3] (No AXLE credit)

**JS 4980. Senior Honors Research Seminar.** [Formerly JS 298A] Presentation and discussion of progress being made on honors theses. Open only to senior departmental honors students. [3] (No AXLE credit)

**JS 4981. Senior Honors Research Seminar.** [Formerly JS 298B] Presentation and discussion of progress being made on honors theses. Open only to senior departmental honors students. [3] (No AXLE credit)

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**K’iche’ – Mayan Language**

**KICH 1101. Introduction to a Maya Language.** Kaqchikel, K’iche’, or Q’eqchi’. Basic speaking, reading, and writing skills. Offered on a graded basis only. Serves as repeat credit for students who have earned credit for ANTH 2612. [3] (No AXLE credit)

**KICH 2201. Advanced K’iche’ Maya.** Vocabulary, listening, and speaking skills. Modern and colonial texts. Cultural context of linguistic practices in K’iche’ communities. No credit for students who have earned credit for Anthropology 278. Offered on a graded basis only. Prerequisite: 1102. [3] (INT)

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**Latin**

**LAT 1101. Beginning Latin I.** [Formerly LAT 101] Practice in speaking and writing. No credit for students who have earned credit for a more advanced Latin language course. Graded basis only. [3] (No AXLE credit)

**LAT 1102. Beginning Latin II.** [Formerly LAT 102] Transition to literary Latin. Emphasis on comprehension of texts. No credit for students who have earned credit for a more advanced Latin language course. Graded basis only. Prerequisite: 1101. [3] (INT)

**LAT 1103. Intensive Elementary Latin.** [Formerly LAT 100] The equivalent of Latin 1101 and 1102. This course presents the elements of the Latin language at an accelerated pace. Designed for students who have completed one or two years of Latin in high school but are not prepared to enter Latin 1102. No credit for students who have earned credit for 1101, 1102, or a more advanced Latin language course. [5] (INT)

**LAT 2201. Intermediate Latin: Prose.** [Formerly LAT 103] Review of Latin grammar and selected reading from major Latin authors. No credit for students who have earned credit for a more advanced Latin language course except 2202. [3] (INT)

**LAT 2202. Intermediate Latin: Poetry.** [Formerly LAT 104] Selected reading from the major Latin poets. No credit for students who have earned credit for a more advanced Latin language course. [3] (INT)

**LAT 3010. The Writings of Caesar.** [Formerly LAT 218] Selections from The Civil War and The Gallic War. Literary style and historical context. Prerequisite: 2202. [3] (HCA)

**LAT 3020. Cicero and the Humanistic Tradition.** [Formerly LAT 206] Study of Cicero’s career and thought, and of his contribution to the development of the concept of humanitas. Readings from his letters, speeches, or philosophical works. Prerequisite: 2202. [3] (HCA)


**LAT 3040. The Roman Historians.** [Formerly LAT 215] Selections from Sallust, Livy, and Tacitus, with attention to their objectives and methods; analysis of Roman historiography and its relation to Greek and early Christian historiography. Prerequisite: 2202. [3] (HCA)

**LAT 3050. Suetonius.** [Formerly LAT 217] Selections from the works of one of Rome’s most important biographers, read in the context of the Latin biographical tradition as well as the political and social background. Prerequisite: 2202. [3] (HCA)

**LAT 3060. Tacitus.** [Formerly LAT 216] Selections from the works of one of Rome’s most important historians, read in the context of historiographical tradition and political and social background. Prerequisite: 2202. [3] (HCA)

**LAT 3100. Roman Comedy.** [Formerly LAT 212] Reading of selected comedies of Plautus and Terence: study of the form of Roman comedy and its relation to the Greek New Comedy. Prerequisite: 2202. [3] (HCA)

**LAT 3110. Catullus.** [Formerly LAT 201] Reading and interpretation of Catullus’ poems; aesthetic, political, and rhetorical contexts; fundamentals of Latin meter. Prerequisite: 2202. [3] (HCA)

**LAT 3120. Lucretius: De Rerum Natura.** [Formerly LAT 268] Lucretius’ poem studied both in the tradition of Epicurean philosophy and as a landmark in the development of the Latin didactic epic; background material in the fragments of Epicurus and some treatment of the Epicurean movement in Italy and especially in Rome. Prerequisite: 2202. [3] (HCA)


**LAT 3140. The Lyric Poetry of Horace.** [Formerly LAT 203] Reading and interpretation of Horace’s Epodes and Odes; relation to the Greco-Roman lyric tradition and to Augustan politics. Prerequisite: 2202. [3] (HCA)

**LAT 3150. Latin Elegy.** [Formerly LAT 204] Authors who created a new type of love poetry during the rule of emperor Augustus: Tibullus, Propertius, Ovid, and Sulcicia. Construction and contestation of gender roles; political contexts; development of the elegiac couplet; modern responses. Prerequisite: 2202. [3] (HCA)

**LAT 3160. Ovid.** [Formerly LAT 202] Reading and interpretation of selections from the Metamorphoses or other works of Ovid. Prerequisite: 2202. [3] (HCA)

**LAT 3170. Roman Satire.** [Formerly LAT 264] The satires of Horace and Juvenal; the origins of Roman satire; history and conventions of the genre; background reading in other Roman satirists. Prerequisite: 2202. [3] (HCA)

**LAT 3180. Neronian Writers.** [Formerly LAT 267] Selections from authors in the literary renaissance during the reign of the artistic Emperor Nero, including Seneca, Lucan, Persius, and Petronius. Stylistic innova-

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**Latin American Studies**

**LAS 1001. Commons Seminar.** [Formerly LAS 99] Topics vary. General Elective credit only. [1] (No AXLE credit.)

**LAS 1111. First-Year Writing Seminar.** [Formerly LAS 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if
there is no duplication of topic, but students may earn only up to 3 credits
in any 1111 course per semester of enrollment. [3; maximum of 6 credits
total for all semesters of 1111] (AXLE credit category varies by section)

LAS 2101. Introduction to Latin America. [Formerly LAS 201] A multi-
disciplinary survey of Latin America from pre-Columbian times to the pres-
ent emphasizing culture, economic and political patterns, social issues,
literature, and the arts in a historical perspective. [3] (INT)

LAS 2102. Introduction to Brazil. [Formerly LAS 202] A multidisciplinary
survey of Brazil from pre-Columbian times to the present, emphasizing
culture, economic and political patterns, social issues, literature, and the
arts in historical perspective. [3] (INT)

LAS 2301. Music of Protest and Social Change in Latin America.
[Formerly LAS 231] Politics of musical culture. Music both as a marker of
sociopolitical change and as an agent of political transformation. [3] (INT)

LAS 2601. Latin America, Latinos, and the United States. [Formerly
LAS 260] Immigration of Latin American and Caribbean peoples to the
United States and their experiences in this country. Required service work
and a research project in the Nashville Latino community. [3] (P)

LAS 3851. Independent Study. [Formerly LAS 289a] A program of in-
dependent readings or research to be selected in consultation with the
center’s undergraduate adviser. Open only to juniors and seniors. May be
repeated for a total of 12 credits in 3851 and 3852 combined over a four
semester period, but students may earn only up to 3 credits per semester
of enrollment. [1–3; maximum of 12 credits total for four semesters of LAS
3851 and 3852] (No AXLE credit)

LAS 3852. Independent Study. [Formerly LAS 289b] A program of in-
dependent readings or research to be selected in consultation with the
center’s undergraduate adviser. Open only to juniors and seniors. May be
repeated for a total of 12 credits in 3851 and 3852 combined over a four
semester period, but students may earn only up to 3 credits per semester
of enrollment. [1–3; maximum of 12 credits total for four semesters of LAS
3851 and 3852] (No AXLE credit)

LAS 3880. Internship Training. [Formerly LAS 260b] Under faculty su-
vision, students gain experience working in a variety of settings, such as
civic, corporate, cultural, government, health, media, political, research,
and social welfare organizations in the United States and Latin America.
Background reading and research will be completed in Latin American
Studies 3881 concurrently with the completion of internships in Latin
American Studies 3880. A minimum of 3 hours of 3881 must be complet-
ed, independent of hours taken in 3880. Students may earn up to 6 hours
of 3881 credit. A research paper and report must be submitted at the end
of the semester during which the internship training is completed. A 2.90
grade point average, 6 hours of prior work in Latin American Studies,
and prior approval of the director of undergraduate studies of the student’s
plans are required. Offered on a Pass/Fail basis only and must be taken
currently with 3881. Hours of 3880 cannot be included in the minimum
number of hours counted toward the Latin American Studies major or
minor. Corequisite: 3881. [1–9] (No AXLE credit)

LAS 3881. Internship Readings and Research. [Formerly LAS 280a]
Under faculty supervision, students gain experience working in a variety of
settings, such as civic, corporate, cultural, government, health, media, po-
litical, research, and social welfare organizations in the United States and
Latin America. Background reading and research will be completed in Latin
American Studies 3881 concurrently with the completion of internship train-
ing in Latin American Studies 3880. A minimum of 3 hours of 3881 must be
completed, independent of hours taken in 3880. Students may earn up to
6 hours of 3881 credit. A research paper and report must be submitted at the
end of the semester during which the internship training is completed. A
2.90 grade point average, 6 hours of prior work in Latin American Studies,
and prior approval of the director of undergraduate studies of the student’s
plans are required. Corequisite: 3880. [3–6] (No AXLE credit)

LAS 3891. Special Topics in Latin American Studies. [Formerly LAS
294A] Selected special topics suitable for interdisciplinary examination
from the perspective of the social sciences and humanities. May be re-
peated for credit more than once if there is no duplication in topic. Stu-
dents may enroll in more than one section of this course each semester.
[3] (No AXLE credit)

LAS 4901. Interdisciplinary Research Methods. [Formerly LAS 290]
Principal research methods and sources necessary for the study of Latin
America in the social sciences and humanities. [3] (No AXLE credit)

Latino and Latina Studies

LATS 2201. Introduction to Latino and Latina Studies. [Formerly
LATS 201] Foundational course for interdisciplinary study of Americans of
Hispanic heritage and their communities. History and cultural production.
Interconnections and differences among diverse Hispanic communities.
[3] (P)

LATS 3831. Latino and Latina Business and Entrepreneurship.
[Formerly LATS 250] Research on Nashville’s growing Latino and Latina
communities. Types of businesses and how they function. Issues affecting
businesses within the communities. Work with local community leaders. A
service learning course. [3] (SBS)

LATS 4961. Latino and Latina Studies Seminar. [Formerly LATS 280]
Overview of cultural production, history, and political and socioeconomic
experiences of Hispanic people living in the United States. Synthesis of
issues, traditions, approaches, and problems. [3] (HCA)

Managerial Studies

General Elective credit only. [1] (No AXLE credit)

MGRL 1100. Fundamentals of Management. [Formerly MGRL 194]
Entrepreneurship, strategy, marketing, operations, and finance. For-profit,
non-profit, and social enterprise organizations. [3] (SBS)

MGRL 1200. Principles of Marketing. [Formerly MGRL 190] Creating
customer value and building profitable customer relationships. Under-
standing customer needs, defining target markets, and crafting value

[Formerly MGRL 196] Functional areas within companies, business plans
at various stages of company development and critique of business plans
for investment suitability. Prerequisites: 1100 and FNEC 1600. [3] (SBS)

MGRL 3105. Negotiation. [Formerly MGRL 185] Contemporary chal-
 lenges in leading change in organizations and building effective manage-
tment teams. The context and dynamics of negotiation: components,
structure, and management of negotiations; and varying requirements
across the spectrum of negotiation types. [3] (SBS)

MGRL 3200. Advanced Marketing. [Formerly MGRL 191] Case study of
processes, techniques, and theories of marketing, including branding,
advertising, interactive media, sales promotion, and marketing research.
Offered on a graded basis only. Prerequisite: 1200. [3] (SBS)

MGRL 3209. Creative Advertising. [Formerly MGRL 192] Examination
and practical application of the creative process in advertising; the cre-
ation of marketing campaigns, including the integration of various media.
Prerequisite: 1200. [3] (SBS)

MGRL 3250. Corporate Strategy. [Formerly MGRL 198] Examination
of the issues and challenges facing corporate management. Responsibili-
ties and interrelationships of functional areas including marketing, finance,
operations, and R&D. Industry, competitor, and customer analysis. De-
design and implementation of corporate strategy. Informational and control
systems. Interpersonal skills for effective teamwork. Prerequisite: FNEC
1600. [3] (SBS)

MGRL 3300. Entrepreneurial Challenge. [Formerly MGRL 195] Simu-
lation of the entrepreneurial experience from idea generation to funding.
Development of a complete business plan, including financial projections,
and competition for funding from investors. Offered on a graded basis
only. Prerequisite: 1100. [3] (SBS)
MGR 3841. Directed Study. [Formerly MGR 290] Directed readings and related field research toward a scholarly project conceived and executed under the supervision of a faculty member. Limited to juniors and seniors. [3] (No AXLE credit)

MGR 3851. Independent Study in Managerial Studies. [Formerly MGR 245] A program of independent reading in consultation with an adviser. Written permission of an instructor and the program director required. [Variable credit: 1–3; may not be repeated] (No AXLE credit)

MGR 3891. Selected Topics in Managerial Studies. [Formerly MGR 235] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

Mathematics
MATH 1001. Commons Seminar. [Formerly MATH 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

MATH 1005. Pre-calculus Mathematics. [Formerly MATH 133] Inequalities, functions and graphs, trigonometric identities, theory of equations. Designed for students who plan to take either 1200–1201 or 1300–1301 but need a stronger background in algebra and trigonometry. [3] (No AXLE credit)

MATH 1010. Probability and Statistical Inference. [Formerly MATH 127A] For students not planning to major in science, engineering, or mathematics. Discrete and continuous probability models (exponential, binomial, Poisson, normal). Law of large numbers; conditional probability and Bayes' Theorem; counting techniques and combinatorics. Descriptive statistics: measures of central tendency and dispersion, histograms. [3] (No AXLE credit)

MATH 1011. Probability and Statistical Inference. [Formerly MATH 127B] For students not planning to major in science, engineering, or mathematics. Linear regression, correlation, hypothesis testing. Confidence intervals, sampling distributions, statistical inference. Prerequisite: 1010. [3] (MNS)

MATH 1100. Survey of Calculus. [Formerly MATH 140] A basic course in the rudiments of analytic geometry and differential and integral calculus with emphasis on applications. Designed for students who do not plan further study in calculus. Students who have earned credit for 1200 or 1300 will earn only one credit for this course. Students who have earned credit for 1201 will earn only three credits for this course. [4] (MNS)

MATH 1111. First-Year Writing Seminar. [Formerly MATH 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

MATH 1200. Single-Variable Calculus I. [Formerly MATH 150a] Review of algebra and trigonometry. Exponential functions; inverse functions and logarithms. Limits; differentiation of algebraic and transcendental functions; rules of differentiation; related rates. Three hours of lecture and one hour of recitation period per week. No credit for students who have earned credit for 1100. Students who have earned credit for 1200 will earn only one credit for this course. [3] (MNS)

MATH 1201. Single-Variable Calculus II. [Formerly MATH 150b] Maximum and minimum values; curve sketching. Antiderivatives; the Fundamental Theorem of Calculus; areas and volumes; techniques of integration. Three hours of lecture and one hour of recitation period per week. Students who have earned credit for 1100 or 1301 will earn only one credit for this course. Students who have earned credit for 1200 will earn only one credit for this course. Prerequisite: 1200. [3] (MNS)

MATH 1300. Accelerated Single-Variable Calculus I. [Formerly MATH 155a] Functions, limits, differentiation of algebraic functions, integration, applications including extremum problems, areas, volumes, centroids, and work. Students who have earned credit for 1100 will earn only one credit for this course. Students who have earned credit for 1200 or 1201 will earn only two credits for this course. [4] (MNS)

MATH 1301. Accelerated Single-Variable Calculus II. [Formerly MATH 155b] Differentiation and integration of transcendental functions, applications, methods of integration, coordinate geometry, polar coordinates, infinite series. Students who have earned credit for 1201 will earn only three credits for this course. Students who have earned credit for 2200 will earn only one credit for this course. Prerequisite: 1300 or 1201. [4] (MNS)

MATH 2200. Single-Variable Calculus III. [Formerly MATH 170] Analytic geometry, parametric equations, polar coordinates, infinite series, Taylor series. Repeat credit for students who completed 170a prior to fall 2008. No credit for students who have earned credit for 1301. Prerequisite: 1201. [3] (MNS)

MATH 2300. Multivariable Calculus. [Formerly MATH 175] Vectors, curves, and surfaces in space. Functions of several variables, partial derivatives, multiple integrals. Vector integral calculus, including line and surface integrals. Repeat credit for students who completed 170b prior to fall 2008. No credit for students who have earned credit for 2501. Students who have earned credit for 2500 will earn only one credit for this course. Prerequisite: 1301 or 2200. [3] (MNS)


MATH 2410. Methods of Linear Algebra. [Formerly MATH 194] Vectors and matrix operations. Linear transformations and fundamental properties of finite dimensional vector spaces. Numerical solutions of systems of linear equations. Eigenvectors and eigenvalues. Selected basic elements of linear programming. No credit for students who have earned credit for 2400, 2600, or 2501. Students who have earned credit for 2500 will earn only two credits for this course. Prerequisite or corequisite: 2300. [3] (MNS)

MATH 2420. Methods of Ordinary Differential Equations. [Formerly MATH 198] Linear first-order differential equations, applications, higher order linear differential equations, complementary and particular solutions, applications, Laplace transform methods, series solutions, numerical techniques. No credit for students who have earned credit for 2400 or 2610. Prerequisite: 2300 or 2501. [3] (MNS)

MATH 2500. Multivariable Calculus and Linear Algebra. [Formerly MATH 205a] Vector algebra and geometry; linear transformations and matrix algebra. Real and complex vector spaces, systems of linear equations, inner product spaces. Functions of several variables and vector-valued functions: limits, continuity, the derivative. Extremum and nonlinear problems, manifolds. Multiple integrals, line and surface integrals, differential forms, integration on manifolds, theorems of Green, Gauss, and Stokes. Eigenvectors and eigenvalues. Emphasis on rigorous proofs. No credit for students who have earned credit for 2501, 2300, 2410, or 2600. Open only to first-year students with a test score of 5 on the Calculus-BC Advanced Placement examination. [4] (MNS)

MATH 2501. Multivariable Calculus and Linear Algebra. [Formerly MATH 205b] Continuation of 2500. Vector algebra and geometry; linear transformations and matrix algebra. Real and complex vector spaces, systems of linear equations, inner product spaces. Functions of several variables and vector-valued functions: limits, continuity, the derivative. Extremum and nonlinear problems, manifolds. Multiple integrals, line and surface integrals, differential forms, integration on manifolds, theorems of Green, Gauss, and Stokes. Eigenvectors and eigenvalues. Emphasis on rigorous proofs. No credit for students who have earned credit for 2501, 2500, 2410, or 2600. Prerequisite: 2500 and first-year standing. [4] (MNS)

MATH 2610. Ordinary Differential Equations. [Formerly MATH 208] First- and second-order differential equations, applications. Matrix methods for linear systems; stability theory of autonomous systems; existence and uniqueness theory. Intended for mathematics and advanced science majors. No credit for students who have earned credit for 2400 or 2420. Prerequisite: concurrent enrollment in 2501 or prior credit for either 2501 or both 2300 and either 2410 or 2600. [3] (MNS)


MATH 2820. Introduction to Probability and Mathematical Statistics. [Formerly MATH 218] Discrete and continuous probability models, mathematical expectation, joint densities. Laws of large numbers, point estimation, confidence intervals. Hypothesis testing, nonparametric techniques, applications. Students taking 2820 are encouraged to take 2820L concurrently. No credit for students who have earned credit for 2810. Prerequisite: 2300 or 2501. [3] (MNS)

MATH 2820L. Statistics Laboratory. [Formerly MATH 218L] Application of the theory developed in 2820. Emphasis on data analysis and interpretation. Topics include the one- and two-sample problems, paired data, correlation and regression, chi-square, and model building. Pre- or corequisite: 2810 or 2820. [1] (No AXLE credit)

MATH 2821. Introduction to Applied Statistics. [Formerly MATH 219] A brief review of basic applied statistics followed by a development of the analysis of variance as a technique for interpreting experimental data. The generalized likelihood ratio principle, completely randomized designs, nested designs, orthogonal contrasts, multiple comparisons, randomized block designs, Latin squares, factorial designs, 2n designs, fractional factorials, confounding, introduction to response surface methodology. Applications will be emphasized. Prerequisite: 2810 or 2820. [3] (MNS)

MATH 3000. History of Mathematics. [Formerly MATH 252] Major developments in mathematics from ancient times to the early twentieth century. Emphasis both on the historical perspective and the mathematics; assignments include many exercises and theorems. Highly recommended for teacher candidates. Prerequisite: 2501 or both 2300 and either 2410 or 2600. [3] (MNS)

MATH 3010. Intensive Problem Solving and Exposition. [Formerly MATH 200] Intended to develop widely-applicable mathematical skills. Basic principles such as induction, the pigeonhole principle, symmetry, parity, and generating functions. Prerequisite: 2300 or 2500. [3] (MNS)

MATH 3100. Introduction to Analysis. [Formerly MATH 260] Properties of real numbers, compactness and completeness. Limits, sequences and series, uniform convergence, and power series. Basic properties of functions on the real line, and the elementary theory of differentiation and integration. Emphasis on methods of proof used in advanced mathematics courses. Prerequisite: 2501 or both 2300 and either 2410 or 2600. [3] (MNS)

MATH 3110. Complex Variables. [Formerly MATH 261] Complex numbers, analytic and elementary functions, transformations of regions. Complex integrals, Cauchy’s integral theorem and formula, Taylor and Laurent series. The calculus of residues with applications, conformal mappings. Prerequisite: 2300 or 2501. [3] (MNS)

MATH 3120. Introduction to Partial Differential Equations. [Formerly MATH 234] Initial- and boundary-value problems for partial differential equations using separation of variables in conjunction with Fourier series and integrals. Explicit solutions of problems involving the heat equation, the wave equation, and Laplace’s equation. Prerequisite: Either 2410, 2600, or 2501 and either 2400, 2420, or 2610. [3] (MNS)

MATH 3130. Fourier Analysis. [Formerly MATH 263] Fourier series topics including convolution, Poisson kernels, Dirichlet kernels, and pointwise and mean-square convergence. Integral transforms including one-dimensional and multidimensional Fourier integrals, Fourier inversion formula and Plancherel theorem, Poisson summation formula, Radon transform, and X-ray transform. Fourier analysis on Abelian groups including finite Fourier analysis and fast Fourier transform. Applications to signal processing, Shannon sampling theory, and/or compressed sensing. Repeat credit for students who completed 267 section 1 in spring 2011 or spring 2013. No credit for graduate students in Mathematics. Prerequisite: Either 2501 or both 2300 and either 2410 or 2600. [3] (MNS)

MATH 3165. Advanced Calculus. [Formerly MATH 259] Advanced treatment of multivariable calculus. Differentiation of functions of several variables including inverse and implicit function theorems. Vector differential calculus. Integration of functions of several variables. Vector integral calculus, including Stokes’ theorem. No credit for students who have earned credit for 3600. Prerequisite: 2501 or both 2300 and either 2410 or 2600. [3] (MNS)


MATH 3210. Transformation Geometry. [Formerly MATH 240] Transformations of the plane, groups of transformations, reflections, glide reflections, classification of the isometries of the plane, frieze groups, analysis of frieze patterns, wall paper groups, and analysis of wall paper patterns. Especially recommended for prospective teachers of mathematics. Prerequisite: 2410, 2600, or 2501. [3] (MNS)


MATH 3310. Introduction to Mathematical Logic. [Formerly MATH 250] Development of the first order predicate calculus and fundamental metamathematical notions. Prerequisite: 2410, 2600, or 2501. [3] (MNS)

MATH 3320. Error-Correcting Codes and Cryptography. [Formerly MATH 253] Applications of algebra to reliability and secrecy of information transmission. Error-correcting codes, including linear, Hamming, and cyclic codes, and possibly BCH or Reed-Solomon codes. Cryptography, including symmetric-key, DES and RSA encryption. Prerequisite: 2410, 2600, or 2501. [3] (MNS)


MATH 3620. Introduction to Numerical Mathematics. [Formerly MATH 226] Numerical solution of linear and nonlinear equations, interpolation and polynomial approximation, non-numerical differentiation and integration. Least-squares curve fitting and approximation theory, numerical solution of differential equations, errors and floating point arithmetic. Application of the theory to problems in science, engineering, and economics. Student use of the computer is emphasized. Familiarity with computer programming is expected. Prerequisite: Either 2410, 2600, or 2501, and either 2400, 2420, or 2610. [3] (MNS)

MATH 3630. Mathematical Modeling in Biology and Medicine. [Formerly MATH 262] Basic mathematical modeling tools, such as interpolation, least-squares regression, difference equations, and ordinary and partial differential equations. Statistical analysis of data, support vector machines, and computer simulation. Familiarity with computer programming is expected. Prerequisite: Either 2410, 2600, or 2501, and either 2400, 2420, or 2610. [3] (MNS)
MATH 3640. Probability. [Formerly MATH 247] Combinatorics, probability models (binomial, Poisson, normal, gamma, etc.) Stochastic independence, generating functions, limit theorems and types of convergence, bivariate distributions, transformations of variables. Markov processes, applications. Except for students with extremely strong backgrounds, 2820 should be taken prior to 3640. Prerequisite: 2501 or both 2300 and either 2410 or 2600. [3] (MNS)

MATH 3641. Mathematical Statistics. [Formerly MATH 248] Distribution theory, order statistics, theory of point estimation and hypothesis testing, normal univariate inference, Bayesian methods, sequential procedures, regression, nonparametric methods. Students interested in applications may take 2820GL. Prerequisite: 3640. [3] (MNS)

MATH 3650. Introduction to Actuarial Mathematics. [Formerly MATH 246a] Applications of calculus and probability to actuarial science. The foundations of financial mathematics, including the theory of interest. Prerequisite: 2300 or 2501. Prerequisite or corequisite: 2810, 2820, or 3640. [3] (MNS)


MATH 3700. Discrete Mathematics. [Formerly MATH 215] Elementary combinatorics including permutations and combinations, the principle of inclusion and exclusion, and recurrence relations. Graph theory including Eulerian and Hamiltonian graphs, trees, planarity, coloring, connectivity, network flows, some algorithms and their complexity. Selected topics from computer science and operations research. Prerequisite: 2410, 2600, or 2501. [3] (MNS)


MATH 3859. Independent Study. [Formerly MATH 298] Reading and independent study in mathematics under the supervision of an adviser. Designed primarily for honors candidates, but open to others with approval by department chair. [Variable credit: 1–3 each semester, not to exceed 6 without departmental permission] (No AXLE credit)

MATH 3890. Selected Topics for Undergraduates. [Formerly MATH 267] Topics vary. May be repeated for a total of 12 credits in 3890 and 3895 combined if there is no duplication in topic. Students may enroll in either 2410 or 2600. [1-3; maximum of 12 credits total for all semesters of MATH 3890 and 3895 combined] (No AXLE credit)

MATH 4100. Partial Differential Equations. [Formerly MATH 294a] Classification of equations: equations of elliptic, parabolic, and hyperbolic type. Separation of variables, orthonormal series, solutions of homogeneous and nonhomogeneous boundary value problems in one-, two-, and three-dimensional space. Possible additional topics include subharmonic functions and the Perron existence theorem for the Laplace equation of Sturm-Liouville theory. Prerequisite: Either 2410, 2600, or 2501, and either 2400, 2420, or 2610. [3] (MNS)


MATH 4220. Differentiable Manifolds. [Formerly MATH 243] Manifolds in n-dimensional Euclidean space, smooth maps; inverse and implicit function theorems. Regular value theorem, immersions and submersions, Sard’s theorem, and transversality. Degree of a map; winding numbers and the Fundamental Theorem of Algebra; intersection theory modulo 2. Prerequisite: 2501 or both 2300 and either 2410 or 2600. [3] (MNS)


MATH 4301. Modern Algebra. [Formerly MATH 283b] Introductory theory of commutative rings and fields, and additional topics such as Galois theory, modules over a principal ideal domain and finite dimensional algebras. Prerequisite: 4300, [3] (MNS)

MATH 4310. Set Theory. [Formerly MATH 280] The basic operations on sets. Cardinal and ordinal numbers. The axiom of choice. Zorn’s lemma, and the well-ordering principle. Introduction to the topology of metric spaces, including the concepts of continuity, compactness, connectivity, completeness, and separability. Product spaces. Applications to Euclidean spaces. Strongly recommended for beginning graduate students and for undergraduates who plan to do graduate work in mathematics. Prerequisite: 2501 or both 2300 and either 2410 or 2600. [3] (MNS)


MATH 4610. Methods of Mathematical Physics. [Formerly MATH 292] Linear operators on vector spaces, matrix theory, and Hilbert spaces. Functions of a complex variable and calculus of residues. Ordinary and partial differential equations of mathematical physics, boundary value problems, special functions. Prerequisite: Either 2410, 2600, or 2501, and either 2400, 2420, or 2610. [3] (MNS)

MATH 4620. Linear Optimization. [Formerly MATH 288] An introduction to linear programming and its applications. Formulation of linear programs. The simplex method, duality, complementary slackness, dual simplex method and sensitivity analysis. The ellipsoid method. Interior point methods. Possible additional topics include the primal-dual algorithm, cutting planes, or branch-and-bound. Applications to networks, management, engineering, and physical sciences. Prerequisite: either 2410, 2600, or 2501, and either CS 1101 or 1103. [3] (MNS)

MATH 4630. Nonlinear Optimization. [Formerly MATH 287] Mathematical modeling of optimization problems. Theory of unconstrained and constrained optimization, including convexity and the Karush-Kuhn-Tucker conditions. Derivative- and non-derivative-based methods. Familiarity with computer programming is expected. Prerequisite: 2501 or both 2300 and either 2410 or 2600. [3] (MNS)

MATH 4650. Financial Stochastic Processes. [Formerly MATH 249a] The theory of stochastic processes and applications to financial economics. Brownian motion; martingales; Itô’s Lemma; stochastic integration. Monte Carlo simulations with variance reduction techniques. Applications include discrete-time option pricing and delta hedging. Prerequisite: 3650 and either 2810, 2820, or 3640. [3] (MNS)


MATH 4700. Combinatorics. [Formerly MATH 274] Elements of enumerative analysis including permutations, combinations, generating functions,
recurrence relations, the principle of inclusion and exclusion, and Polya’s theorem. Some special topics will be treated as class interest and back-ground indicate (e.g., Galois fields, theory of codes, and block designs). Students unfamiliar with permutations, combinations, and basic counting techniques should take 3700 prior to 4710. Prerequisite: 2410, 2600, or 2501. [3] (MNS)


MATH 4999. Senior Thesis. [Formerly MATH 269] A written presentation of research results, original for the student but not usually original in the larger sense. The regulations governing the writing of a master of arts thesis in mathematics will apply to the writing of the senior thesis. [3] (No AXLE credit)

Medicine, Health, and Society

MHS 1001. Commons Seminar. [Formerly MHS 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

MHS 1111. First-Year Writing Seminar. [Formerly MHS 111F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


MHS 1950. Theories of the Body. Interdisciplinary study of the human body through critical theory, history, philosophy, art, and popular culture. How cultural understandings of bodies reflect broader social, political, scientific, and legal regimes. No credit for students who have earned credit for 290-02 in fall 2013. [3] (HCA)


MHS 2150. Medical Humanities. [Formerly MHS 248] Conceptual and creative analysis of philosophy, literature, art, and music to identify and account for human nature in the medical context. Ethical, practical, and social management of medical technology. Theories of art, music, and literature to understand human creativity and self-explanation in the face of illness and difference. Serves as repeat credit for students who completed 290 section 2 in either spring 2010 or spring 2009. [3] (HCA)


MHS 2250. War and the Body. [Formerly MHS 212] Impact of war on the human body. Anthropology of the body and theories of bodily experience. Production, representation, and experience of war and of military and medical technologies on a bodily level. Acceptable and unacceptable types of harm. No credit for students who earned credit for 290 section 2 in fall 2012. [3] (P)


MHS 2320. Medicine, Law, and Society. [Formerly MHS 244] Survey of issues in medicine and law, including the physician-patient relationship, medical malpractice, organ donation, healthcare financing, and the limits and powers of the government to protect the public's health. Serves as repeat credit for students who completed 290 section 3 in fall 2010, 290 section 2 in spring 2010, or 290 section 2 in spring 2009. [3] (SBS)


MHS 2410. HIV/AIDS in the Global Community. [Formerly MHS 236] Medical, social, political, economic, and public policy dimensions of HIV/AIDS. Prevention and treatment strategies, social stigma, and discrimination. Repeat credit for students who completed 290 section 2 in fall 2009 and for students who completed 290 section 5 in fall 2008. [3] (P)

MHS 2420. Economic Demography and Global Health. [Formerly MHS 206] Economic consequences of demographic change in developing and developed countries. Links between socioeconomic status and health; relationship between health and economic growth; determinants of fertility, mortality, and migration. [3] (SBS)

MHS 2430. Social Capital and Health. [Formerly MHS 240] Theoretical approaches to social capital and their applications to the social production of disease and illness. Theoretical background of social capital; the conceptualization and measurement of social capital; and the multiple roles of social capital as a social antecedent of health. Serves as repeat credit for students who completed 290 section 5 in spring 2010 and section 1 in spring 2011. [3] (SBS)

MHS 2510. Caring for Vulnerable Populations. [Formerly MHS 237] Humanitarian aid and the risks and responsibilities in providing for vulnerable populations. Differences between acute and chronic crises. Geopolitical, cultural, clinical, and practical factors. Serves as repeat credit for students who completed 290 section 3 in spring 2010 and for students who completed 290 section 4 in either spring 2009 or spring 2008. [3] (No AXLE credit)

MHS 3000. Undergraduate Seminar. [Formerly MHS 295] Advanced reading, research, and writing. Topics vary. Limited to juniors and seniors with preference to majors in Medicine, Health, and Society. May be repeated for credit once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Offered on a graded basis only. [3; maximum of 6 credits total for all semesters of MHS 3000] (No AXLE credit)


MHS 3030. Community Health Research. [Formerly MHS 235] Conceptual and methodological challenges. Focus on descriptive studies and intervention research to address health disparities in chronic diseases and psychiatric disorders. [3] (SBS)

MHS 3050W. Medicine and Literature. [Formerly MHS 205W] Narrative analysis, and other humanistic, interpretative practices of relevance to medicine and health. [3] (HCA)

MHS 3110. Global Health and Social Justice. [Formerly MHS 204] Global health institutions, policies, and practices. Issues of social justice. Anthropological, sociological, and scientific studies that address the social, moral, political and economic factors influencing the definition of and response to global health problems. No credit for students who earned credit for 290 section 4 in fall 2012. [3] (P)


MHS 3150. Death and Dying in America. [Formerly MHS 225] Interdisciplinary introduction to thanatology; changes in medicine and attitudes towards dying as they reshape the American way of death in a multicultural landscape. [3] (P)


MHS 3212. Health, Development, and Culture in Guatemala. [Formerly MHS 218B] Social and political dimensions of health and development in Guatemala through fieldwork and service learning in rural Maya communities in Quetzaltenango and Sololá. Prerequisite: 3210; 1–3 (No AXLE credit)

MHS 3220. Healthcare Organizations. [Formerly MHS 222] Key healthcare organizations in the context of policies governing the U.S. healthcare system. How organizations and policies shape the meaning of health and the dynamics of medical encounters. No credit for students who have earned credit for 295 in spring 2012. [3] (SBS)

MHS 3250. Perspectives on Trauma. [Formerly MHS 254] Trauma as a framework for understanding individual and collective suffering. Trauma in the context of medicine, war, and politics, and of racial, sexual, and gender inequalities. Alternative ways of conceptualizing feeling, memory and loss. No credit for students who earned credit for 295 section 02 in spring 2013. [3] (SBS)

MHS 3310. Health Care in France and the U.S. [Formerly MHS 256] Comparison of contemporary health care systems and the evolution of medicine and health policies in France and the United States. Includes travel to France to visit health care delivery centers and meet with health professionals. Knowledge of French is not required. No credit for students who have earned credit for 290 section 1 in summer 2014. [3] (INT)

MHS 3350. Medicine, Religion, and Spirituality. [Formerly MHS 246] How individuals, families, and communities deal with such life events as birth, serious illness and injury, disability, war, and death through the combined belief in medicine and religion. Sources include fiction, poetry, drama, film, and texts. Research seminar. Serves as repeat credit for students who completed 295 section 2 in either fall 2009 or fall 2008. [3] (No AXLE credit)

MHS 3380. Service Learning. [Formerly MHS 294A] Under faculty supervision, students will design a program of community service associated with a set of learning objectives. The service component (3380) should benefit both the recipient and the provider of the service, offering the latter opportunities for self-reflection, self-discovery, and the development of values, skills, and knowledge. A central objective must be firsthand experience of a central issue or issues studied in sociology, psychology, political science, economics, or another academic discipline. The MHS program will work to find placements for interested students. The other component, 3381, will consist of an independent study in the relevant discipline and must be closely linked to the issue(s) addressed in 3380. For example, a student may provide services to the elderly in nursing homes and use 3381 to study how state and federal policies affect the delivery of health care and other services to nursing home populations. To be accepted, students must have a 2.90 overall grade point and 6 hours of prior work in approved MHS courses. They must submit a specific plan for the service-learning experience to the MHS program director. Must be taken Pass/Fail and concurrently with 3381. These hours shall not be included in the minimum hours required for the MHS major or minor. After completing the experience, all students must write a thorough report. Co requisite: 3381. 1–3 [No AXLE credit]

MHS 3381. Service Learning Research and Readings. [Formerly MHS 294B] Under faculty supervision, students will design a program of community service associated with a set of learning objectives. The service component (3380) should benefit both the recipient and the provider of the service, offering the latter opportunities for self-reflection, self-discovery, and the development of values, skills, and knowledge. A central objective must be firsthand experience of a central issue or issues studied in sociology, psychology, political science, economics, or another academic discipline. The MHS program will work to find placements for interested students. The other component - 3381 - will consist of an independent study in the relevant discipline and must be closely linked to the issue(s) addressed in 3380. For example, a student may provide services to the elderly in nursing homes and use 3381 to study how state and federal policies affect the delivery of health care and other services to nursing home populations. To be accepted, students must have a 2.90 overall grade point average and 6 hours of prior work in approved MHS courses. They must submit a specific plan for the service-learning experience to the MHS program director. Students will write a substantial research or interpretative paper under the supervision of a Vanderbilt faculty member on a topic related to their service learning experience. Corequisite: 3380. 1–3 [No AXLE credit]

MHS 3830. Independent Study. [Formerly MHS 296] A program of reading and/or research in one area of MHS studies to be selected in consultation with an advisor. Normally limited to qualified MHS minors or majors. Approval of faculty adviser and MHS program director required for enrollment. May be repeated for credit once if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. (However, students in the MHS honors program may count a total of 12 hours in MHS 3850, including the 6 hours in the senior year devoted to preparation of the honors thesis. The same instructor will ordinarily supervise work on the honors thesis in both fall and spring semesters; a student may work with a thesis adviser who has previously supervised an independent study with that student.) 1–3; maximum of 6 credits for all semesters of MHS 3850; maximum of 12 credits for students in the MHS honors program] (No AXLE credit)

MHS 3880. Internship Training. [Formerly MHS 293a] Under faculty supervision, students from any discipline can gain experience in a broad range of public and private agencies, institutions, and programs devoted
to health care, public health, health-related policy and research. Two options are available. (1) Full-time: 12–15 hours total, including 6–9 hours in 3880, and 6 hours in 3881. (2) Part-time: 2–9 hours total, including 1–6 hours in 3880 and 1–3 hours in 3881. To be accepted for either option, students must have a 2.90 grade point average and 6 hours of prior work in approved MHS courses; they must submit a specific plan for the internship to the MHS program director. After completing the internship, all students must write a thorough report. Note: All work for an internship must be completed during a single semester or summer. Must be taken Pass/Fail and concurrently with 3881. These hours shall not be included in the minimum hours required for the MHS major or minor. Corequisite: 3881. [Variable credit: 1–9] (No AXLE credit)

MHS 3890. Special Topics. [Formerly MHS 290] May be repeated for credit twice if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [1–3; maximum of 9 credits total for all semesters of MHS 3890] (No AXLE credit)

MHS 4010. Psychiatry, Culture, and Globalization. [Formerly MHS 252] Cross-cultural analysis of mental illness; the emergence of cultural psychiatry; and the globalization of biopsychiatry and neuroscience. No credit for students who earned credit for 295 section 2 in fall 2012. [3] (P)


MHS 4998. Honors Research. [Formerly MHS 297] Offered on a graded basis only. Limited to seniors admitted to the departmental honors program. [3] (No AXLE credit)

MHS 4999. Honors Thesis. [Formerly MHS 298] Offered on a graded basis only. Limited to seniors admitted to the departmental honors program. [3] (No AXLE credit)

Military Science

MS 1510. American Military History: Principles of War. [formerly MS 151] Offered on a pass/fail basis only. [3]

Naval Science

NS 1100. Introduction to Naval Science (Navy and Marine option). [formerly NS 100] No Credit Toward Current Degree. [3]


NS 2410. Organization and Management (Navy & Marine option). [formerly NS 241] [3]


Neuroscience

NSC 1001. Commons Seminar. [formerly NSC 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

NSC 2060. Elective (Cellular and Molecular). [formerly 71AT] This course has no Vanderbilt equivalent. Credit is eligible to count toward the Cellular and Molecular elective.

NSC 2065. Elective (Systems and Integrative). [formerly 72AT] This course has no Vanderbilt equivalent. Credit is eligible to count toward the Systems and Integrative elective.

NSC 2201. Neuroscience. [formerly NSC 201] Physiology of nerve cells, sensory and motor systems, sleep, speech, and sexual behavior. Clinical topics include the chemical basis of psychosis, diseases of the brain, and repair mechanisms after brain injury. [3] (MNS)

NSC 3235. Biological Basis of Mental Disorders. [formerly NSC 235] Cellular and molecular neuropathology of cortical dysfunction resulting from affective disorders, drug addiction, neurodegenerative disease, and stroke. Prerequisite: 2201. [3] (MNS)


NSC 3270. Computational Neuroscience. [formerly NSC 270] Theoretical, mathematical, and simulation models of neurons, neural networks, or brain systems. Computational approaches to analyzing and understanding data such as neurophysiological, electrophysiological, or brain imaging. Demonstrations simulating neural models. Prerequisite: 2201, either CS 1101 or 1103, and either MATH 1200 or 1300. [3] (MNS)

NSC 3272. Structure and Function of the Cerebral Cortex. [formerly NSC 272] Classic and current concepts of cerebral function. Species differences, receptor field organization, neurotransmitters, modifications by experience, and behavioral effects. Prerequisite: 2201. [3] (MNS)


NSC 3851. Independent Reading in Neuroscience. [formerly NSC 291] Reading and discussion of research papers on a selected topic under direction of a faculty sponsor. Consent of both faculty sponsor and the director of honors and independent study is required. May be repeated for credit once if there is no duplication in topic, but students may earn only up to 1 credit per semester of enrollment. [1; maximum of 2 credits for all semesters of NSC 3851] (No AXLE credit)

NSC 3860. Introduction to Neuroscience Research. [formerly NSC 190] Research and reading in the laboratory of a member of the Neuroscience Program. Consent of the Director of Honors and Independent Research is required. Serves as repeat credit for students who have completed 290. [1] (No AXLE credit)

NSC 3861. Undergraduate Research. [formerly NSC 292a] Original student research on a defined problem in neuroscience under the direction of a faculty sponsor. Consent of both the faculty sponsor and the director of honors and independent studies is required. Prerequisite: 3860 or both 2201 and sophomore standing. [2] (No AXLE credit)

NSC 3862. Undergraduate Research. [formerly NSC 292b] Continuation of 3861. Original student research on a defined problem in neuroscience under the direction of a faculty sponsor. Consent of both the faculty sponsor and the director of honors and independent studies is required. Prerequisite: 3861. [2] (No AXLE credit)

NSC 3863. Advanced Research in Neuroscience. [formerly NSC 293a] Original student research on a defined problem in neuroscience under the direction of a faculty sponsor with some independence in the design and
execution of the project. Consent of both the faculty sponsor and the director of honors and independent studies is required. Prerequisite: 3862. [3] (No AXLE credit)

**NSC 3864. Advanced Research in Neuroscience.** [Formerly NSC 293b] Continuation of a research project on a defined problem in neuroscience under the direction of a faculty sponsor with some independence in the design and execution of the project. Consent of both the faculty sponsor and the director of honors and independent studies is required. May be taken for credit more than once, but students may earn only up to 3 credits per semester. Prerequisite 3863. [3] (No AXLE credit)

**NSC 3891. Special Topics in Cellular and Molecular Neuroscience.** [Formerly NSC 285] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 2201. [3] (MNS)

**NSC 3892. Special Topics in Systems and Integrative Neuroscience.** [Formerly NSC 287] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 2201. [3] (MNS)

**NSC 4961. Integrative Neuroscience.** [Formerly NSC 255] Structure and function of nervous systems. Emphasis on the vertebrate brain and the relationship of anatomy, physiology, and biochemistry to sensory perception, cognition, motor activity, and learning and memory. Prerequisite: 2201 and senior standing. [3] (MNS)

**NSC 4969. Senior Seminar in Neuroscience.** [Formerly NSC 299] Seminar with advanced reading, discussion, and writing on a specific topic in neuroscience. Limited to seniors. [3] (No AXLE Credit)

**NSC 4999. Honors Research.** [Formerly NSC 296] Participation in a research project under the direction of a faculty sponsor. Consent of both the faculty sponsor and the director of honors and independent study is required. May be repeated for credit more than once, but students may earn only up to 4 credits per semester of enrollment. [2-4] (No AXLE credit)

**Philosophy**

**PHIL 1001. Commons Seminar.** [Formerly PHIL 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

**PHIL 1002. Introduction to Philosophy.** [Formerly PHIL 100] An introduction to the basic problems of philosophy based upon readings in the works of selected leading philosophers. Repeat credit for students who have completed 1002W. [3] (HCA)

**PHIL 1002W. Introduction to Philosophy.** [Formerly PHIL 100W] An introduction to the basic problems of philosophy based upon readings in the works of selected leading philosophers. Repeat credit for students who have completed 1002W. [3] (HCA)

**PHIL 1003. General Logic.** [Formerly PHIL 102] A study of the uses of language, definition, informal fallacies, the theory of the syllogism, the basic operations of modern symbolic logic, and selected issues in inductive logic and scientific method. Emphasis is placed on the ambiguities and pitfalls of ordinary usage and on techniques for translating ordinary arguments into formal logic. [3] (MNS)

**PHIL 1004. Introduction to Asian Philosophy.** [Formerly PHIL 103] Philosophical thought of Asian origin, especially India and China, from ancient times to the present, theoretical and practical concerns. Repeat credit for students who have completed 1004W. [3] (INT)

**PHIL 1004W. Introduction to Asian Philosophy.** [Formerly PHIL 103W] Philosophical thought of Asian origin, especially India and China, from ancient times to the present, theoretical and practical concerns. Repeat credit for students who have completed 1004W. [3] (INT)


**PHIL 1008. Introduction to Medical Ethics.** [Formerly PHIL 108] Moral issues in the practice of medicine, biomedical research, policies and regulations related to health care. Repeat credit for students who have completed 1008W. [3] (P)

**PHIL 1008W. Introduction to Medical Ethics.** [Formerly PHIL 108W] Moral issues in the practice of medicine, biomedical research, policies and regulations related to health care. Repeat credit for students who have completed 1008W. [3] (P)

**PHIL 1100. Introduction to Business Ethics.** [Formerly PHIL 110] Ethical issues arising from business and professional practice. Topics will include: corporate social responsibility, employee rights, technology and privacy in the workplace, corporate governance, and globalization. [3] (P)

**PHIL 1111. First-Year Writing Seminar.** [Formerly PHIL 1115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

**PHIL 1200. The Meaning of Life.** [Formerly PHIL 120] Accounts of life’s meaning. The relations between ways of living, happiness, and the fact of death. The individual’s role in giving meaning to life. Readings from Mill, Tolstoy, Kierkegaard, and several contemporary thinkers. Repeat credit for students who have completed 1200W. [3] (HCA)

**PHIL 1200W. The Meaning of Life.** [Formerly PHIL 120W] Accounts of life’s meaning. The relations between ways of living, happiness, and the fact of death. The individual’s role in giving meaning to life. Readings from Mill, Tolstoy, Kierkegaard, and several contemporary thinkers. Repeat credit for students who have completed 1200W. [3] (HCA)

**PHIL 2100. Ancient Philosophy.** [Formerly PHIL 210] An examination of the major Greek and Roman philosophers with emphasis on the works of Plato and Aristotle. [3] (HCA)

**PHIL 2101. Hellenistic and Late Ancient Philosophy.** [Formerly PHIL 218] Philosophical ideas of Stoics, Cynics, Epicureans, skeptics, Peripatetics, Neoplatonists, and early monotheist thinkers such as Philo, Origen, and Philoponus. [3] (HCA)

**PHIL 2102. Medieval Philosophy.** [Formerly PHIL 211] Comparative study of key figures in Islamic, Jewish, and Christian philosophy as they struggle with the philosophy of logic, metaphysics, language, culture, politics, ethics, and nature. [3] (INT)

**PHIL 2103. Modern Philosophy.** [Formerly PHIL 212] An examination of the major philosophers of modern Europe from Descartes and Spinoza through Locke, Berkeley, Hume, and Kant. [3] (HCA)


**PHIL 2110. Contemporary Philosophy.** [Formerly PHIL 213] An examination of selected problems treated in recent philosophical literature such as meaning, perception, knowledge, truth, and freedom. Readings from the Anglo American analytical and the phenomenological traditions. [3] (HCA)

**PHIL 2660. Philosophy of Music.** [Formerly PHIL 249] Music and meaning, language, emotion, expression, interpretation, performance, the body, and politics. No musical background is required. [3] (HCA)

**PHIL 3003. Formal Logic and Its Applications.** [Formerly PHIL 202] A self-contained course designed to convey an understanding of the concepts of modern formal logic, to develop convenient techniques of formal reasoning, and to make some applications of them in one or more of the following: psychology, linguistics, structuralist studies, information and computer sciences, and the foundations of mathematics. Philosophy 1003 is not required. [3] (MNS)

**PHIL 3004. Advanced Asian Philosophy.** [Formerly PHIL 203] Classical Asian philosophical texts. Historical development of practices and ideas;
translation and interpretation issues; comparisons with European and other traditions of thought. [3] (INT)

PHIL 3005. Jewish Philosophy. [Formerly PHIL 261] Introduction to Jewish philosophy and the philosophical achievement of such major figures as Philo, Saadiah, Maimonides, Levinas, and selected contemporary thinkers. [3] (HCA)

PHIL 3006. Islamic Philosophy. [Formerly PHIL 262] Introduction to the major figures of Islamic philosophy including Khâlid, Razi, Farabi, Avicenna, and Ibn Khaldûn. [3] (INT)

PHIL 3007. French Feminism. [Formerly PHIL 263] Introduction to the tradition of French feminist philosophy, including relevant works by Beauvoir, Cixous, Irigaray, Kristeva, LeDœuff, Kofmann, and others. [3] (No AXLE credit)

PHIL 3008. American Philosophy. [Formerly PHIL 222] A study of the works of selected American philosophers from the colonial period to the present. [3] (US)

PHIL 3009. Existential Philosophy. [Formerly PHIL 224] A study of two or three existential philosophers and selected problems that arise in relation to their thought. [3] (HCA)

PHIL 3010. Phenomenology. [Formerly PHIL 226] Selected readings from such thinkers as Husserl, Sartre, and Merleau-Ponty on the structures of experience, the sources and limits of knowledge, mind, and body, interpersonal relations, and the meaning of freedom. [3] (HCA)

PHIL 3011. Critical Theory. [Formerly PHIL 232] The Frankfurt School: mass culture, ideology, and modernism in the arts; the disenchantment of reason; alienation and fascism; the prospects for experience and political critique. Readings include Adorno, Horkheimer, Marcuse, Benjamin, and Habermas. [3] (HCA)

PHIL 3012W. Writing as Political Resistance. [Formerly PHIL 233W] Writings from the political margins from authors under house arrest, in exile, or in prison. Expressions of active resistance to oppressive, and occasionally violent, political institutions. [3] (P)


PHIL 3103. Immanuel Kant. [Formerly PHIL 220] Kant’s revolutionary critique of the foundations of human knowledge, moral obligation, and religious faith, with readings from his three Critiques and lesser works. [3] (HCA)


PHIL 3601. Metaphysics. [Formerly PHIL 217] Selected problems in metaphysics such as ultimate explanation, meaning of existence, time and eternity, freedom and determinism, and science and religion. [3] (HCA)

PHIL 3602. Philosophy of History. [Formerly PHIL 231] Focus on alternative conceptions of time and history in Aristotle, Augustine, Kant, Hegel, Heidegger, and Benjamin. [3] (HCA)


PHIL 3606. Moral Problems. [Formerly PHIL 239] A discussion of specific moral problems such as the justification of abortion and euthanasia. Moral theories such as utilitarianism will be discussed, but the emphasis will be on their relevance to the solution of moral problems. Repeat credit for students who have completed 3606W. Prerequisite: 1005. [3] (P)

PHIL 3606W. Moral Problems. [Formerly PHIL 239W] A discussion of specific moral problems such as the justification of abortion and euthanasia. Moral theories such as utilitarianism will be discussed, but the emphasis will be on their relevance to the solution of moral problems. Repeat credit for students who have completed 3606. Prerequisite: 1005. [3] (P)


PHIL 3608. Ethics and Medicine. [Formerly PHIL 270] Selected ethical issues raised by clinical practice, medical theories, and biomedical research and technology. No credit for students who have completed 1111, section 3. Prerequisite: 1005, 1008, or 1008W. [3] (P)


PHIL 3610. Ethics and Law. [Formerly PHIL 272] Moral problems in the practice of law including conflicts of interest, confidentiality, limits of advocacy, and the obligations of lawyers to clients, courts, and the public. Repeat credit for students who have completed 3610W. Prerequisite: 1005. [3] (SBSS)

PHIL 3610W. Ethics and Law. [Formerly PHIL 272W] Moral problems in the practice of law including conflicts of interest, confidentiality, limits of advocacy, and the obligations of lawyers to clients, courts, and the public. Repeat credit for students who have completed 3610. Prerequisite: 1005. [3] (SBSS)

PHIL 3611. Environmental Philosophy. [Formerly PHIL 273] Environmental ethics (animal rights, respect for nature, the land ethic), science and the natural world, the aesthetics of nature, global justice, and sustainability. [3] (P)

PHIL 3612. Ethics and Animals. [Formerly PHIL 274] Ethical issues raised by human interactions with animals, including laboratory experiments, factory farming, hunting, zoos, and pet ownership. Challenges to ethical theory provoked by extending rights to animals. [3] (HCA)

PHIL 3615. Philosophy of Film. [Formerly PHIL 243] Challenges posed by film forms to traditional aesthetics and the novel philosophical approaches created to deal with them. Topics include the nature of the film image, film and experiential time, cinematic genres, the problem of mass art, and feminist critiques of spectatorship. Weekly screenings. [3] (HCA)

PHIL 3616. Philosophy and the Natural Sciences. [Formerly PHIL 244] Philosophical issues in the methodology, conceptual structure, patterns of explanation, historical development, and cultural impact of the natural sciences. Metaphysical and ethical implications. [3] (P)

PHIL 3617. Philosophy of Language. [Formerly PHIL 246] Philosophical problems in the methodology of linguistics, relations between thought and language, theories of meaning and symbolism, the nature of metaphor, the philosophical implications of theories of language acquisition. [3] (SBSS)

PHIL 3618. Philosophy and Literature. [Formerly PHIL 248] Philosophical topics in novels or poetry. Examples include: meaning of life, linguistic meaning, good and evil, aesthetic value, and human freedom. Repeat credit for students who have completed 3618W. [3] (HCA)

PHIL 3618W. Philosophy and Literature. [Formerly PHIL 248W] Philosophical topics in novels or poetry. Examples include: meaning of life, linguistic meaning, good and evil, aesthetic value, and human freedom. Repeat credit for students who have completed 3618. [3] (HCA)

PHIL 3621. Early Modern Political Philosophy. [Formerly PHIL 257] A study of competing accounts of the best form of political association, which differ from Locke, through the works of Machiavelli, Hobbes, Spinoza, and Rousseau. [3] (INT)

PHIL 3622. Contemporary Political Philosophy. [Formerly PHIL 258] A focused and extended examination of selected topics in contemporary political theory, such as justice, liberty, rights, tolerance, and autonomy. Content varies depending on instructor. [3] (P)

PHIL 3623. Modern Philosophies of Law. [Formerly PHIL 254] Contemporary theories of legal validity, legal liability (criminal and civil), and contractual obligation with special attention to the controversy between legal positivism and “natural law” theories and the assessment of contemporary economic analyses of legal rights. [3] (SBS)

PHIL 3630. Philosophy of Mind. [Formerly PHIL 256] Selected problems in the philosophy of mind. Relation between mind and body, the nature of consciousness, the problem of other minds, the status of self-knowledge, and the possibility of machine and other intelligence. Connections with empirical investigations in related cognitive disciplines. [3] (SBS)

PHIL 3657. Humanity, Evolution, and God. [Formerly PHIL 245] The impact of the idea of evolution on our conception of personhood. Theistic and non-theistic approaches to philosophical anthropology, ethics and societ, the theory of knowledge, the mind-body problem, and relations with the environment and other species. [3] (P)

PHIL 3661. Topics in Aesthetics. [Formerly PHIL 251] Philosophy of art and aesthetic theory. [3] (HCA)

PHIL 3851. Independent Readings. [Formerly PHIL 289a] Designed for majors not in the departmental honors program. Consists of a project to be carried out under the supervision of a member of the department. All projects must be approved by the department. May be repeated for a total of 12 credits in 3851 and 3852 combined over a four semester period if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [1–6; maximum of 12 credits total for all semesters of PHIL 3851 and 3852] (No AXLE credit)

PHIL 3852. Independent Readings. [Formerly PHIL 289b] Designed for majors not in the departmental honors program. Consists of a project to be carried out under the supervision of a member of the department. All projects must be approved by the department. May be repeated for a total of 12 credits in 3851 and 3852 combined over a four semester period if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. [1–6; maximum of 12 credits total for four semesters of PHIL 3851 and 3852] (No AXLE credit)

PHIL 3891. Selected Topics. [Formerly PHIL 294a] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

PHIL 3892. Selected Topics. [Formerly PHIL 294b] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit) (No AXLE credit)

PHIL 4999. Independent Study. [Formerly PHIL 295] Designed for students in the Honors Program in philosophy. Consists of guided reading, periodic reports, and work on honors thesis. May be repeated for credit once, but students may earn only up to 6 credits per semester of enrollment. [3–6; maximum of 12 credits total for all semesters of PHIL 4999] (No AXLE credit)

Physics

PHYS 1001. Commons Seminar. [Formerly PHYS 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

PHYS 1010. Introductory Physics. [Formerly PHYS 110] Normally accompanied by PHYS 1010L. Motion, forces, conservation laws, light, heat, and electricity. Quantum theory, the atomic nucleus, elementary particles, and properties of materials. Special relativity, Big Bang, and cosmology. Primarily intended for those who do not expect to major in science. No credit for students who have earned credit for 1050. [3] (MNS)

PHYS 1010L. Introductory Physics Laboratory. [Formerly PHYS 111] Laboratory to accompany 1010. Corequisite: 1010. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1010. [1] (No AXLE credit)

PHYS 1111. First-Year Writing Seminar. [Formerly PHYS 113F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 6 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

PHYS 1501. Introductory Physics for the Life Sciences I. [Formerly PHYS 113a] Normally accompanied by 1501L. Calculus-based introduction to physics taught within the context of life science applications. Mechanics, fluids, sound, thermal, and statistical physics. Prospective majors are strongly advised to take Math 1300 or a higher level calculus course. Prior study of calculus or concurrent enrollment in Math 1100, 1200, or 1300 is expected. No credit for students who have earned credit for 1601 or 1901. [3] (MNS)

PHYS 1501L. Laboratory for Introductory Physics for the Life Sciences I. [Formerly PHYS 113aL] Laboratory to accompany Physics 1501. Normally accompanied by 1501. Satisfies the AXLE lab course requirement when completed with 1501. No credit for students who have earned credit for 1601L or 1901L. [1] (No AXLE credit)

PHYS 1502. Introductory Physics for the Life Sciences II. [Formerly PHYS 113b] Normally accompanied by 1502L. Calculus-based introduction to physics taught within the context of life science applications. Electricity and magnetism; geometric and physical optics; atomic, nuclear, and quantum physics. Prospective majors are strongly advised to take Math 1301 or a higher level calculus course. Prior study of calculus or concurrent enrollment in Math 1100, 1201, or 1301 is expected. No credit for students who have earned credit for 1602 or 1902. [3] (MNS)

PHYS 1502L. Laboratory for Introductory Physics for the Life Sciences II. [Formerly PHYS 113bL] Laboratory to accompany Physics 1502. Normally accompanied by 1502. Satisfies the AXLE lab course requirement when completed with 1502. No credit for students who have earned credit for 1602L or 1902L. [1] (No AXLE credit)

PHYS 1601. General Physics I. [Formerly PHYS 116a] Normally accompanied by 116a. Calculus-based introduction to general physics and its applications. Mechanics, heat, and sound. Potential majors are strongly advised to take MATH 1300 or a higher level calculus course. Prior study of calculus or concurrent enrollment in MATH 1200 or 1300 is expected. No credit for students who have earned credit for 1501 or 1901. [3] (MNS)

PHYS 1601L. General Physics Laboratory I. [Formerly PHYS 116aL] Laboratory to accompany 1601. Normally accompanied by 1601. Satisfies the AXLE lab course requirement when completed with 116a. No credit for students who have earned credit for 1501L or 1901L. [1] (No AXLE credit)

PHYS 1602. General Physics II. [Formerly PHYS 116b] Normally accompanied by 1602L. Calculus-based introduction to general physics and its applications. Electricity and magnetism, optics, modern physics. Potential majors are strongly advised to take MATH 1301 or a higher level calculus course. Prior study of calculus or concurrent enrollment in MATH 1201 or 1301 is expected. No credit for students who have earned credit for 1502 or 1902. [3] (MNS)

PHYS 1602L. General Physics Laboratory II. [Formerly PHYS 116bL] Laboratory to accompany 1602. Normally accompanied by 1602. Satisfies the AXLE lab course requirement when completed with 1602. No credit for students who have earned credit for 1502L or 1902L. [1] (No AXLE credit)
PHYS 1901. Principles of Physics I. [Formerly PHYS 121a] Classical dynamics, conservation laws, gravitation, wave motion, and thermodynamics. Designed for first-year students who plan to major in physics or in related disciplines. Three lectures and a one-hour discussion period on modern topics of interest. One three-hour laboratory per week. Students who have earned credit for both 1501 and 1501L or both 1601 and 1601L will earn one hour of credit for this course. Students who have earned credit for 1501 or 1601 only will earn two hours of credit for this course. Students who have earned credit for 1501L or 1601L only will earn four hours of credit for this course. Prerequisite or corequisite: MATH 1301 or 2200. [5] (MNS)

PHYS 1902. Principles of Physics II. [Formerly PHYS 121b] Continuation of 1901. Electromagnetism, optics, relativity, quantum mechanics, and atomic and nuclear physics. Designed for first-year students who plan to major in physics or in related disciplines. Three lectures and a one-hour discussion period on modern topics of interest. One three-hour laboratory per week. Students who have earned credit for both 1502 and 1502L or both 1602 and 1602L will earn one hour of credit for this course. Students who have earned credit for 1502 or 1602 only will earn two hours of credit for this course. Students who have earned credit for 1502L or 1602L only will earn four hours of credit for this course. Prerequisite or corequisite: MATH 2300 or 2501. [4] (MNS)

PHYS 2210. Classical and Modern Optics. [Formerly PHYS 221] Geometrical optics, including reflection, refraction, ray tracing, aberrations, and interference. Physical optics, including wave theory, absorption, dispersion, diffraction, and polarization. Properties of light from lasers and synchrotron sources. Photodetectors and optical technology. Prerequisite: either 1502 or 1602 or 1902; and either MATH 1201 or 1301. [3] (MNS)

PHYS 2237. Computational Physics. [Formerly PHYS 257] Topics in modern physics analyzed exclusively with computer programs. Three-body solar system orbits. Random walk diffusion and entropy growth. Magnetism in the second order using model, non-equilibrium molecular dynamics. Solutions to the Schrödinger equation with numerical methods. Prerequisite: either 1502 or 1602 or 1902; and either MATH 1201 or 1301. [3] (MNS)

PHYS 2250. Concepts and Applications of Quantum Physics. [Formerly PHYS 225] Atomic and molecular structure, interaction of light with atoms and molecules, and spectroscopy. One three-hour laboratory per week. Repeat credit for students who have completed 2250W. Prerequisite: either 1502 or 1602 or 1902. Prerequisite or corequisite: MATH 2300 or 2501. [4] (MNS)

PHYS 2250W. Concepts and Applications of Quantum Physics. [Formerly PHYS 225W] Atomic and molecular structure, interaction of light with atoms and molecules, and spectroscopy. One three-hour laboratory per week. Repeat credit for students who have completed 225W. Prerequisite: either 1502 or 1602 or 1902. Prerequisite or corequisite: MATH 2300 or 2501. [4] (MNS)

PHYS 2260. Modern Physics. [Formerly PHYS 226] Condensed-matter physics, biophysics, special theory of relativity, and nuclear and particle physics. One three-hour laboratory per week. Repeat credit for students who have completed 2260W. Prerequisite: either 1502 or 1602 or 1902. Prerequisite or corequisite: MATH 2300 or 2501. [4] (MNS)

PHYS 2260W. Modern Physics. [Formerly PHYS 226W] Condensed-matter physics, biophysics, special theory of relativity, and nuclear and particle physics. One three-hour laboratory per week. Repeat credit for students who have completed 226W. Prerequisite: either 1502 or 1602 or 1902. Prerequisite or corequisite: MATH 2300 or 2501. [4] (MNS)


PHYS 2271. Classical Mechanics II. [Formerly PHYS 227b] Continuation of 2270. Orbital and rotational angular momentum and gravitational and Coulomb central-force problems, motion in non-inertial reference frames; coupled oscillators and normal modes; rigid-body motion; continuous systems and the wave equation; special relativity. Prerequisite: 2270. [3] (MNS)

PHYS 2290. Electricity, Magnetism, and Electrodynamics I. [Formerly PHYS 229a] Electrostatic fields and potentials. Gauss’s law. Electrical properties of insulators, semiconductors, and metals. The Lorentz force. Magnetic fields and forces. Electromagnetic induction, Maxwell’s equations, and electromagnetic waves. Prerequisite: either 1502 or 1602 or 1902; and either MATH 1301 or 2200. [3] (MNS)


PHYS 2660. Experimental Nanoscale Fabrication and Characterization. [Formerly PHYS 266] Laboratory course introduction to nanofabrication and characterization. Independent and original research in nanotechnology and nanoscience. Nanomaterials, nanoelectronics, and photonics. Repeat credit for students who completed 240 section 1 in fall 2010 or fall 2011. Prerequisite: One of (225 or 2250W) and one of (226 or 2260W); or one of (1501, 1601, or 1901) and one of (CHEM 1602L or MSE 150b). [3] (MNS)

PHYS 2805. Foundations of Medical Imaging. [Formerly PHYS 228] Physics and engineering of image formation for medical applications. Mathematical concepts of image formation and analysis. Techniques for recording images using ionizing radiation, including CT, ultrasound, magnetic resonance; and nuclear, including SPECT and PET. Methods of evaluating image quality. No credit for students who have earned credit for BME 4400. Prerequisite: 1502, 1602, or 1902; and Mathematics: MATH 2400; or one of (MATH 2410, 2600, 2501) and one of (MATH 2420, 2610). [3] (No AXLE credit)


PHYS 3600. Undergraduate Seminar. [Formerly PHYS 250] Directed readings and discussions of current topics in physics. Preference to majors for enrollment. Prerequisite or corequisite: 2250, 2250W, 2260, or 2260W. [1] (No AXLE credit)


PHYS 3645. Radiation Detectors and Measurements. [Formerly PHYS 285] Basic physics principles and applications of radiation detecting instruments, with laboratory exercises. Techniques and instrumentation for nuclear radiation detection and measurements as they relate to health physics (radiation safety) and nuclear physics. [4] (MNS)

PHYS 3651. Advanced Quantum Mechanics I. [Formerly PHYS 251a] Wave-particle duality, indeterminacy, superposition, the Schrödinger equation, angular momentum, the hydrogen atom, and spin and indistinguishability. Prerequisite: Either 225 or 2250W; either 226 or 2260W; and Mathematics: MATH 2400; or one of (MATH 2410, 2600, 2501) and one of (MATH 2420, 2610). [3] (MNS)
PHYS 3652. Advanced Quantum Mechanics II. [Formerly PHYS 251b] Time-independent and time-dependent perturbation theory, matrix theory, scattering, applications to atomic physics, condensed matter physics, and astrophysics. Prerequisite: 2290 and 3651. [3] (MNS)

PHYS 3660. Introduction to Particle Physics. [Formerly PHYS 255] Weak, strong, and electromagnetic forces as evidenced by the interactions of elementary particles. Classification of particles and experimental techniques. Prerequisite or corequisite: either 2250 or 2250W and either 2260 or 2260W. [3] (MNS)

PHYS 3840. Directed Study. [Formerly PHYS 289] Individual research or readings under close faculty supervision. May be repeated for a total of 10 credits, but students may earn only up to 5 credits per semester of enrollment. Prerequisite: either 2250 or 2250W and either 2260 or 2260W. [1–5] (No AXLE credit)

PHYS 3860. Independent Study. [Formerly PHYS 291] Introduction to independent research and scholarly investigation under faculty supervision. May be repeated for a total of 10 credits, but students may earn only up to 6 credits per semester of enrollment. Prerequisite or corequisite: multivariable calculus and either 2250 or 2250W and either 2260 or 2260W. [1–6; maximum of 10 credits total for all semesters of PHYS 3860] (No AXLE credit)

PHYS 3890. Selected Topics. [Formerly PHYS 240] Prerequisite or corequisite: either 2250 or 2250W and either 2260 or 2260W. [1–3] (No AXLE credit)

PHYS 4998. Honors Research and Senior Thesis. [Formerly PHYS 296] Independent experimental or theoretical investigations of basic problems in physics under faculty supervision, culminating in a written thesis submitted to the faculty. Required for departmental honors in physics. May be repeated for a total of 10 credits, but students may earn only up to 6 credits per semester of enrollment. Prerequisite: senior standing, major in Physics and Astronomy, and departmental approval. Prerequisite or corequisite: multivariable calculus and either 2250 or 2250W and either 226 or 2260W. [1–6; maximum of 10 credits total for all semesters of PHYS 4998] (No AXLE credit)

Political Science

PSCI 1001. Commons Seminar. [Formerly PSCI 99] Topics vary. General Elective credit only. [1] (No AXLE credit)


PSCI 1101. Introduction to Comparative Politics. [Formerly PSCI 101] Democracy, communism, and authoritarian rule in developed and developing countries; political institutions and public policy in diverse national settings; principles of comparative analysis. [3] (SBS)

PSCI 1102. Introduction to International Politics. [Formerly PSCI 102] Significant patterns and trends in twentieth-and twenty-first-century world politics: modes of conducting relations among nations, instruments for promoting national and supranational interests, and controls over international disputes. Emphasis upon episodes throwing light on the causes of war and the conditions of peace. [3] (SBS)


PSCI 1111. First-Year Writing Seminar. [Formerly PSCI 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 115F course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)


PSCI 2203. History of Modern Political Philosophy. [Formerly PSCI 203] Intensive analysis of the principal political philosophers in the modern tradition. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)


PSCI 2207. Liberalism and Its Critics. [Formerly PSCI 207] The liberal tradition in political theory and its major challengers. Critical debates surrounding the relationship between individuals and political community, rights, freedom and equality. Repeat credit for students who have completed 207W. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)

PSCI 2207W. Liberalism and Its Critics. [Formerly PSCI 207W] The liberal tradition in political theory and its major challengers. Critical debates surrounding the relationship between individuals and political community, rights, freedom and equality. Repeat credit for students who have completed 207W. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)

PSCI 2208. Law, Politics, and Justice. [Formerly PSCI 208] Contemporary and classical theories of law and society; rights theories, gender and the law; and transitions to democracy; law between nations. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)

PSCI 2209. Issues in Political Theory. [Formerly PSCI 209] Topics vary from semester to semester. May be repeated once if there is no overlap with previous offerings. Prerequisite: 2202, 2203, or 2205. [3] (No AXLE credit)

PSCI 2210. West European Politics. [Formerly PSCI 210] Analysis of political development, social forces, institutions, and public policy in Great Britain, France, Germany, Italy, and Sweden. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (INT)

PSCI 2213. Democratization and Political Development. [Formerly PSCI 213] Comparative study of political development, with a focus on institutions. The effect of political choices among voting systems, executive and legislative powers, cabinet formation, and other institutions on political competition, parties and government stability. Cases from established democracies and countries undergoing democratization. No credit for students who have taken 8317. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2215. Change in Developing Countries. [Formerly PSCI 215] Comparative study of political and economic change in developing countries. Political implications of ethnicity, economic dependency, and environmental degradation. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2216. The Chinese Political System. [Formerly PSCI 216] Governmental institutions and political processes in the People’s Republic of China with emphasis upon the interaction of traditional and revolutionary elements. Some attention to Taiwan since 1950 and to the overseas Chinese as parts of the Chinese political universe. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (INT)

PSCI 2219. Politics of Mexico. [Formerly PSCI 219] A survey of contemporary Mexican politics from a comparative perspective. Interaction of economic, social, and political forces that led to the demise of one of the world’s most durable one-party political regimes and the prolonged transition to democracy. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)
PSCI 2220. Crisis Diplomacy. [Formerly PSCI 220] Foreign policy decision making and strategy. Emphasis on differences between crises that lead to war and those that do not. Foreign relations of Britain, France, Germany, Russia, and Japan. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2221. Causes of War. [Formerly PSCI 221] Scientific study of the onset of expansion and consequences of war; conditions of peace, emphasizing alliances, arms races, and crisis escalation. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2222. American Foreign Policy. [Formerly PSCI 222] Critical analysis of major international and domestic factors shaping U.S. foreign relations as reflected in selected twentieth- and twenty-first-century experiences. No credit for students who have taken 1111, Section 1. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2223. European Political Economy and Economic Institutions. [Formerly PSCI 223] Policy-making processes of key economic institutions that influence the global political economy. International and financial regulatory reforms. World Trade Organization negotiations and current European economic issues. No credit for students who earned credit for PSCI 285 section 1 in summer 2011. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2225. International Political Economy. [Formerly PSCI 225] Survey of major issues involving the interaction of political and economic forces at the global level. Particular attention to theories of interdependence and imperialism, the position of developing countries in the international system, multinational corporations, and the economic origins of war. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2226. International Law and Organization. [Formerly PSCI 226] The role of international law and international organizations in the contemporary global political system. Focus on the evolution and impact of international law, the United Nations, the International Monetary Fund (IMF), and selected regional organizations. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2230. Middle East Politics. [Formerly PSCI 230] Cross-national analysis of political institutions, political economies, and processes of change in the Middle East. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2236. The Politics of Global Inequality. [Formerly PSCI 236] Causes of international inequality in the distribution of wealth. The emergence of rich and poor nations, and rich and poor people. Factors related to economic development, and their impact on income distribution, Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2237. African Politics. [Formerly PSCI 237] Pre-colonial to the present. State-building, socioeconomic development, public service provision, and foreign interventions. Conflict including: separatism, insurgency, slavery, genocide, and gender-based violence. Rise of democracy including party systems, voting behavior, electoral competition, fraud. Identity politics of ethnicity, gender, class, and clash of Western and local norms. Offered on a graded basis only. Repeat credit for 284-01 taken in Spring 2014. Prerequisite or corequisite: 100, 101, 102, 103, or 150. [3] (SBS)

PSCI 2240. Political Parties. [Formerly PSCI 240] Theories of party formation, organization, and behavior. Historical development of party systems. Criteria for the comparative evaluation of party systems. Parties as instruments of citizen control. Implications for electoral outcomes, coalition formation, legislative decision making, and public policy. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2243. Political Campaigns and the Electoral Process. [Formerly PSCI 243] Theories of representation and democratic accountability; electoral strategies and tactics, including political polling and analysis. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (US)

PSCI 2245. The American Presidency. [Formerly PSCI 245] Constitutional, historical, and political aspects. Attention to electing and nominating president, presidential leadership and personality, governing, and relations with Congress and the public. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (US)

PSCI 2251. The Politics of U.S. and Global Immigration. [Formerly PSCI 251] Political, philosophical, and moral issues. Serves as repeat credit for students who completed 283 section 1 in spring 2009. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (INT)

PSCI 2255. Public Policy Problems. [Formerly PSCI 255] Specific problems of public policies and their relations to political and institutional structures. Particular policy problems vary from semester to semester. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)


PSCI 2259. Political Strategy and Game Theory. [Formerly PSCI 259] Campaigns and elections, legislative politics, political bargaining, and political organization. Applications of decision and game theory. Models of complete and perfect information, and games of incomplete information. No credit for students who have earned credit for 359. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2262. The Judicial Process. [ Formerly PSCI 262] Functioning of the judiciary in the American political process; operation and powers of the courts; non-legal aspects of the judicial process; political role and effects of judicial decisions. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2263. Religion and Politics. [Formerly PSCI 263] Religion in democratic societies. Abortion, gay marriage, faith-based initiatives, and the Pledge of Allegiance. Historical works and contemporary contributions to debates. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)


PSCI 2266. Constitutional Law: Civil Liberties and Rights. [Formerly PSCI 266] Supreme Court’s interpretation of the Bill of Rights and the Fourteenth Amendment. Case method. No credit for students who have earned credit for 261b prior to fall 2009. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (US)

PSCI 2267. Voting and Political Representation in America. [Formerly PSCI 267] The history of voting rights and the efficacy of representation in the American political system. Political participation, voting rights, felon disenfranchisement, redistricting, and alternative electoral systems. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (US)

PSCI 2270. Conducting Political Research. [Formerly PSCI 270] Research sources, designs, and methods used by political scientists. Locating and accessing data, the logic of causal inferences, and basic data presentation and analysis. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (US)


PSCI 2274. Nature of War. [Formerly PSCI 274] Warfare from ancient to contemporary times. Western and non-Western perspectives. Views from political science, philosophy, history, and official U.S. military doctrine. Interplay among international politics, military strategy, technology, and psychology. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 3211. The European Union. [Formerly PSCI 211] Political and economic integration. Origins, institutions, decision processes, policies, achievements, and prospects of the European integration movement. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (INT)

PSCI 3217. Latin American Politics. [Formerly PSCI 217] Cross-national analysis of political institutions, cultures, and processes of change in Latin America. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (INT)

PSCI 3228. International Politics of Latin America. [Formerly PSCI 228] Examination of Latin America’s role in the international and inter-American system. Special attention to the international response to revolutionary change in the area, and to the region’s major actors and their changing relationship with the United States, with other major powers, and with other actors such as multinational corporations and international financial institutions. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (INT)

PSCI 3229. Strategy and International Politics. [Formerly PSCI 229] Strategic behavior and strategic choices arising from interactive decision making within the context of international politics. General principles of strategy. In-class experiments and game playing. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (INT)

PSCI 3235. Political Islam. [Formerly PSCI 235] Rise of political Islam. Origins, goals, and practices of specific Islamic groups throughout the Middle East. Global and local causes of Islamic political mobilization, and the American response to that mobilization. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (INT)


PSCI 3244. The Legislative Process. [Formerly PSCI 244] Legislative organization and processes in the U.S. Congress. Attention to parties, elections, institutional structure, interest groups, and other branches of government as they relate to the legislative process. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 3247. American Political Culture. [Formerly PSCI 247] Content, historical development, and political consequences of the American public’s deeply rooted values concerning how the political system ought to work and the ends it ought to serve. Attention to regional variation. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (US)


PSCI 3250. Group Conflict and Cooperation in U.S. Politics. [Formerly PSCI 250] Psychological and institutional sources of division and unity in American politics. Identity formation and change, explicit and implicit racial attitudes, and political tolerance. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 3252. Business and Public Policy. [Formerly PSCI 252] Relationships among business, public policy, and political strategy in the United States and other political systems. Lobbying and legislative politics, antitrust and regulation, intellectual property, international trade, and ethics and corporate social responsibility. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 3253. Ethics and Public Policy. [Formerly PSCI 253] Political and moral values in assessing policy-making, public policies and processes, and policy impacts. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)

PSCI 3254. Political Psychology. [Formerly PSCI 254] Interface between politics and the psychological processes of individuals and groups. Cognition, emotion, identity, and intergroup relations, leadership, and extremism. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 3258. Democratic Theory and Practice. [Formerly PSCI 258] Theories of democratic institutions, practices, and values in historical and contemporary political thought. Impact of popular participation on issues of justice, equality, individual freedom, and political power. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)

PSCI 3260. Introduction to American Law. [Formerly PSCI 260] Law as a component of public policy and the political system; the elements and rationale of private law. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)


PSCI 3271. Feminist Theory and Research. [Formerly PSCI 271] Introduction to feminist works in the social sciences. Development of feminist analysis. Important issues, feminist theories, and approaches to social criticism. Methodological challenges to feminist research. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (P)


PSCI 3275. National Security. [Formerly PSCI 275] How states ensure their national security. Origins of the security dilemma; the use of power, deterrence, coercion, engagement, and interstate cooperation in settling disputes. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 3841. Directed Study. [Formerly PSCI 291a] Participation in research projects under the direction of a faculty supervisor. Consent of both the faculty supervisor and the director of undergraduate studies is required. Open only to junior and senior majors. May be repeated for a total of 6 credits in 290a, 290b, 3841, 3842, 3851, and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [1-3] (No AXLE credit)

PSCI 3842. Directed Study. [Formerly PSCI 291b] Participation in research projects under the direction of a faculty supervisor. Consent of both the faculty supervisor and the director of undergraduate studies is required. Open only to junior and senior majors. May be repeated for a total of 6 credits in 290a, 290b, 3841, 3842, 3851, and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [1-3; maximum of 6 credits total for all semesters of PSCI 290a, 290b, 3841, 3842, 3851, and 3852] (No AXLE credit)

PSCI 3851. Independent Research. [Formerly PSCI 293a] Development of a research project by the individual student under direction of a faculty sponsor. Consent of both the faculty sponsor and the director of undergraduate studies is required. Normally open only to majors in political science. May be repeated for a total of 6 credits in 290a, 290b, 3841, 3842, 3851, and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [1-3; maximum of 6 credits total for all semesters of PSCI 290a, 290b, 3841, 3842, 3851, and 3852] (No AXLE credit)
PSCI 3852. Independent Research. [Formerly PSCI 289b] Development of a research project by the individual student under direction of a faculty sponsor. Consent of both the faculty sponsor and the director of undergraduate studies is required. Normally open only to majors in political science. May be repeated for a total of 6 credits in 290a, 290b, 3841, 3842, 3851, and 3852 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [1–3; maximum of 6 credits total for all semesters of PSCI 290a, 290b, 3841, 3842, 3851, and 3852] (No AXLE credit)

PSCI 3880. Internship Training. [Formerly PSCI 280a] Under faculty supervision, students from any discipline gain experience with local, state, national, and international government offices or other politically related organizations. A thorough report and research paper are submitted at the end of the semester. Completion of 6 hours of political science, normally a 2.90 grade point average, and prior department approval of the student’s plan are required. May be taken on a Pass/Fail basis only and must be taken concurrently with 3882 and/or 3883. These hours may not be included in the minimum hours required in the political science major. Corequisite: 3882 and/or 3883. [1–9] (No AXLE credit)

PSCI 3882. Internship Readings. [Formerly PSCI 280c] Under faculty supervision, students from any discipline gain experience with local, state, national, and international government offices or other politically related organizations. A thorough report and research paper are submitted at the end of the semester. Completion of 6 hours of political science, normally a 2.90 grade point average, and prior department approval of the student’s plan are required. Corequisite: 3880. [Variable credit: 1–3] (No AXLE credit)

PSCI 3883. Internship Research. [Formerly PSCI 280b] Under faculty supervision, students from any discipline gain experience with local, state, national, and international government offices or other politically related organizations. A thorough report and research paper are submitted at the end of the semester. Completion of 6 hours of political science, normally a 2.90 grade point average, and prior department approval of the student’s plan are required. Corequisite: 3880. [Variable credit: 1–3] (No AXLE credit)

PSCI 3891. Topics in Contemporary Politics. [Formerly PSCI 281] Political, governmental, and policy issues. May be repeated for credit when topics vary. No more than three hours may be counted toward the major. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [1–3] (No AXLE credit)

PSCI 3893. Selected Topics in American Government. [Formerly PSCI 283] Topics of special interest. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)

PSCI 3894. Selected Topics in Comparative Politics. [Formerly PSCI 284] Topics of special interest. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)

PSCI 3895. Selected Topics in International Politics. [Formerly PSCI 285] Topics of special interest. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)

PSCI 3896. Selected Topics in Political Theory. [Formerly PSCI 286] Topics of special interest. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)

PSCI 3897. Selected Topics. [Formerly PSCI 287] Topics of special interest. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. No more than a total of 6 credits may be earned for 3897 and 3898 combined. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)

PSCI 4238. Comparative Political Parties. [Formerly PSCI 238] Political parties and their role in the democratic process of modern liberal western democracies, focusing on party systems and party organizations. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 4257. The Politics of Capitalism. [Formerly PSCI 257] Commerce and capitalism in social and political life from the eighteenth century to the present. Questions of justice and equality, freedom, and democratic politics. Serves as repeat credit for students who completed 207 in fall 2009. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)

PSCI 4277. Future of Warfare. [Formerly PSCI 277] Political, societal, and technological factors that could affect the future conduct of warfare. Insurgency and counterinsurgency. Military operations other than war. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 4998. Senior Honors Research. [Formerly PSCI 299a] Open only to seniors in the departmental honors program. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)

PSCI 4999. Senior Honors Research. [Formerly PSCI 299b] Open only to seniors in the departmental honors program. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)

Portuguese

PORT 1001. Commons Seminar. [Formerly PORT 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

PORT 1103. Intensive Elementary Portuguese. [Formerly PORT 102] Accelerated introduction to reading, writing, speaking, and listening. Emphasis on practical usage. Intended for students with prior or current study of another Romance language. No credit for students who have earned credit for 1101, 1102, or a higher level Portuguese language course. [4] (INT)

PORT 1111. First-Year Writing Seminar. [Formerly PORT 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

PORT 2203. Intermediate Portuguese. [Formerly PORT 200] Review of Portuguese grammar with emphasis on conversation, composition, and reading of modern Portuguese literary texts. No credit for students who have earned credit for a higher level Portuguese language course. Prerequisite: 1103. [3] (INT)

PORT 2900. Brazilian Civilization through English Language Material. [Formerly PORT 291] The cultural heritage of Brazil from its earliest days to the present. National identity, race relations, and Brazil’s emergence as a major force in the Americas and beyond. Taught in English. No credit for graduate students in Spanish and Portuguese. No credit for students who have earned credit for 1111 section 1. [3] (F)

PORT 3301. Portuguese Composition and Conversation. [Formerly PORT 201] Expository writing and development of speaking skills. Emphasis on pronunciation, vocabulary, and grammar. No credit for students who have earned credit 202. Prerequisite: 2203. [3] (INT)

PORT 3302. Brazilian Pop Culture. [Formerly PORT 203] Development of written and oral communication skills through the study of Brazilian popular culture. Movies, music, television, and magazines. Prerequisite: 2203. [3] (INT)

PORT 3303. Introduction to Luso-Brazilian Literature. [Formerly PORT 205] Critical readings and methods of literary analysis. Masterpieces from Portugal and Brazil from all genres in several periods. Conversation and writing. Prerequisite: 3301 or 3302. [3] (HCA)

PORT 3850. Independent Study. [Formerly PORT 289] A reading course, the content of which varies according to the needs of the individual student. Primarily designed to cover pertinent material not otherwise available to the student in the regular courses of the curriculum. [Variable credit: 1–3 hours, not to exceed 12 over a four-semester period] (No AXLE credit)
PORT 3891. Special Topics in Portuguese and Brazilian Literature or Civilization in English Translation. [Formerly PORT 295] Does not count toward a major or minor in Portuguese. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

PORT 3892. Special Topics in Portuguese Language, Literature, or Civilization. [Formerly PORT 294] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 3303. [3] (No AXLE credit)

PORT 4350. Brazilian Culture through Native Material. [Formerly PORT 225] Differences between spoken and written Portuguese in Brazil. Modern culture, including popular music, film, politics, family life, and sports. Prerequisite: 3301 or 3302. [3] (P)

PORT 4420. Brazilian Literature through the Nineteenth Century. [Formerly PORT 232] Main literary trends, principal writers and works of Brazilian literature, from colonial beginnings through the nineteenth century. Study of the works of Gregório de Matos, Gonçalves Dias, Alencar, Machado de Assis, and Euclides da Cunha. Prerequisite: 3303. [3] (HCA)

PORT 4425. Modern Brazilian Literature. [Formerly PORT 233] Brazilian literature from the Semana de Arte Moderna to the present. Modernist and neo-Modernist movements. Prerequisite: 3303. [3] (HCA)

Psychology (A&S)

PSY 1001. Commons Seminar. [Formerly PSY 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

PSY 1111. First-Year Writing Seminar. [Formerly PSY 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

PSY 1200. General Psychology. [Formerly PSY 101] A survey of modern scientific psychology. Topics include development, perception, motivation, learning, thinking, remembering, emotion, intelligence, special aptitudes, and personality development. General applications to human behavior. The student must either analyze published research or be a subject in current research. No credit for students who have earned credit for 1111 sections 1, 2, or 3. [3] (SBS)

PSY 2100. Quantitative Methods. [Formerly PSY 209] Principles and methods for the statistical analysis of experiments, with emphasis on applications in psychology. Descriptive and inferential statistics. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (MNS)

PSY 2150. Principles of Experimental Design. [Formerly PSY 208] Theory and research methods in psychological science. Philosophy of science, ethical issues, experimental design, and data interpretation. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3100. Abnormal Psychology. [Formerly PSY 215] Mental and emotional disorders. Definitions of adequate human functioning processes that disrupt functioning. Methods of evaluation and treatment. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3110. Social Psychology. [Formerly PSY 231] The influence of social conditions upon behavior in interpersonal and group relations. Perception, judgment, learning, and attitudes. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3120. Cognitive Psychology. [Formerly PSY 225] Attention, pattern recognition, knowledge representation, language, reasoning, and human intelligence. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3600. Personality. [Formerly PSY 211] Major theories of personality development, methods of assessment, and results of research, with an emphasis on normal behavior. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3605. Industrial and Organizational Psychology. [Formerly PSY 239] Scientific theories in cognitive, social, and personality psychology to improve work motivation and performance. Job analysis and assessment methods. Leadership, teamwork, and cross-cultural issues. Prerequisite: 1111 section 1, 2, or 3, or 1200; or a major in Cognitive Studies, Child Development, or Child Studies. [3] (SBS)

PSY 3610. Introduction to Clinical Psychology. [Formerly PSY 244] Historical foundations, professional ethics, principles of clinical assessment and therapy, and areas of specialization such as health psychology. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3615. Emotion. [Formerly PSY 245] Definitions and functions of emotion. Emotion and health, emotion and psychopathology, individual differences, and emotional development. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)


PSY 3625. Depression. [Formerly PSY 247] Psychological and biological perspectives on unipolar and bipolar affective disorders. Assessment and classification, epidemiology, genetics, family environment, and treatments. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3630. Drugs and Behavior. [Formerly PSY 261] Drug effects on neural circuits, human physiology, individual psychology, and society. No credit for students who have earned credit for NSC 3260. Prerequisite: 1200 or NSC 2201. [3] (SBS)

PSY 3635. Health Psychology. [Formerly PSY 268] Neurophysiological, endocrine, and immune systems. Factors underlying health habits and lifestyle. Methods to enhance health behaviors and prevent illness. Stress management. Reciprocal interactions among behavior, thoughts, and physiology with resulting effects on physical and psychological health and illness. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3640. Positive Psychology. [Formerly PSY 270] Optimal functioning in human psychology. Interdisciplinary approaches to well being, character strengths and virtues, positive emotions, and clinical implications. No credit for students who have earned credit for PSY 1111 section 13. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3700. Movement. [Formerly PSY 216] Psychological, computational, and neural perspectives on the activities of looking, reaching, grasping, speaking, smiling or frowning, walking and running. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (MNS)


PSY 3715. Animal Behavior and Evolutionary Psychology. [Formerly PSY 258] Comparative and phylogenetic approach to the study of behavior, with special emphasis on sensory processes, instinctive behavior, the genetics of behavior, and ethology. Prerequisite: 1111 section 1, 2, or
PSY 3750. Perception. [Formerly PSY 214] Current theory and research in sensation and perception, including an analysis of philosophical and biological issues. Biological organisms’ acquisition, processing, and use of information about objects and events in the environment. Vision, audition, taste, smell, and touch. Prerequisite: NSC 2201 and either PSY 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (MNS)

PSY 3760. Mind and Brain. [Formerly PSY 232] Concepts of cognitive neuroscience. Relationship between the brain and perception, cognition, attention, memory, language, thought, emotion, social judgments, and consciousness. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (MNS)

PSY 3765. Social Cognition and Neuroscience. [Formerly PSY 238] Neural underpinnings of social perceptions, evaluations, and decisions. Face perception, attraction and reward processing, social co-operation and competition, decision-making, and moral judgments. Offered on a graded basis only. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)


PSY 3780. The Visual System. [Formerly PSY 236] Interdisciplinary approach to the ways that humans see and interpret their visual environment. Structure of the eye and brain, including optics. Physiology of individual cells and groups of cells. Machine vision and models of visual function, visual attention, and mechanisms of complex visual perception. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3785. Brain Damage and Cognition. [Formerly PSY 277] Effects of neurological impairment from stroke, injury, or disease on perception, speech, memory, judgment, and behavior. Relationship between brain systems and cognitive systems. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3840. Directed Study. [Formerly PSY 290] Participation in ongoing research projects under direction of a faculty sponsor. Consent of both the faculty sponsor and the director of undergraduate studies is required. Open only to juniors and seniors. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [1-3] (No AXLE credit)

PSY 3850. Independent Study. [Formerly PSY 293] Development of a project by the individual student under direction of a faculty sponsor. Consent of both the faculty sponsor and the director of undergraduate studies is required. Open only to juniors and seniors. May be repeated for credit more than once if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [1-3] (No AXLE credit)

PSY 3890. Special Topics in Perception. [Formerly PSY 280] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 3750. [3] (No AXLE credit)

PSY 3891. Special Topics in Cognitive Psychology. [Formerly PSY 282] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 3120. [3] (No AXLE credit)

PSY 3892. Special Topics in Neuroscience. [Formerly PSY 285] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: NSC 2201. [3] (No AXLE credit)

PSY 3893. Special Topics in Clinical Psychology. [Formerly PSY 288] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 3100. [3] (No AXLE credit)

PSY 3894. Special Topics in Social Psychology. [Formerly PSY 289] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. Prerequisite: 3110. [3] (No AXLE credit)

PSY 3980. Honors Seminar. [Formerly PSY 295a] Individual readings, reports, and seminar discussions of the basic areas of psychology. Selection of topics will provide some freedom to pursue individual interests. Open only to departmental honors candidates. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (No AXLE credit)

PSY 3981. Honors Seminar. [Formerly PSY 295b] Individual readings, reports, and seminar discussions of the basic areas of psychology. Selection of topics will provide some freedom to pursue individual interests. Open only to departmental honors candidates. Prerequisite: 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (No AXLE credit)


PSY 4998. Honors Thesis. [Formerly PSY 296a] Participation with a staff member in work leading toward the senior thesis. This work may consist of readings and reports or active participation in research and will culminate in an independent research report. Open only to departmental honors candidates. Prerequisite: 3980 or 3981. [3] (No AXLE credit)

PSY 4999. Honors Thesis. [Formerly PSY 296b] Participation with a staff member in work leading toward the senior thesis. This work may consist of readings and reports or active participation in research and will culminate in an independent research report. Open only to departmental honors candidates. Prerequisite: 3980 or 3981. [3] (No AXLE credit)

Public Policy Studies

PPS 1001. Commons Seminar. [Formerly PPS 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

PPS 3890. Special Topics. [Formerly PPS 294] Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

PPS 4960. Senior Seminar on Research in Public Policy. [Formerly PPS 295] Supervised research project in policy area incorporating methodologies and analytical insights from more than one discipline. Offered on a graded basis only. [3] (SBS)

Religious Studies

RLST 1001. Commons Seminar. [Formerly RLST 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

RLST 1010. Encountering Religious Diversity. [Formerly RLST 101] Essential beliefs and practices of the world’s major religious traditions. Hinduism, Buddhism, Judaism, Christianity, and Islam. Contemporary scholarship and perspectives on religious encounters from each of these traditions. [3] (HCA)

RLST 1100. Introduction to African American Religious Traditions. [Formerly RLST 107] Historical survey of the leadership, dynamics, and cultural milieu of African American religious traditions. Institutional expressions and theologies from the colonial period to the present. [3] (US)

RLST 1111. First-Year Writing Seminar. [Formerly RLST 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral
presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

RLST 1190W. Introduction to Southern Religion and Culture. [Formerly RLST 110W] An exploration of the histories of evangelical and non-evangelical expressions in Southern religious culture from the colonial period to the present. The evangelical thrust of Southern culture, with some attention to Catholicism, Judaism, and other religious modes considered outside the mainstream of that culture. [3] (HCA)

RLST 1200. Introduction to Judaism. [Formerly RLST 112] Comprehensive historical overview of Judaism as a religion and a culture. The main ideas and institutions of Judaism, the centrality of the Hebrew Bible and the meaning of interpretation, thinkers, and movements in Jewish civilization, from rabbinic Judaism, medieval philosophy, mysticism, to modern thought, Zionism, and the foundation of the State of Israel. Recent Jewish self-representation in art. [3] (HCA)

RLST 1208. Themes in the Hebrew Bible. [Formerly RLST 108] A thematic introduction to the Hebrew Scripture/Old Testament. Selected themes - such as creation, revelation, covenant, law, suffering, messianic expectation - are traced through the diverse parts of the Bible (Pentateuch, Prophetic Writings, and Wisdom Literature) as well as in early Jewish texts. The comparison of the various expressions of these themes shows both the distinctiveness of each document and the continuity of the Biblical faith through the centuries. [3] (HCA)


RLST 1500. Introduction to Islam. [Formerly RLST 113] An historical overview of the different religious traditions in Islam, their basis in the Qur’an and life of the Prophet, their proliferation in the medieval period, and their response to the challenge of modernity. Topics include sunni and shi'i Islam, evolution of law and theology, sultism and political philosophy. Islam in Africa, India, Spain, and southeast Asia as well as the Middle East. [3] (HCA)


RLST 1820. Religion, Sexuality, Power. [Formerly RLST 120] Historical, cultural, social, scientific, and philosophical theories of how religious and political ideas and institutions are related to and dependent upon assumptions and ideologies of sex, gender, and race. Politics and public discourse on sex and religion. [3] (SBS)


RLST 2310. Interpreting the Gospels. [Formerly RLST 210] The Synoptic Gospels through history and culture. Focus on either Matthew, Mark, or Luke; a survey of the interpretations of the Gospel from its original historical context, through the history of the church, and more recently in Catholic and Protestant churches after the Holocaust, in African American churches, and in feminist circles. [3] (HCA)

RLST 2461. Islam in Africa. [Formerly RLST 261] Social and cultural development of Islam across Africa from the eighth century to the present, as illuminated by historical, ethnographic, and literary sources. Interplay between Muslims and outside religious groups, jihads in pre-colonial Africa, and Islam during European colonization. Attention to Sub-Saharan Africa. [3] (INT)

RLST 2471. Religion in Africa. [Formerly RLST 171] Indigenous religious forms from pre-colonial Africa to the present. Creation myths, notions about gods and spirits, ritual, magic, witchcraft, art, shamanism, and ancestry. Interplay of indigenous religions with Islam and Christianity. No credit for students who earned credit for 294 section 2 in fall 2013. [3] (INT)

RLST 2472. Religion, Ecology, and Power in Africa. [Formerly RLST 272] The interrelationship between religion and ecology in Africa; the ways power relations in pre-colonial Africa through the present have determined human-Earth relations. Divine origin and development of the Earth and its peoples; influence on African social structure, ethnically-based occupations, and stewardship over the environment. [3] (INT)


RLST 3119. Martin Luther King, Jr., and the Social Roles of Religion. [Formerly RLST 219] King as religious leader and agent of social change. His views of the social roles of religion seen against the background of late nineteenth-century dissenting traditions and the early twentieth-century social gospel movement in America. Critical evaluations in terms of classical Christian views (e.g., Aquinas, Luther, Calvin, Wesley). [3] (US)

RLST 3142. Slave Thought and Culture in the American South. [Formerly RLST 242] The religious thought of African American slaves as ex-


RLST 3229. The Holocaust: Its Meanings and Implications. [Formerly RLST 229] Interdisciplinary study of the systematic destruction of European Jewish communities during WWII. Historical, social, political, cultural developments that led to it. Psychological and sociological dimensions of its aftermath. Philosophical and theological problems it raises for both Jews and Christians. No credit for students who earned credit for JS 156 in fall 2013. [3] (P)

RLST 3270. Jewish Theories of Religion. [Formerly RLST 203] Critical analysis and discussion of modern Jewish constructions of religion: politically, symbolically, ethically, normatively, and aesthetic-mystically. Selected readings from Cohen, Buber, Rosenzweig, Kaplan, and social philosophers such as Simmel and Habermas on the function, nature, and meaning of religion in secular culture. [3] (P)

RLST 3304W. Evangelical Protestantism and the Culture Wars. [Formerly RLST 204W] Evangelical traditions from the reformation to their present-day manifestations in twentieth-century America. Debates concerning the authority of the scripture, the person of Jesus Christ, evangelism, and soul-winning mission, revivalism and social reform, church-state relations, the relationship between science and religion, Biblical vs. “New” morality, and other areas of cultural cleavage. [3] (US)

RLST 3306. Global Interpretations of Christian Scriptures. [Formerly RLST 206] Comparative interpretations of Biblical texts by Christians in Africa, Asia, Latin America, and Oceania - with those by Orthodox Christians in Eastern Europe and the Middle East, and by Catholics and Protestants in Western Europe and North America. The role of culture in each type of biblical interpretation. [3] (INT)

RLST 3312. The Pauline Interpretation of Christianity. [Formerly RLST 212] An introduction to Pauline Christianity and its place in the early church, using the letters of Paul, the deutero-Pauline letters, and the portraits of Paul in Acts. [3] (HCA)


RLST 3316. Christianity in the Reformation Era. [Formerly RLST 216] The setting of the Reformation (c. 1500–1648) and its developments together with consideration of some of the significant ecclesiastical, theological, and historical issues of the period. Attention to backgrounds and causes and examination of major individuals and ecclesiastical patterns. The aim of the course is to help students understand and interpret the events, become familiar with some of the major theological documents, and reflect upon questions of continuing historical interest that have come out of the Reformation. [3] (HCA)

RLST 3380. History Christian Tradition. [Formerly RLST 180] Christian traditions from the origins to the present. Such themes as Christology, church and state, and the social and cultural contents of changing Christian beliefs, and views of the Church. [3] (HCA)


RLST 3650. Classical Philosophies of India. [Formerly RLST 250] Hindu and Buddhist traditions. The six “mainstream” schools (darsana) of Hindu thought and their interaction with Buddhist philosophy in ancient India. [3] (INT)

RLST 3669. Sacred Space in the Tibetan World. [Formerly RLST 269] Creation, mediation, and reproduction of sacred space from artifacts to built structures to geographies. Narrative, ritual, and cosmological aspects of Tibetan Buddhist, Bön, and local religious traditions. Cases include pre-modern to modern periods, and local to global contexts. [3] (INT)

RLST 3670W. Buddhism and the State. [Formerly RLST 270W] Models relating Buddhism and the state in ancient and modern Asia. Kingship and spiritual leadership; sacred territory and national identity; legitimation theory and its alternatives; and religious responses to the modern state. Case studies from India, Nepal, Thailand, Burma, Tibet, Mongolia, China, and Japan. [3] (INT)


RLST 3749. Zen Buddhism. [Formerly RLST 249] A study of the development of Zen Buddhism in China and Japan with special attention to its basic philosophy, its position within Mahayana Buddhism, its meditational techniques, and its contemporary significance. [3] (INT)


RLST 3775. Chinese Religions through Stories. [Formerly RLST 275] Analysis of narratives from various religious traditions and genres within early and medieval China. The role of narrative in Chinese religious, cultural, and political life. Primary texts in English translation. Offered on a graded basis only. [3] (INT)

RLST 3850. Independent Study. [Formerly RLST 289a] May be repeated for a total of 6 credits in 3850 and 3851 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of RLST 3850 and 3851] (No AXLE credit)

RLST 3851. Independent Study. [Formerly RLST 289b] May be repeated for a total of 6 credits in 3850 and 3851 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for all semesters of RLST 3850 and 3851] (No AXLE credit)

RLST 3890. Special Topics in Religious Studies. [Formerly RLST 294] May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)


RLST 3926. Ancient Goddesses. [Formerly RLST 226] Ancient concepts of the feminine divine in literature and iconographic evidence. Specific goddesses, their spheres of influence, and their place in the various pantheons. Cultic practices and religious syncretism across cultures, including Mesopotamia, Egypt, and Ancient Israel. Offered on a graded basis only. [3] (INT)

RLST 3930. Women and Religion. [Formerly RLST 230] Themes and issues in the traditions and texts of selected Western religions from a feminist perspective. Biblical and theological images of women, sources of religious authority, psychological and ethical implications of feminist approaches to religion. [3] (P)
RLST 3940. The Nature of Evil. [Formerly RLST 240] Human evil as expressed in the Shoah, religious fundamentalism, and ethnic cleansing. Theological, philosophical, biological, and literary texts. Evil transformed by scientific inquiry since 1600. [3] (HCA)


RLST 4551. Islamic Mysticism. [Formerly RLST 251] Origins and development of mystical traditions in Islam; rise of asceticism; early Sufis; development and systematization of Sufi orders and teachings; evolution of theosophical dimensions of mysticism; present day Sufism and its spread in North America; comparison of Islamic mysticism with other forms of mysticism. [3] (HCA)

RLST 4552. Islam in the Modern World. [Formerly RLST 252] Impact of colonialism on Muslim societies and everyday life in the cities of the Middle East. Analysis through literary, religious, political, and ethnographic texts. Relationship of Sharia to the modern state; impact of modernity on the understanding and practice of religion. [3] (INT)

RLST 4554. The Qur’an and Its Interpreters. [Formerly RLST 254] The Qur’an and the Islamic tradition of interpretation. The treatment of Biblical prophets, Jesus and Satan. Interpretations will be drawn from all time periods including rationalist, dogmatic, Shi’i and mystical schools of interpretation. [3] (INT)


RLST 4592. Advanced Seminar in Arabic. [Formerly RLST 292] Analysis of style and forms. Poetry, novels, popular literature, and historical chronicles. Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

RLST 4593. Advanced Seminar in Islamic Tradition. [Formerly RLST 293] Analysis of original Arabic texts, manuscript reading, and research methods. Topics vary. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)


RLST 4834. Post-Freudian Theories and Religion. [Formerly RLST 234] An examination of contemporary European and American schools of psychoanalysis. Focus on both the clinical and explanatory theories as they relate to the examination of religious experience. Recommended: 1520 or 121. [3] (SBS)

RLST 4835. Freudian Theories and Religion. [Formerly RLST 235] A critical assessment of psychoanalytic theories as an explanation of religious behavior. Study of the basic structure of these theories followed by a systematic critique of texts by Sigmund Freud and Erik Erikson. Examination of religious narrative forms. [3] (SBS)


RLST 4930. Depression and Suicide. [Formerly RLST 239] Examination of religious rituals and myths from both Christian and other traditions. Critical review of major psychological theories of ritual and myth. Their relevance to an understanding of myth and ritual as religious phenomena. [3] (SBS)

RUSS 1111. First-Year Russian. [Formerly RUSS 101] Elementary conversation and reading with an emphasis on everyday situations. An introduction to Russian culture and life through contemporary Russian materials. Five hours of class work. No credit for students who have earned credit for a more advanced Russian language course. [5] (No AXLE credit)

RUSS 1102. First-Year Russian. [Formerly RUSS 102] Continuation of 1101 with emphasis on reading and talking about texts. No credit for students who have earned credit for a more advanced Russian language course. Prerequisite: 1101. [5] (INT)

RUSS 1111. First-Year Writing Seminar. [Formerly RUSS 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

RUSS 1172. Russian Culture in the Twentieth Century. [Formerly RUSS 172] Russian cinema, literature, music, art, and sports in historical context. Taught in English. [3] (INT)


RUSS 2201. Second-Year Russian I. [Formerly RUSS 203] Reading, speaking, listening, and writing. Grammar review and reading of contemporary Russian texts. No credit for students who have earned credit for 2211 [205] or 2212 [206]. Prerequisite: 1102. [4] (INT)

RUSS 2202. Second-Year Russian II. [Formerly RUSS 204] Reading, speaking, listening, and writing. Grammar review and reading of contemporary Russian texts. No credit for students who have earned credit for 2211 [205] or 2212 [206]. Prerequisite: 2201. [4] (INT)

RUSS 2210. Russia Today: Politics, Economics, and Culture. [Formerly RUSS 251] Four-week immersion in the history and culture of Russia. Travel to and interaction with residents in Vladivostok, Moscow, St. Petersburg, and rural areas. Excursions to UNESCO World Heritage sites and volunteering at community organizations. Pre-departure readings and an examination must be completed. Knowledge of Russian is not required. [3] (INT)

RUSS 2230. Russia at War. [Formerly RUSS 230] Russia’s wars as seen through depictions in literature, film, music, and video games. Works by Tolstoy, Eisenstein, Bulgakov, Babel, Borodin, and others. Knowledge of Russian not required. [3] (INT)

RUSS 2232. The Evil Empire: Stalin’s Russia. [Formerly RUSS 232] Life in Stalin’s Russia as portrayed in memoirs, novels, stories, poetry, films, and music. No knowledge of Russian required. [3] (INT)

RUSS 2240. Terrors and Terrorists: Russian Literature of the Irrational and the Absurd. [Formerly RUSS 240] Philosophical and psychological sources of Russian literature and culture. Conflicts of cultural identity, including tradition vs. modernization, Western vs. Eastern, order vs. chaos, and rationality vs. absurdity. Literary themes including the supernatural, the irrational, political and philosophical conflict, and utopias and dystopias. Alexander Pushkin, Nikolai Gogol, Fyodor Dostoevsky, Evgenii Zamiatin, and Viktor Pelevin. Taught in English. [3] (INT)

RUSS 2273. Russian Science Fiction. [Formerly RUSS 173] Masterpieces of the genre including Tarkovsky’s Solaris and Stalker, the novels of the Strugatsky Brothers, and Protazanov’s Aelita. Various media ranging from literature and film to video games. Knowledge of Russian not required. [3] (INT)


RUSS 2434. The Russian Cinema. [Formerly RUSS 234] Socialist Realism of the 1930s to 1950s; masterpieces of the post-Stalin era in the 1960s and ’70s; sex and violence of the Perestroika; new post-Soviet cinema. Films by such directors as Eisenstein, Pyryev, Romm, Tarkovsky, Mikhailov, and Sokurov are studied and discussed within the political context. No knowledge of Russian required. [3] (INT)


RUSS 2438. Dostoevsky’s Major Novels: Philosophy and Aesthetics. [Formerly RUSS 238] Major prose works in historical and social context, including The Notes from the Underground and The Brothers Karamazov. Influence on twentieth-century philosophy. Critical responses from other writers and philosophers of the nineteenth and twentieth centuries. Taught in English with texts in English translation. [3] (INT)


RUSS 2537. Vladimir Nabokov. [Formerly RUSS 237] Major works including The Luzhin Defense, Lolita, Pale Fire, Examination of Nabokov’s life through his memoir, Speak, Memory, and excerpts from his unfinished final novel, The Original of Laura. Knowledge of Russian is not required. [3] (INT)


RUSS 3231. Jews in Russian Culture: Survival and Identity. [Formerly RUSS 231] A course on the history of Jewish contributions to Russian culture, including literature, the visual arts, theatre, and film. Questions of assimilation, the rise of Jewish national consciousness, and interest in Jewish heritage are discussed. No knowledge of Russian required. [3] (INT)


RUSS 3303. Advanced Grammar and Reading. Advanced grammar and reading skills. May be repeated once for credit. Prerequisite: 2202. [4] (INT)

RUSS 3305. Advanced Conversation and Composition. [Formerly RUSS 257] Advanced conversation and composition skills. May be repeated once for credit. Prerequisite: 2202. [4] (INT)

RUSS 3850. Independent Readings. [Formerly RUSS 289a] Designed for majors and qualified undergraduates. Projects are carried out under the supervision of a member of the department. All projects must be approved by the department. May be repeated for a total of 6 credits over a four-semester period in 3850 and 3851 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for four semesters of RUSS 3850 and 3851] (No AXLE credit)

RUSS 3851. Independent Readings. [Formerly RUSS 289b] Designed for majors and qualified undergraduates. Projects are carried out under the supervision of a member of the department. All projects must be approved by the department. May be repeated for a total of 6 credits over a four-semester period in 3850 and 3851 combined if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 6 credits total for four semesters of RUSS 3850 and 3851] (No AXLE credit)

RUSS 3880. Internship Training. [Formerly RUSS 280a] Under faculty supervision, students gain experience working in a variety of settings, such as civic, corporate, cultural, government, health, media, political, research, and social welfare organizations in the United States and Russia. Background reading and research must be completed in Russian 3881 concurrently with 3880. A minimum of 3 hours of 3881 must be completed, independent of hours taken in 3880. Students may earn up to 6 hours of 3881 credit. A research paper and report must be submitted at the end
of the semester during which the internship training is completed. A 2.90 grade point average and prior approval of the director of undergraduate studies of the student’s plans are required. Offered on a Pass/Fail basis only and must be taken concurrently with 3881. Hours of 3880 cannot be included in the minimum hours counted toward the Russian majors or minors. Corequisite: 3882. Variable credit: 1–9 (No AXLE credit)

RUSS 3891. Selected Topics. [Formerly RUSS 294b] May be repeated for a total of 12 credit hours in 3890 and 3891 combined if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [1–5; maximum of 12 credit hours total for all semesters of RUSS 3890 and 3891] (No AXLE credit)

RUSS 4402. Advanced Composition and Conversation. [Formerly RUSS 258] Continuation of 4401. Prerequisite: 3302. [3] (No AXLE Credit)

Sociology

SOC 1001. Commons Seminar. [Formerly SOC 99] Topics vary. General Elective credit only. [1] (No AXLE Credit)

SOC 1010. Introduction to Sociology. [Formerly SOC 101] The study of human society; the nature of culture and its organization. Processes of communication, socialization, mobility, population growth. Repeat credit for students who have completed 1010W. No credit for students who have earned credit for 103. [3] (SBS)

SOC 1010W. Introduction to Sociology. [Formerly SOC 101W] The study of human society; the nature of culture and its organization. Processes of communication, socialization, mobility, population growth. Repeat credit for students who have completed 1010. No credit for students who have earned credit for 103. [3] (SBS)

SOC 1020. Contemporary Social Issues. [Formerly SOC 102] Social change, conflict, and inequality in modern societies. Basic sociological concepts and methods as they apply to social issues and policy. Focus varies by section. Repeat credit for students who have completed 1020W. [3] (SBS)

SOC 1020W. Contemporary Social Issues. [Formerly SOC 102W] Social change, conflict, and inequality in modern societies. Basic sociological concepts and methods as they apply to social issues and policy. Focus varies by section. Repeat credit for students who have completed 1020. [3] (SBS)

SOC 1041. Men and Women in American Society. [Formerly SOC 104] This course focuses on ideas about masculinity and femininity and how these ideas carry with them inequalities in the distribution of power and resources available to men and women. We examine how gender permeates seemingly neutral aspects of everyday life - how we date, sexuality, family life, work relationships, political life, media images. Repeat credit for students who have completed 1041W. [3] (P)

SOC 1041W. Men and Women in American Society. [Formerly SOC 104W] This course focuses on ideas about masculinity and femininity and how these ideas carry with them inequalities in the distribution of power and resources available to men and women. We examine how gender permeates seemingly neutral aspects of everyday life - how we date, sexuality, family life, work relationships, political life, media images. Repeat credit for students who have completed 1041. [3] (P)

SOC 1111. First-Year Writing Seminar. [Formerly SOC 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

SOC 2100. Statistics for Social Scientists. [Formerly SOC 127] Descriptive and inferential statistics with social science research applications. Sampling issues; describing data with measures of central tendencies and dispersion; hypothesis testing using categorical and continuous indicators; multivariate techniques for continuous, categorical, and time dependent data. Limited to majors and minors in Sociology, Public Policy Studies, and Communication of Science and Technology, with preference given to Sociology majors and minors. [3] (No AXLE credit)

SOC 3001. Sociological Perspectives. [Formerly SOC 201] Major classical and contemporary sociological perspectives such as symbolic interactionism, functionalism, and conflict sociology. Attention to the orientation and style of outstanding representatives of each perspective. Analysis in terms of basic concepts, central questions, substantive themes, methodology, and bearing on contemporary social issues. [3] (P)

SOC 3002. Introduction to Social Research. [Formerly SOC 211] Overview and evaluation of research strategies. Interpretation of qualitative and quantitative data. Research methods and design. Evaluate research ethics, research hypotheses, and literature reviews. Prerequisite: 1010, 1010W, 1020, or 1020W. Open only to majors. [3] (SBS)

SOC 3003. Research Practicum. [Formerly SOC 212] Application of research skills acquired in 3002. A research report, including statement of hypothesis, discussion of data and methods, and interpretation of results, is required. Prerequisite: 3002 and either 2100, MATH 1011 or 2820, or ECON 1500 or 1510. Open also to students who have earned credit for PSY 2100 or PSY-PC 1400 and are majors in Child Development, Child Studies, Cognitive Studies, Human and Organizational Development, or A&S Psychology. [3] (No AXLE credit)

SOC 3201. Cultural Consumption and Audiences. [Formerly SOC 228] How audiences and consumers engage with art and culture - from popular music to film, classical art, fashion, and food. [3] (SBS)

SOC 3202. Cultural Production and Institutions. [Formerly SOC 229] The production of culture. The role of artists, firms, and markets in creating cultural objects, ideas, and practices, including: novels, television and news, science, music, visual arts, and food. Prerequisite: 3201. [3] (SBS)


SOC 3204. Tourism, Culture, and Place. [Formerly SOC 218] The nature of tourist encounters. Marketing and displaying culture to tourists. Implications for urban economies and landscapes, and for tourists and locals. Biweekly field trips in Nashville. Open only to Sociology majors and minors. [3] (SBS)


SOC 3206. Creativity and Innovation in Society. [Formerly SOC 227] The social context for innovation and creativity. Interdisciplinary approaches to the creative process, invention, and entrepreneurship. Social relations and networks surrounding creative work; gate keeping; the diffusions of innovation; changing institutions; and economic forces. [3] (SBS)
SOC 3207. Popular Culture Dynamics. [Formerly SOC 248] Examination of theories and research that link culture and society. Consideration of the mass media arts with particular emphasis on popular music. Focus on creators, industry, and audiences. [3] (SBS)


SOC 3222. Sociology of Religion. [Formerly SOC 246] Theories of the nature, function, and structure of religion. Religion in America, including fundamentalism, the Black Church, and cults. How religion changes and is changed by secular society. [3] (SBS)

SOC 3223. Schools and Society: The Sociology of Education. [Formerly SOC 254] How schools affect individuals and relate to institutions: the government, the economy, social classes, and families. How social attributes, including race and class, affect academic achievement. Controversies such as desegregation and intelligence testing. [3] (SBS)

SOC 3224W. Sociology through Baseball. [Formerly SOC 265W] Baseball as a social institution. Group dynamics, baseball as work and business. Free agency and law, race and ethnic relations, and globalization. [3] (SBS)


SOC 3232. Contemporary Mexican Society. [Formerly SOC 279] Sociological understanding of contemporary Mexican society. Historical roots of the modern Mexican state. Economic, political, and social institutions operating in Mexico, formal and informal structures, and their consequences. [3] (INT)


SOC 3304. Race, Gender, and Health. [Formerly SOC 268] Effect of racial and ethnic background, gender, socioeconomic status, sexual identity, and age or generation on the experiences of health, illness, medical institutions, and work in the health professions. [3] (SBS)

SOC 3311. Climate Change and Society. [Formerly SOC 207] The sociology of climate change, including efforts to reduce greenhouse gases and problems caused by climate change. Comparative analysis of how governments and businesses develop strategies to adapt to climate change. [3] (SBS)

SOC 3312. Environment and Development. [Formerly SOC 208] Relationships between economic development and the natural environment. Implications of development on our contemporary ways of life and the environmental conditions of our planet. Different models of development for both Western industrial and developing societies, from early imperialism to contemporary globalization. Current global environmental crises, problems of environmental inequality and injustice, and social movements for alternative development initiatives. [3] (SBS)


SOC 3314. Environmental Inequality and Justice. [Formerly SOC 221] Relationships between social inequalities and environmental degradation, both in the U.S. and internationally. Distribution of environmental hazards across race and class, natural resource rights and management, urban health and sustainability, climate injustices, and environmental justice movements. No credit for students who have earned credit for WGS 1111 section 4. [3] (SBS)


SOC 3601. Self, Society, and Social Change. [Formerly SOC 204] Problems and prospects for individual participation in social change; volunteering, community service, and philanthropy; role of individuals and voluntary associations in social change. [3] (SBS)


SOC 3612. Class, Status, and Power. [Formerly SOC 236] Analysis of the competition for jobs, advancement, and income. The influence of social background, education, politics, race, sex, changes in national
economy, and other factors will be considered. Theoretical and empirical analysis focusing on the United States. [3] (SBS)

SOC 3613. Law and Society. [Formerly SOC 240] Examines the relationship between the legal system and other institutions with illustrations drawn from both American and other societies. The actual operation of the legal system including lawyers, courts, and police is described. [3] (SBS)

SOC 3614. Politics, State, and Society. [Formerly SOC 244] The relationship between state and society; the nature and distribution of power in democratic society; the social conditions necessary for democracy; social movements and protest in political change; and the politics of public policy making. Attention to political actions, definitions of citizenship, and political ideology. [3] (SBS)

SOC 3615. Human Behavior in Organizations. [Formerly SOC 247] Organizations are treated as resources in the production and distribution of goods and services. Case analyses from the economy are reviewed to diagnose "organizational pathologies" and to understand reciprocal impacts among organizational structures, leaders, and citizens. [3] (SBS)

SOC 3616. Women and Public Policy in America. [Formerly SOC 251] A study of public policies as they affect women in contemporary American society. Issues considered include participation of women in the labor force; effects of employment patterns on the family; birth control, abortion, and health care policies; child care; participation of women in political processes; divorce, child support, and custody; affirmative action policies; present governmental remedies and proposed alternatives. [3] (SBS)

SOC 3621. Criminology. [Formerly SOC 231] The nature, distribution, causes, and control of crime with emphases on contemporary American society and a broad range of types of crime. [3] (SBS)


SOC 3623. Deviant Behavior and Social Control. [Formerly SOC 233] The social causes of, and societal reactions to, several types of deviant behavior (e.g., juvenile delinquency, crime, sex deviance, mental illness). Examines the probable consequences of suggested solutions to reduce different types of deviant behavior. [3] (SBS)


SOC 3711. Women, Gender, and Globalization. [Formerly SOC 239] Globalization and its impact on women and gender relations. Multinational corporations, economic development, and inequality; new forms of work; human rights; feminist movements for change. [3] (INT)

SOC 3722. Gender in Society. [Formerly SOC 250] Theoretical approaches to gender relations with a focus on the contemporary U.S. Evolution of gender stereotypes, gender socialization over the life course, gender in social interactions, institutional sources of gender inequality, and intersections of gender with race, social class, and sexual identity. Topics include work, school, families, health, and intimate relationships. [3] (SBS)

SOC 3723. Gender, Sexuality, and the Body. [Formerly SOC 257] The body is a physical marker of gender and sexuality. Biological reproduction is saturated with social meanings - shaping ideas about masculinity, femininity, the gender division of labor, and heterosexuality. In this course, we will look at the body as reflexive project and as the site of historical and ideological significance. We address race, ethnicity, physical abilities, and class in explaining variations in cultural ideals. [3] (SBS)

SOC 3724. Gender Identities, Interactions, and Relationships. [Formerly SOC 272] Gender identities form and influence interactions in friendships, intimate relations, families, education, and other institutions. Changes and continuities in gender roles within the United States and ways in which race, class, and sexual orientation intersect processes of gender relations. [3] (SBS)

SOC 3851. Independent Research and Writing. [Formerly SOC 299] May be repeated for a total of 6 credits. Students may enroll in more than one section of this course each semester. [1-6; maximum of 6 credits total for all semesters of 3851] (No AXLE credit)

SOC 3880. Internship Training. [Formerly SOC 280a] Under faculty supervision, students gain experience in any of a variety of settings, such as civic, corporate, cultural, government, health, media, political, research, and social welfare organizations. Background reading and research will be completed in Sociology 3881 concurrently with the completion of internship training, Sociology 3880. A minimum of 3 hours of 3881 must be completed with hours taken in 3882. A research paper and report must be submitted at the end of the semester during which the internship training is completed. A 2.90 grade point average, completion of 6 hours of prior work in sociology, and prior departmental approval of the student’s plans are required. Offered on a pass/fail basis only and must be taken concurrently with 3881. Hours of 3880 may not be included in the minimum hours counted toward the sociology major. Corequisite: 3881. [1-6] (No AXLE credit)

SOC 3881. Internship Readings and Research. [Formerly SOC 280a] Under faculty supervision, students gain experience in any of a variety of settings, such as civic, corporate, cultural, government, health, media, political, research, and social welfare organizations. Background reading and research will be completed in Sociology 3881 concurrently with the completion of internship training, Sociology 3880. A minimum of 3 hours of 3881 must be completed with hours taken in 3880. A research paper and report must be submitted at the end of the semester during which the internship training is completed. A 2.90 grade point average, completion of 6 hours of prior work in sociology, and prior departmental approval of the student’s plans are required. Corequisite: 3880. [3-6] (No AXLE credit)

SOC 4961. Seminars in Selected Topics. [Formerly SOC 294] May be repeated for a total of 6 credits if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3; maximum of 6 credits total for all semesters of 4961] (No AXLE credit)

SOC 4981. Honors Research. [Formerly SOC 296] Research and writing supervised by department staff culminating in the Senior Honors Thesis. Work consists of both background reading and active research. May be repeated for a total of 12 credits if there is no duplication in topic, but students may earn only up to 6 credits per semester of enrollment. Open only to honors candidates. Prerequisite or corequisite: 3002. [3-6; maximum of 12 credits total for all semesters of 4981] (No AXLE credit)

Spanish

SPAN 1001. Commons Seminar. [Formerly SPAN 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

SPAN 1100. Elementary Spanish I for True Beginners. [Formerly SPAN 100] Designed exclusively for students with no previous exposure to Spanish. Development of basic listening, speaking, reading, and writing skills with Spanish-speaking culture through a communicative approach. Conducted primarily in Spanish. Not open to students with previous training in Spanish. Four hours of classroom instruction plus one hour of independent research activities. Students continuing in Spanish take 1102. No credit for students who have already completed 1100 or have earned credit for a more advanced Spanish language course. Students wishing to repeat this course must take 1101 for repeat credit. [5] (No AXLE credit)

SPAN 1101. Elementary Spanish I. [Formerly SPAN 101] Basic listening, speaking, reading, and writing skills. Communicative approach and
exposure to aspects of Spanish-speaking cultures. Conducted entirely in Spanish. Four hours of classroom instruction plus one hour of independent research activities. Intended for students with prior study of the language and a departmental placement score under 275. Serves as repeat credit for students who have completed 1100. No credit for students who have earned credit for a more advanced Spanish language course. [5] (No AXLE credit)

SPAN 1102. Elementary Spanish II. [Formerly SPAN 102] Further development of listening, speaking, reading, and writing skills using a communicative approach. Exposure to aspects of Spanish-speaking culture. Conducted entirely in Spanish. Four hours of classroom instruction plus one hour of independent research activities. Students continuing in Spanish take 2203. No credit for students who have earned credit for a more advanced Spanish language course. Prerequisite: 1100 or 1101. [5] (INT)

SPAN 1103. Intensive Elementary Spanish. [Formerly SPAN 103] A communicative approach to reading, writing, listening, and speaking for students who have studied one to three years of Spanish. Rigorous review of elementary Spanish through four hours of class instruction and one hour of independent research activities. Departmental Spanish placement exam score of 275–364. Students continuing in Spanish take 2203. No credit for students who have earned credit for 1100, 1101, or 1102. No credit for students who have earned credit for a more advanced Spanish language course. Prerequisite: 1100 or 1101. [5] (INT)

SPAN 1111. First-Year Writing Seminar. [Formerly SPAN 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] AXLE credit category varies by section

SPAN 2203. Intermediate Spanish. [Formerly SPAN 104] Development of intermediate linguistic competence in Spanish (listening, speaking, reading, and writing) using a communicative approach. Study of cultural, social, political, and economic systems of Spanish-speaking countries by incorporating authentic materials. Four hours of classroom instruction plus one hour of independent research activities. Intended for students who have earned credit for 1102 or 1103 or have a departmental placement score of 365–440. No credit for students who have earned credit for a more advanced Spanish language course. [5] (INT)


SPAN 2995. Contemporary Latin American Prose Fiction in English Translation. [Formerly SPAN 293] Themes and techniques of the contemporary novel, novella, and short story written by both men and women in Spanish America and Brazil. No credit for graduate students in Spanish or Portuguese. [3] (HCA)

SPAN 3301W. Intermediate Spanish Writing. [Formerly SPAN 201W] Development of abilities in composition tasks related to expository writing. Focus on rhetorical techniques for organizing information, vocabulary abilities, and emphasis on collaborative work. Students write several short papers and a final long paper. Intended for students who have earned credit for 2203 or have a departmental Spanish placement exam score of 441 or higher. [3] (INT)

SPAN 3302. Spanish for Oral Communication through Cultural Topics. [Formerly SPAN 202] Development of speaking skills through the study of Spanish and Hispanic culture, and Spanish and Spanish-American current affairs. Texts drawn from contemporary articles, short stories, TV news, documentaries, and Web materials. Different registers of spoken Spanish. The development of effective strategies for oral communication. Offered on a graded basis only. Prerequisite: 3301W. Students with advanced oral skills will be placed in a higher level course. [3] (INT)

SPAN 3303. Introduction to Spanish and Spanish American Literature. [Formerly SPAN 203] Critical reading and methods of literary analysis. Selections cover all genres in several periods. Prerequisite: 3301W and 3302. [3] (HCA)

SPAN 3320. Introduction to Hispanic Cultural Studies. [Formerly SPAN 204] An examination of contemporary Hispanic culture through a variety of media (newspapers, magazines, comics, Web sites), arts, and entertainment. Prerequisite: 3301W and 3302. Not open to students who have studied abroad. [3] (INT)

SPAN 3325. The Way of Saint James. [Formerly SPAN 205] Origins and development of the Way of Saint James, or Camino de Santiago, through an examination of literature, art, history, and cultural and religious issues. Contributions from the cult of Saint James and the Way to Spanish national identity. Repeat credit for students who completed 296 section 1 in summer 2012 and summer 2013. Prerequisite: 3301W and 3302. [3] (HCA)


SPAN 3340. Advanced Conversation. [Formerly SPAN 207] An intercultural approach contrasting Hispanic and American perspectives. Discussions and oral presentations on contemporary issues. For students with a high level of oral proficiency, especially those returning from a semester abroad. Offered on a graded basis only. Prerequisite: 3302. [3] (INT)

SPAN 3345. Spanish for Business and Economics. [Formerly SPAN 206] Linguistic skills and cultural information for conducting business in the Spanish-speaking world. Basic syntactic and phonological structures within the context of business. Activities to develop written, oral, and aural skills in several areas, including finance, management, marketing, and tourism. Offered on a graded basis only. Prerequisite: 3301W and 3302. [3] (INT)


SPAN 3355. Advanced Conversation through Cultural Issues in Film. [Formerly SPAN 208] Spanish and Latin American films as the basis for discussion and analysis of linguistic, historic, cultural, and social issues. Students are expected to have completed at least one Spanish language course beyond 3303. Prerequisite: 3301W, 3302, and 3303. [3] (INT)

SPAN 3360. Spanish Civilization. [Formerly SPAN 221] The development of Spanish culture from the Middle Ages to the present in the context of Western civilization. Discussion of historical background, literary and artistic trends, and political and socioeconomic patterns. Not open to students who have attended Vanderbilt in Spain. Prerequisite: 3301W and 3302. [3] (INT)

SPAN 3365. Film and Recent Cultural Trends in Spain. [Formerly SPAN 222] The cinema and Spanish cultural evolution during and after the Franco dictatorship. Prerequisite: 3303. [3] (INT)

SPAN 3370. Spanish American Civilization. [Formerly SPAN 223] The development of Spanish American culture from colonial times to the present; discussion of basic institutions, political and socioeconomic patterns, education, the arts, and folklore. Prerequisite: 3301W and 3302. [3] (INT)

SPAN 3375. Film and Culture in Latin America. [Formerly SPAN 227] Latin American cinema in historical perspective. Screenings, critical readings, and supplementary texts. Prerequisite: 3303. [3] (P)

SPAN 3380. The Spanish Language. [Formerly SPAN 209] An advanced grammar course with emphasis on problem constructions, stylistics, and composition. Offered only in the Vanderbilt in Spain program. [3] (INT)
SPAN 3385. Creative Writing and Advanced Grammar. Development of writing skills through advanced grammatical concepts, vocabulary, and writing techniques and the production of short stories, essays, poems, and other forms of textual discourse. Prerequisite: 3303. [3] (INT)

SPAN 3830. Spanish for the Medical Profession. [Formerly SPAN 211] Advanced conversation course incorporating linguistic skills and cultural information relevant to medical issues in the Hispanic world. Service learning with the Latino and Latina community as an important component. Prerequisite: 3301W and 3302. [3] (INT)

SPAN 3835. Latino Immigration Experience. [Formerly SPAN 243] Literature and film that depict the immigration and assimilation experiences of the main Latino groups. Service to the Latino community integral part of course work. Prerequisite: 3303. [3] (P)

SPAN 3850. Independent Study. [Formerly SPAN 289] Designed primarily for majors. Projects are arranged with individual professors and must be approved by the director of undergraduate studies before the close of registration in the semester of the project. May be repeated for a total of 12 credits over a four semester period, but students may earn only up to 3 credits per semester of enrollment. [1–3; maximum of 12 credits total for fours semesters of SPAN 3850] (No AXLE credit)

SPAN 3880. Internship Training in Spain. [Formerly SPAN 287b] Under faculty supervision, students gain experience in public or private organizations and complete research and readings. Offered on a pass/fail basis only and must be taken concurrently with 3881. Corequisite: 3881. [1] (No AXLE credit)

SPAN 3881. Internship Readings and Research in Spain. [Formerly SPAN 287a] Under faculty supervision, students gain experience in public or private organizations, and complete research and readings. Must be taken concurrently with 3880. Corequisite: 3880. [3] (No AXLE credit)

SPAN 3891. Special Topics in Hispanic Culture. [Formerly SPAN 296] Prerequisite: 3303. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

SPAN 3892. Special Topics in Spanish Language and Linguistics. [Formerly SPAN 295] Prerequisite: 3303. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

SPAN 3893. Special Topics in Hispanic Literature. [Formerly SPAN 294] Prerequisite: 3303. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)


SPAN 4310. Translation and Interpretation. [Formerly SPAN 213] The art and practice of translation and interpretation dealing with materials from science, economics, politics, belles lettres, etc. Prerequisite: 3301W and 3302. [3] (SSS)

SPAN 4315. Contrastive Analysis of Spanish and English. [Formerly SPAN 217] A comparison of the phonological, morphological, and syntactical structures of Spanish and English to demonstrate the similarities and differences between the linguistic systems of these two languages. Prerequisite: 3301W and 3302. [3] (SSS)

SPAN 4320. Phonology. [Formerly SPAN 216] Analysis of the production, nature, and systematic function of the sounds of the Spanish language, as well as of problems frequently experienced by non-native speakers. Both standard and dialect features of Spanish are examined. Prerequisite: 3301W and 3302. [3] (SSS)

SPAN 4325. Dialectology. [Formerly SPAN 214] Formation, general characteristics, distinctive features, and geographical extension of the principal dialectal regions of Spain and Spanish America. Both historical and modern dialects are considered. Emphasis on non-standard dialectal varieties of Spanish. Prerequisite: 3301W and 3302. [3] (SSS)

SPAN 4330. Words and Stems. [Formerly SPAN 215] A morphological presentation of the structural principles governing the creation of noun, verb, adjective, and adverb along with an overview of the formation of the underlying stems. Prerequisite: 3301W and 3302. [3] (SSS)

SPAN 4335. Morphology and Syntax. [Formerly SPAN 218] An introduction to the principles of modern Spanish morphology (word formation) and syntax (phrase structure and usage) through an analysis of the native speaker's organization of reality and use of language to reflect and to express that organization. Prerequisite: 3301W and 3302. [3] (SSS)


SPAN 4345. The Languages of Spain. [Formerly SPAN 220] Origins, development, and the contemporary sociolinguistic situation of the principal languages and dialects of Spain, including Castilian, Catalan, Galician, and Basque. Prerequisite: 3301W and 3302. [3] (SSS)


SPAN 4355. Spanish in Society. [Formerly SPAN 283] Language variation and linguistic change. Regional, socioeconomic, gendered, and ethnic differences in spoken Spanish. Language as it shapes the identities of speakers. Language use in social contexts with comparisons to English. Prerequisite: 3303. [3] (SSS)


SPAN 4400. The Origins of Spanish Literature. [Formerly SPAN 231] From its beginnings to the Renaissance; the creation of a social order and a cultural tradition. Close study of three literary landmarks - Poema del Cid, Libro de Buen Amor, La Celestina - and other prose and poetry selections. Prerequisite: 3303. [3] (HCA)

SPAN 4405. Literature of the Spanish Golden Age. [Formerly SPAN 232] Representative works from early modern Spain, including poetry, prose, and drama of the Renaissance and Baroque periods. Prerequisite: 3303. [3] (HCA)

SPAN 4410. Spanish Literature from the Enlightenment to 1900. [Formerly SPAN 233] Essays and Neoclassic literature. Romanticism, Realism, and Naturalism. Representative works and authors from all genres. Prerequisite: 3303. [3] (HCA)

SPAN 4415. Spanish Literature from 1900 to the Present. [Formerly SPAN 234] Representative authors and works. Prerequisite: 3303. [3] (HCA)


SPAN 4425. Spanish American Literature from 1900 to the Present. [Formerly SPAN 236] The works of Neruda, Borges, Paz, García Márquez and others. Prerequisite: 3303. [3] (HCA)

SPAN 4440. Development of the Short Story. [Formerly SPAN 260] From early manifestations in Spain through its current forms in Spain and Spanish America. Prerequisite: 3303. [3] (HCA)
SPAN 4445. Development of the Novel. [Formerly SPAN 239] From the seventeenth century through Realism and Naturalism in Spain and Spanish America. Prerequisite: 3303. [3] (HCA)


SPAN 4455. Development of Drama. [Formerly SPAN 251] Spanish theatrical works from 1600 to 1900, including the Golden age comedias, neoclassicism, romanticism, and early realism in drama. Prerequisite: 3303. [3] (HCA)

SPAN 4465. The Theory and Practice of Drama. [Formerly SPAN 281] Critical works and plays from different periods. Introduction to the principles of dramaturgy. Prerequisite: 3303. [3] (HCA)

SPAN 4470. Development of Lyric Poetry. [Formerly SPAN 230] Popular and traditional forms; the sonnet and other Renaissance and Baroque classical forms. Romanticism. Prerequisite: 3303. [3] (HCA)


SPAN 4550. The Theory and Practice of Literary Translation. [Formerly SPAN 271] Theoretical approaches and their consequences for the interpretation of translated texts. Practical application of these principles in the translation of both Spanish and Portuguese texts into English. Taught in Spanish. Written work in Spanish or Portuguese. Serves as repeat credit for students who completed 294 section 3 in fall 2013 or spring 2013, or 294 section 1 in spring 2012. Prerequisite: 3303. [3] (HCA)

SPAN 4620. Love and Honor in Medieval and Golden Age Literature. [Formerly SPAN 256] The evolution of the key themes of love and honor in works from various genres of medieval and Golden Age Spanish literature with special attention to sociohistorical context. Prerequisite: 3303. [3] (HCA)


SPAN 4690. Alterity and Migration in Spain. [Formerly SPAN 265] Historical and literary texts about nationalism and cultural difference. Representations of contact with Africa, the Americas, and Asia; regional identities; immigration; gender and racial issues. Repeat credit for students who completed 294 section 2 in fall 2013 or section 1 in spring 2014. Prerequisite: 3303. [3] (P)

SPAN 4720. Literary Genres and National Identities in Latin America. [Formerly SPAN 277] A comparative approach to the rise of the national literary traditions from independence to the latter half of the twentieth century. Indigenist novels, abolitionist narratives, and gaucho poetry by colonial figures, including African slaves, indigenous peoples, and Argentinian Gauchos. Serves as repeat credit for students who completed 294 section 1 in spring 2013. Prerequisite: 3303. [3] (P)

SPAN 4730. Modern Latin American Poetry. [Formerly SPAN 273] Development of poetry in Spanish America and Brazil during the twentieth century. Major poets and movements, including both Spanish American Modernismo and Brazilian Modernismo. Poetry as a genre; composition and discussion of students’ poetry. Taught in Spanish. Serves as repeat credit for students who completed 294 section 2 in fall 2013 or 294 section 1 in fall 2012. Prerequisite: 3303. [3] (P)

SPAN 4740. Spanish-American Literature of the Boom Era. [Formerly SPAN 247] The Boom novel of the 1960s: Carlos Fuentes’ La muerte de Artemio Cruz, Julio Cortázar’s Rayuela, Mario Vargas Llosa’s La ciudad y los perros, Guillermo Cabrera Infante’s Tres tristes tigres, and Gabriel García Márquez’s Cien años de soledad. Prerequisite: 3303. [3] (HCA)

SPAN 4741. Spanish-American Literature of the Post-Boom Era. [Formerly SPAN 248] The post-Boom novel from the 1970s to the present; analysis of related films. Manuel Muñiz’s Boquitas pintadas, Me llamo Rigoberta Menchú, Laura Esquivel’s Coma agua para chocolate, Reinaldo Arenas’s Viaje a La Habana, and Daisey Rubiera Castillo’s Reyita, sencilamente. Prerequisite: 3303. [3] (P)

SPAN 4750. Afro-Hispanic Literature. [Formerly SPAN 244] From nineteenth-century slave narrative to modern writers such as Miguel Barnet, Alejo Carpentier, and Quince Duncan. Prerequisite: 3303. [3] (P)


SPAN 4760. Literature and Medicine. [Formerly SPAN 274] Modern intersections of literature and medicine in Latin America. From the social hygiene literature of the nineteenth century to the autobiographical disease narrative of the late twentieth century. Prerequisite 3303. [3] (P)

SPAN 4810. Images of the City. [Formerly SPAN 263] Literary representations of cityscapes in Spain and Latin America. Repeat credit for students who completed 294 section 2 in fall 2011. Prerequisite: 3303. [3] (HCA)

SPAN 4980. Undergraduate Seminar. [Formerly SPAN 280] Close contextual readings of major Hispanic literary texts through selected critical approaches. Open to junior and senior majors in Spanish; required of candidates for honors. Prerequisite: 3303. [3] (HCA)

SPAN 4998. Senior Honors Thesis. [Formerly SPAN 299a] [3] (No AXLE credit)

SPAN 4999. Senior Honors Thesis. [Formerly SPAN 299b] [3] (No AXLE credit)

Theatre

THTR 1001. Commons Seminar. [Formerly THTR 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

THTR 1010. Fundamentals of Theatre. [Formerly THTR 100] An introduction to the various elements that combine to form a theatrical experience; the development of critical standards to judge these elements in performance. No credit for students who have earned credit for 1111. Repeat credit for students who have completed 1010W. [3] (HCA)

THTR 1010W. Fundamentals of Theatre. [Formerly THTR 100W] An introduction to the various elements that combine to form a theatrical experience; the development of critical standards to judge these elements in performance. No credit for students who have earned credit for 1111. Repeat credit for students who have completed 1010W. [3] (HCA)

THTR 1111. First-Year Writing Seminar. [Formerly THTR 115F] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

THTR 1611. Acting I. [Formerly THTR 219] The role of the actor in the theatre with emphasis on artistic self-expression through improvisation and development of performance skills. Available on a graded basis only. [3] (HCA)

THTR 1711. Introduction to Theatrical Production. [Formerly THTR 110] Contemporary concepts, methods, and practices employed in the planning and implementation of stage scenery and lighting. Communication, creative problem solving, and organizational management through research, lecture, and class discussion. [4] (HCA)


THTR 2202W. Histories of Theatre and Drama II: The European Stage. [Formerly THTR 202W] Including the Italian Renaissance, French neoclassicism, English Restoration, German and French romanticism, and the modernist movements of realism, symbolism, Dada and futurism, expressionism, epic theatre, and absurdism. [3] (INT)

THTR 2204. Histories of Theatre and Drama III: The U.S. Stage. [Formerly THTR 204] Including British colonial and revolutionary drama; frontier theatre; melodrama; minstrelsy, vaudeville, burlesque, and the musical stage; pageantry and community theatre; postwar realism; African-American, Chicana/o, feminist, and Asian-American theatre movements. [3] (US)


THTR 2781. The History of Fashion: Sex and Propaganda. [Formerly THTR 216] Men's and women's fashion from ancient times to the present. Women's roles in society as reflected in their clothing. [3] (P)

THTR 3201W. Contemporary Drama and Performance Criticism. [Formerly THTR 206W] Dramatic literature and performance theory. Advanced techniques in writing performance criticism. No credit for students who have earned credit for 203. Prerequisite: at least sophomore standing and 1010, 1010W, or 1111. [3] (P)

THTR 3281. Theatre in London. [Formerly THTR 280] Intensive overseas summer study program in contemporary British theatre. Ten productions in London covering a broad spectrum of theatrical offerings. Weekly seminars with artists and administrators from the British professional stage. [3] (P)

THTR 3311. Playwriting. [Formerly THTR 225] Instruction in writing plays with critical attention to dramatic themes and characterization. Prerequisite: 1010, 1010W, or 1111 and consent of the instructor. [3] (HCA)

THTR 3600. Rehearsal-Acting. [Formerly THTR 221] Students performing major roles in university theatre productions may receive 1 credit hour per role at the discretion of the director. Full character analysis and periodic reports of rehearsal progress are required. Prerequisite: 3611. May be repeated for a total of 3 credits, but students may earn only up to 2 credits per semester of enrollment. [1–2; maximum of 3 credits total for all semesters of THTR 3600] (No AXLE credit)

THTR 3611. Acting II. [Formerly THTR 220] The actor's role in the theatre with emphasis on acting as character interpretation and ensemble performance through analysis and scene study. Offered on a graded basis only. Prerequisite: 1611. [3] (HCA)


THTR 3700. Rehearsal-Production. [Formerly THTR 211] Students performing major technical assignments in university theatre productions may receive 1 credit hour per assignment at the discretion of the technical director. Detailed plans of expected work and full reports on all crew sessions are to be submitted. May be repeated for a total of 3 credits, but students may earn only up to 2 credits per semester of enrollment. Prerequisite: consent of instructor. [1–2; maximum of 3 credits total for all semesters of THTR 3700] (No AXLE credit)


THTR 3741. Elements of Basic Design: Costuming and Makeup. [Formerly THTR 214] Aesthetics and processes. Development and communication of design ideas through the drawing and rendering of the costumed figure. Prerequisite: 1711 or 2781. [4] (HCA)


THTR 3851. Independent Study. [Formerly THTR 289] A research project in selected aspects of theatre and drama to be arranged with the instructor. [Variable credit: 1–3] (No AXLE credit)

THTR 3891. Selected Topics in Theatre. [Formerly THTR 294] Intensive study of a particular area of theatre. Emphasis on personal investigation and written reports. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

THTR 4201. Shakespeare in the Theatre. [Formerly THTR 232] Selected plays and scenes. Theoretical and practical exploration of script, theatre, and audience in terms of production past and present. Prerequisite: at least junior standing. [3] (HCA)

THTR 4611. Problems of Acting Style. [Formerly THTR 223] Advanced scene study, investigating methods used today to perform drama of past eras which used non-realistic styles. Offered on a graded basis only. Prerequisite: 3611. [3] (HCA)

THTR 4961. Senior Seminar: Performance Ensemble. [Formerly THTR 261] Advanced development of artistic, communicative, and organizational skills required to create theatre. Culminates in a public performance. Open to senior majors only. Prerequisite: 1010, 1010W, or 1111; 1711; 1751; 1611; and 2651. [3] (HCA)

THTR 4998. Senior Honors Thesis. [Formerly THTR 299a] Independent research and completion of an honors thesis, done in consultation with a member of the faculty in Theatre. Open only to those who qualify to begin departmental honors work in Theatre. [3] (No AXLE credit)

THTR 4999. Senior Honors Thesis. [Formerly THTR 299b] Independent research and completion of an honors thesis, done in consultation with a member of the faculty in Theatre. Open only to those who qualify to begin departmental honors work in Theatre. [3] (No AXLE credit)

Tibetan Language

TBTN 1101. Elementary Tibetan I (UVA). Grammar and syntax of spoken and written Tibetan. Listening, speaking, reading, and writing from Tibetan short stories, proverbs, and other sources. Tibetan culture. Offered on a graded basis only. [4] (No AXLE credit)

TBTN 2201. Intermediate Tibetan I (UVA). Grammar and syntax of spoken and written Tibetan. Listening, speaking, reading, and writing through the integrated use of spoken and literary forms. Enhanced knowledge of Tibetan culture. Offered on a graded basis only. [4] (No AXLE credit)

Women's and Gender Studies

WGS 1001. Commons Seminar. [Formerly WGS 99] Topics vary. General Elective credit only. [1] (No AXLE credit)

WGS 1111. First-Year Writing Seminar. [Formerly WGS 115] Independent learning and inquiry in an environment in which students can express knowledge and defend opinions through intensive class discussion, oral presentations, and written expression. May be repeated for credit once if
there is no duplication of topic, but students may earn only up to 3 credits in any 1111 course per semester of enrollment. [3; maximum of 6 credits total for all semesters of 1111] (AXLE credit category varies by section)

**WGS 1150. Sex and Gender in Everyday Life.** [Formerly WGS 150] Sex and gender roles in culture and society. Gender, race, and class. Women and men in literature, art, culture, politics, institutions. Repeat credit for students who have completed 1150W. [3] (P)

**WGS 1150W. Sex and Gender in Everyday Life.** [Formerly WGS 150W] Sex and gender roles in culture and society. Gender, race, and class. Women and men in literature, art, culture, politics, institutions. Repeat credit for students who have completed 1150. [3] (P)

**WGS 1160. Sex and Society.** [Formerly WGS 160] Historical, cultural, and social contexts of sexual diversity, discrimination, and sexual violence. Understanding the centrality of sexuality to identity; challenging harmful modes of sexual expression; developing critical awareness of sex and sexuality. [3] (P)

**WGS 1272. Feminism and Film.** [Formerly WGS 272] Images of gender and race; techniques, sound, lighting, cinematography in relation to gender. Prerequisite: 1150 or 1150W. [3] (US)

**WGS 2225. Women in Popular Culture.** [Formerly WGS 200] Gender differentiation in popular culture and mass-market products. Portrayal of women in movies, print, music, and the Internet. The sources and effects of these portrayals. Women as both consumers and the consumed. Prerequisite: 1150 or 1150W. [3] (HCA)

**WGS 2240. Introduction to Women's Health.** [Formerly WGS 240] How culture influences women's health, body image, self-esteem. Issues include fertility control and child bearing, medical innovations to detect disease, alternative therapies, psychological well-being, sexuality, physical and sexual abuse, impact of politics on health options for women. Prerequisite: 1150 or 1150W. [3] (P)

**WGS 2242. Women Who Kill.** [Formerly WGS 242] Examination of classical and contemporary representations of women who kill. [3] (P)


**WGS 2248. Humor and Cultural Critique in Fannie Flagg's Novels.** [Formerly WGS 248] Humor used to address cultural issues in Southern small-town America from 1920-1970. Gender, race, community, and feminism in Fannie Flagg's novels. Prerequisite: 1150 or 1150W. [3] (P)

**WGS 2249. Women and Humor in the Age of Television.** [Formerly WGS 249] The period 1950 to present. Television variety shows, sitcoms, and stand-up comedy as media for promoting women's humor and feminism. Comedy as a means of dealing with difficult personal and social issues. Prerequisite: 1150 or 1150W. [3] (HCA)

**WGS 2252. Sex and Scandals in Literature.** [Formerly WGS 252] From the eighteenth century to the present. Women's and men's disorderly conduct as represented in literary texts. Charlotte Rowson, Kate Chopin, Edith Wharton, Henry James, and Toni Morrison. [3] (HCA)

**WGS 2254. Feminist Fictions.** [Formerly WGS 254] From the nineteenth century to the present. Feminist ideas and ideals as represented in literary texts. Kate Chopin, Edith Wharton, Virginia Woolf, Alice Walker, and Margaret Atwood. [3] (HCA)

**WGS 2259. Reading and Writing Lives.** [Formerly WGS 259] Interdisciplinary exploration of life-stories as narratives. Strategies of self-representation and interpretation, with particular attention to women. Includes fiction, biography, autobiography, history, ethnography, and the writing of life-story narratives. Repeat credit for students who have completed 2259W. Prerequisite: 1150 or 1150W. [3] (HCA)

**WGS 2259W. Reading and Writing Lives.** [Formerly WGS 259W] Interdisciplinary exploration of life-stories as narratives. Strategies of self-representation and interpretation, with particular attention to women. Includes fiction, biography, autobiography, history, ethnography, and the writing of life-story narratives. Repeat credit for students who have completed 2259W. Prerequisite: 1150 or 1150W. [3] (HCA)

**WGS 2262. Gender and Ethics.** [Formerly WGS 262] Religious worldviews connected to moral traditions. Epistemological and ethical systems and their relationship to gender and patriarchy, Social construction of gender; violence against women; feminism; and difference. No credit for students who earned credit for RLST 223 before fall 2014. [3] (P)

**WGS 2267. Seminar on Gender and Violence.** [Formerly WGS 267] In-depth study of violence against women, with a service-learning component in a community setting. Topics include domestic abuse, rape, sexual harassment, pornography, and global violence. Focus on problems and potential solutions, examining violence on a societal, institutional, and individual level, interrogating the “personal as political,” and exposing power structures that shape our communities. Prerequisite: 1150 or 1150W. [3] (P)

**WGS 2268. Gender, Race, Justice, and the Environment.** [Formerly WGS 268] Gender and racial aspects of environmental degradation. Risk, activism, health and illness, policy and politics. Prerequisite: 1150 or 1150W. [3] (HCA)

**WGS 2270. Ecofeminism: Theory, Politics, and Action.** [Formerly WGS 270] Interconnections among the exploitation of nature, the oppression of women, and the abuse of resources that have led to the current global ecological crisis. [3] (HCA)

**WGS 2612. Lesbian, Gay, Bisexual, and Transgender Studies.** [Formerly WGS 212] Introductory study of sexual identity, queer theory, relationships, politics. Prerequisite: 1150 or 1150W. [3] (HCA)

**WGS 3201. Women and Gender in Transnational Context.** [Formerly WGS 201] Gender as a social construction. Feminist critiques of knowledge, family and work, sexuality, health and medicine, and the women's movement. The future of feminism in global context. Prerequisite: 1150 or 1150W. [3] (P)

**WGS 3246W. Women's Rights, Women's Wrongs.** [Formerly WGS 246W] Intellectual and theoretical foundations for contemporary feminist theory and politics in the United States, based upon works by nineteenth- and twentieth-century authors. Prerequisite: 1150 or 1150W. [3] (US)

WGS 3250. Contemporary Women's Movements. [Formerly WGS 250] Recent feminist history. The origins and parameters of women’s movements from the 1960s to the present. Repeat credit for students who have completed 3250W. Prerequisite: 1150 or 1150W. [3] (P)

**WGS 3250W. Contemporary Women's Movements.** [Formerly WGS 250W] Recent feminist history. The origins and parameters of women's movements from the 1960's to the present. Repeat credit for students who have completed 3250W. Prerequisite: 1150 or 1150W. [3] (P)

**WGS 3271. Feminist Legal Theory.** [Formerly WGS 271] Theoretical issues about the interaction between law and gender. Application of feminist analysis and perspective to law relating to family, work, criminal law, reproductive freedom, pornography, and sexual harassment. Prerequisite: 1150 or 1150W. [3] (P)

**WGS 3262. Gender and Ethics.** [Formerly WGS 3262] Religious worldviews connected to moral traditions. Epistemological and ethical systems and their relationship to gender and patriarchy, Social construction of gender; violence against women; feminism; and difference. No credit for students who earned credit for RLST 223 before fall 2014. [3] (P)


**WGS 3850. Independent Study.** [Formerly WGS 289] A program of reading and research for advanced students in an area of women's and gender studies arranged in consultation with an adviser. Prerequisite: 1150 or 1150W. May be repeated for a total of 6 credits if there is no duplication in topic, but students may earn only up to 3 credits per semester of enrollment. [1-3; maximum of 6 credits total for all semesters of WGS 3850] (No AXLE credit)

**WGS 3880. Internship Training.** [Formerly WGS 288a] Under faculty supervision, students gain experience combining theoretical and practical work in a project related to social change and focused on women, feminism,
or gender. Legislative, community, educational, or non-profit settings. Internship plan developed between student and faculty sponsor, with approval of Women's and Gender Studies program director. A thorough report and research paper are submitted at the end of the semester. Must be taken on a Pass/Fail basis only and must be taken concurrently with 3882 and/or 3883. These hours may not be included in the minimum hours required for the women's and gender studies major. Prerequisite: 3201 and one other 2000-level (or higher) Women’s and Gender Studies course, and a 2.90 grade point average. Corequisite: 3882 and/or 3883. [1–9] (No AXLE credit)

**WGS 3882. Internship Readings.** [Formerly WGS 288c] Under faculty supervision, students gain experience combining theoretical and practical work in a project related to social change and focused on women, feminism, or gender. Legislative, community, educational, or non-profit settings. Internship plan developed between student and faculty sponsor, with approval of Women’s and Gender Studies program director. A thorough report and research paper are submitted at the end of the semester. Prerequisite: 3201 and one other 3000-level Women’s and Gender Studies course, and a 2.90 grade point average. Corequisite: 3880. [Variable credit: 1–3] (No AXLE credit)

**WGS 3883. Internship Research.** [Formerly WGS 288b] Under faculty supervision, students gain experience combining theoretical and practical work in a project related to social change and focused on women, feminism, or gender. Legislative, community, educational, or non-profit settings. Internship plan developed between student and faculty sponsor, with approval of Women’s and Gender Studies program director. A thorough report and research paper are submitted at the end of the semester. Prerequisite: 3201 and one other 2000-level (or higher) Women’s and Gender Studies course, and a 2.90 grade point average. Corequisite: 3880. [Variable credit: 1–3] (No AXLE credit)

**WGS 3891. Special Topics: Topics in Gender, Culture, and Representation.** [Formerly WGS 294a] Topics vary. Prerequisite: 1150 or 1150W. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

**WGS 3892. Special Topics: Topics in Gender, Society, and Political Economy.** [Formerly WGS 294b] Topics vary. Prerequisite: 1150 or 1150W. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

**WGS 3893. Selected Topics.** [Formerly WGS 295] Topics vary. Prerequisite: 1150 or 1150W. May be repeated for credit more than once if there is no duplication in topic. Students may enroll in more than one section of this course each semester. [3] (No AXLE credit)

**WGS 4960. Senior Seminar.** [Formerly WGS 291] Advanced reading and research. Prerequisite: 1150 or 1150W. [3] (No AXLE credit)

**WGS 4998. Honors Research.** [Formerly WGS 298] Reading and research under the guidance of a faculty supervisor. Consent of both the faculty supervisor and the director of Women’s and Gender Studies program required. Open only to honors candidates. May be repeated for a total of 6 credits if there is no duplication in topic. [3–6; maximum of 6 credits total for all semesters of WGS 4998] (No AXLE credit)

**WGS 4999. Honors Thesis.** [Formerly WGS 299] Open only to seniors in the Women’s and Gender Studies Honors Program. May be repeated for a total of 6 credits if there is no duplication in topic. [3–6; maximum of 6 credits total for all semesters of WGS 4999] (No AXLE credit)
College of Arts and Science Administration and Faculty

LAUREN BENTON, Ph.D., Dean
KAREN E. CAMPBELL, Ph.D., Senior Associate Dean
CINDY D. KAM, Ph.D., Senior Associate Dean
YOLLETTE T. JONES, Ph.D., Associate Dean
ROGER E. MOORE, Ph.D., Associate Dean
DIANNE MORGAN, Ph.D., Associate Dean
MARTIN RAPISARDA, Ph.D., Associate Dean
JONATHAN PETTY, B.A., Associate Dean for Arts and Science Development
MELISSA WOCHER, B.A., Assistant to the Dean

Named and Distinguished Chairs

CELA STEWART APPLEGATE, William R. Kenan, Jr., Chair in History
HOUSTON A. BAKER, JR., University Distinguished Professor of English
LARRY M. BARTELS, May Werthan Shayne Chair in Public Policy and Social Science
LAUREN A. BENTON, Nelson O. Tyrone, Jr., Chair in History
MICHAEL D. BESS, Chancellor's Chair in History
DAVID BLACKBOURN, Cornelius Vanderbilt Distinguished Chair in History
RICHARD BLACKETT, Andrew Jackson Chair in American History
RANDOLPH BLAKE, Centennial Professor of Psychology
ERIC W. BOND, Joe L. Roby Chair in Economics
KENDAL SCOT BROADIE, Stevenson Chair in Neurobiology
WILLIAM CAFERRO, Gertrude Conaway Vanderbilt Chair in History
KENNETH C. CATANIA, Stevenson Chair in Biological Sciences
JAY CLAYTON, William R. Kenan, Jr., Chair in English
JOSHUA D. CLINTON, Abby and Jon Winkelried Chair in Political Science
WILLIAM COLLINS, Terence E. Adderley, Jr., Chair, in Economics
ANDREW DAUGHEY, Gertrude Conaway Vanderbilt Chair in Economics
COLIN DAYAN, Robert Penn Warren Chair in the Humanities
ARTHUR A. DEMAREST, Ingram Chair in Anthropology
EMMANUEL BIBENETTO, Centennial Professor of Mathematics
DENNIS C. DICKERSON, Reverend James M. Lawson, Jr., Chair in History
TOM DILLEHAY, Rebecca Webb Wilson University Distinguished Chair in Anthropology and Religion and Culture
TONY LEE EARLEY, Samuel Milton Flaiming Chair in English
LYNN E. ENTERLINE, Nancy Perot Mullford Chair in English
JAMES A. EPSTEIN, Distinguished Professor of History
EDWARD H. FRIEDMAN, Gertrude Conaway Vanderbilt Chair in Spanish
ISABEL GAUTHER, David K. Wilson Chair in Psychology
JOHN G. GEER, Gertrude Conaway Vanderbilt Chair in Political Science
LENN E. GOODMAN, Andrew W. Mellon Chair in the Humanities
JOHN C. GORE, Hertha Ramsey Cruse University Chair in Radiology and Radiological Sciences and Biomedical Engineering and Physics
SENTA VICTORIA GREENE, Stevenson Chair in Physics
RICHARD F. HAGLUND, JR., Stevenson Chair in Physics
BARBARA HAHN, Distinguished Professor of German
JOSEPH H. HAMILTON, Landon C. Garland Distinguished Chair in Physics
JOEL HARRINGTON, Centennial Professor of History
DAVID J. HESS, James Thornton Fanth Chair in Sustainability Studies
RUTH HILL, Andrew W. Mellon Chair in the Humanities
STEVEN D. HOLLON, Gertrude Conaway Vanderbilt Chair in Psychology
GEORGE M. HORNBERGER, University Distinguished Professor of Civil and Environmental Engineering and Earth and Environmental Sciences
LARRY W. ISAAC, Gertrude Conaway Vanderbilt Chair in Sociology
MARK JARMA, Centennial Professor of English
CHRISTOPHER M. S. JOHNS, Norman L. and Roselea J. Goldberg Chair in Art History
CARL H. JOHNSON, Stevenson Chair in Biological Sciences
JEFFREY N. JOHNSTON, Stevenson Chair in Chemistry
VAUGHAN JONES, Stevenson Distinguished Chair in Mathematics
CATHY LOGIN JRADE, Chancellor's Chair in Spanish

JON H. KAAS, Gertrude Conaway Vanderbilt Distinguished Chair in Psychology
CINDY D. KAM, William R. Kenan, Jr., Chair in Political Science
GENINNI KASPAROV, Stevenson Chair in Mathematics
LUTZ KOEPNICK, Gertrude Conaway Vanderbilt Chair in German
MICHAEL KREYLING, Gertrude Conaway Vanderbilt Chair in English
VERA M. KUTZINSKI, Martha Rivers Ingram Chair in English
JOHN LACHS, Centennial Professor in Philosophy
PETER LAKE, Martha Rivers Ingram University Distinguished Chair in History
JONATHAN LAMB, Andrew W. Mellon Chair in the Humanities
JANE G. LANDERS, Gertrude Conaway Vanderbilt Chair in History
DAVID E. LEWIS, William R. Kenan, Jr., Chair in Political Science
TONG LI, Gertrude Conaway Vanderbilt Chair in Economics
GORDON D. LOGAN, Centennial Professor of Psychology
WILLIAM LUIJS, Gertrude Conaway Vanderbilt Chair in Spanish
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LAWRENCE J. MARNETT, University Professor of Biochemistry, Chemistry, and Pharmacology
MARY GEDDES STATSHAM Chair
LARRY MAY, W. Alton Jones Chair in Philosophy
RALPH MCKENZIE, Distinguished Professor of Mathematics
JOHN MCLEAN, Stevenson Chair in Chemistry
DOUGLAS G. MCMAHON, Stevenson Chair in Biological Sciences
JONATHAN METZL, Frederick B. Rentschler II Chair in Sociology and Medicine, Health, and Society
CATHY LOGIN JRADE, Chancellor's Char in Spanish

LORRIE MOORE, Gertrude Conaway Vanderbilt Chair in English
KEVIN D. MURPHY, Andrew W. Mellon Chair in the Humanities
DANA NELSON, Gertrude Conaway Vanderbilt Chair in English
KELLY OLIVER, W. Alton Jones Chair in Philosophy
ALEXANDER O’SHANSKY, Centennial Professor of Mathematics
SOKRATES T. PANTELIDES, University Distinguished Professor of Physics and Engineering: William A. and Nancy F. McMinn Chair in Physics
SOPHIE PARK, Gertrude Conaway Vanderbilt Chair in Psychology
JAMES G. PATTON, Stevenson Chair in Biological Sciences
JENNIFER F. REINGANUM, E. Bronson Ingram Chair in Economics
ANTONIS ROKAS, Cornelius Vanderbilt Chair in Biological Sciences
SANDRA J. ROSENTHAL, Jack and Pamela Egan Chair in Chemistry
EDWARD L. RUBIN, University Professor of Law and Political Science
KAMAL SAGGI, Frances and John Downing Family Chair
LARRY L. SCHUMAKER, Stevenson Chair in Mathematics
MICHIEL J. SELIGSON, Centennial Professor in Political Science
TRACY D. SHARPLEY-WHTING, Gertrude Conaway Vanderbilt Chair in African American and Diaspora Studies and French
HELIMUT W. SMITH, Martha Rivers Ingram Chair in History
HORTENSE J. SPILLERS, Gertrude Conaway Vanderbilt Chair in English
TONY K. STEWART, Gertrude Conaway Vanderbilt Chair in the Humanities

GARY ALLEN SULIKOWSKI, Stevenson Chair in Chemistry
ROBERT B. TALISSE, W. Alton Jones Chair in Philosophy
MARK SAPIR, Centennial Professor of Mathematics
JEFFREY D. SCHALL, E. Bronson Ingram Chair in Neuroscience
LARRY L. SCHUMAKER, Stevenson Chair in Mathematics
MISHA A. SELIGSON, Centennial Professor in Political Science
EDWARD L. RUBIN, University Professor of Law and Political Science
KAMAL SAGGI, Frances and John Downing Family Chair
LARRY L. SCHUMAKER, Stevenson Chair in Mathematics
W. KIP VISCUSI, University Distinguished Professor of Law, Economics, and Management
DAVID J. WASSERSTEIN, Eugene Greener, Jr., Chair in Jewish Studies
JOHN A. WEGMARK, Gertrude Conaway Vanderbilt Chair in Economics
JOHN P. WIKSJO, JR., Gordon A. Cain University Chair in Physics
A. B. Learned Chair in Living State Physics
DAVID CHARLES WOOD, W. Alton Jones Chair in Philosophy
DAVID W. WRIGHT, Stevenson Chair in Chemistry
LAURENCE J. ZWIEBEL, Cornelius Vanderbilt Chair in Biological Sciences
Faculty Council

Tiffiny Tung, Chair. Laura Carpenter, Secretary. Ex officio: Dean of the College.

DIVISIONAL MEMBERS.

Terms expiring May 2016: David Blackbourn, Colin Dayan, Edward Saff
Terms expiring May 2017: Laura Carpenter, Marshall Eakin, Eva Harth

AT-LARGE MEMBERS.

Terms expiring May 2016: Jane Landers, Virginia Scott, Tiffiny Tung
Terms expiring May 2017: Letizia Modena, Dana Nelson, Lucius Outlaw

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ADMINISTRATIVE COMMITTEE

ADMISSIONS COMMITTEE

ART GALLERY COMMITTEE

AXLE IMPLEMENTATION COMMITTEE

COMMITTEE ON ACADEMIC STANDARDS AND PROCEDURES

COMMITTEE ON EDUCATIONAL PROGRAMS

COMMITTEE ON GRADUATE EDUCATION

COMMITTEE ON HEALTH RELATED PROFESSIONS

COMMITTEE ON INDIVIDUAL PROGRAMS

COMMITTEE ON UNDERGRADUATE INTERDISCIPLINARY STUDIES

CURRICULUM COMMITTEE

INTERNATIONAL STRATEGY COMMITTEE

SECOND LANGUAGE STUDY COMMITTEE

STUDENT-FACULTY RELATIONS COMMITTEE

STUDY ABROAD COMMITTEE

Faculty

DOUGLAS KILPATRICK ABBOT, Associate Professor of Biological Sciences; Vice Chair of Biological Sciences
B.S. (Georgia 1989); M.S. (Simon Fraser [Canada] 1994); Ph.D. (Arizona 2001) [2004]

BROOKE A. ACKERLY Associate Professor of Political Science; Associate Professor of Human and Organizational Development
B.A. (Williams 1988); Ph.D. (Stanford 1997) [2001]

PHILLIP I. ACKERMAN-LIEBERMAN, Assistant Professor of Jewish Studies; Assistant Professor of Law; Assistant Professor of Religious Studies
B.A. (University of Washington 1990); M.S. (London School of Economics [UK] 1991); M.A. (Jewish Theological Seminary 2002); Ph.D. (Princeton 2007) [2009]

JOHN F. AHNER, Professor of Mathematics
B.A., Ph.D. (Delaware 1967, 1972) [1974]

SCOTT F. AIKIN, Assistant Professor of Philosophy; Assistant Professor of Classics
A.B. (Washington University 1994); M.A. (Montana 1999); Ph.D. (Vanderbilt 2006) [2006]

LEONARD P. ALBERSTADT, Professor of Geology, Emeritus
B.S., M.S. (Tulane 1959, 1962); Ph.D. (Oklahoma 1967) [1967]

ROYAL G. ALBRIDGE, JR., Professor of Physics, Emeritus
B.S. (Ohio State 1965); Ph.D. (California, Berkeley 1960) [1961]

AKRAM ALDROUBI, Professor of Mathematics
M.S. (Swiss Federal Institute of Technology 1982); Ph.D. (Carnegie Mellon 1987) [1997]

MICHAEL ALIJEWICZ, Lecturer in English; Pre-major Academic Advisor
B.A. (Columbia 2008); M.A., Ph.D. (Vanderbilt 2009, 2013) [2013]

BRANDON A. ALLY, Assistant Professor of Neurology; Assistant Professor of Neurological Surgery; Assistant Professor of Psychiatry; Assistant Professor of Psychology

FRANCES A. ALPREN, Senior Lecturer in Spanish

CANDICE AMICH, Assistant Professor of English
M.A., Ph.D. (Rutgers 2008, 2012) [2014]

KATHRYN H. ANDERSON, Professor of Economics

YAGO ANTONIL PICHEL, Assistant Professor of Mathematics
Maitrise (Université Claude Bernard Lyon 1 [France] 2003); Licenciatura en Matematica (Santiago de Compostela [Spain] 2004); M.A. (Universidad Complutense de Madrid [Spain] 2005); Ph.D. (Universidad Autónoma de Barcelona [Spain] 2010) [2013]

CELIA APPLEGATE, William R. Kenan Jr. Chair of History; Vice Chair of History
B.A. (Bryn Mawr 1981); Ph.D. (Stanford 1987) [2012]

DAVID MICHAEL ARONOFF, Associate Professor of Medicine; Associate Professor of Medicine, Health, and Society; Director, Division of Infectious Diseases
B.S. (Indiana, Fort Wayne 1991); M.D. (Tufts 1995) [2013]

JEREMY ATACK, Professor of Economics, Emeritus; Research Professor of Economics

JAMES E. AUER, Senior Lecturer in Asian Studies, Emeritus

PANNEET S. AULAKH, Mellon Assistant Professor of English

MICHAEL L. AURBACH, Professor of Art

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