College of Arts and Science

Administration and Faculty................................................................. 62
A Community for Liberal Learning.......................................................... 65
Degree Program in the College................................................................ 68
Additional Programs ............................................................................. 76
Honors ..................................................................................................... 82
Academic Regulations .......................................................................... 85
Programs of Study.................................................................................. 97
Courses .................................................................................................... 212
College of Arts and Science

JOHN G. GEER, Ph.D., Dean
C. ANDRÉ CHRISTIE-MIZELL, Ph.D., Dean of Undergraduate Education
BONNIE J. DOW, Ph.D., Dean of Academic Initiatives
KAMAL SAGGI, Ph.D., Dean of Faculty
DAVID W. WRIGHT, Ph.D., Dean of Graduate Education and Research
YOLLETTE T. JONES, Ph.D., Associate Dean of Undergraduate Education
ROGER E. MOORE, Ph.D., Associate Dean of Undergraduate Education
DANIEL MORGAN, Ph.D., Associate Dean of Undergraduate Education
JONATHAN PETTY, B.A., Associate Dean of Development and Alumni Relations
ANDREA HEARN, Ph.D., Assistant Dean of Undergraduate Education
ROGER E. MOORE, Ph.D., Associate Dean of Undergraduate Education
DANIEL MORGAN, Ph.D., Associate Dean of Undergraduate Education
JONATHAN PETTY, B.A., Associate Dean of Development and Alumni Relations
ANDREA HEARN, Ph.D., Assistant Dean of Undergraduate Education
PATRICK J. RETTON II, B.S., Chief Business Officer
HOLLIS CALHOUN, M.P.A., Executive Director of Strategic Affairs and Communications
MELISSA WOCHER, B.A., Administrative Director

Named and Distinguished Chairs

CElia STEWART APPLEGATE, William R. Kenan, Jr., Chair in History
HOUSTON A. BAKER, JR., University Distinguished Professor in 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
RANDOLPH BLAKE, Centennial Professor in 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
MARIAMALCAMPOS-PONS, Cornelius Vanderbilt Chair in Art
CHRISTOPHER CARPENTER, E. Bronson Ingram Chair in Economics
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
JEFFERSON R. COWIE, J. G. Stahlman Chair in American History
KATHERINE CRAWFORD, Cornelius Vanderbilt Chair in Gender and Sexuality Studies and History
KATE DANIELS, Edwin Mims Chair in English
COLIN DAYAN, Robert Penn Warren Chair in the Humanities
ARTHUR A. DEMAREST, Ingram Chair in Anthropology
EMMANUELE DIBENEDETTTO, Centennial Professor in 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
MARSHALL C. EAKIN, Distinguished Professor of History
TONY LEE EARLEY, Samuel Milton Fleming Chair in English
BRANDT F. EICHMAN, William R. Kenan, Jr., Chair
LYNN E. ENTERLINE, Nancy Perot Mulford Chair in English
EDWARD FISCHER, Cornelius Vanderbilt Chair in Anthropology
LEONARD FOLGARAIT, Distinguished Professor in History of Art and Architecture
EDWARD H. FRIEDMAN, Gertrude Conaway Vanderbilt Chair in Spanish
ISABEL GAUTHIER, 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 Cress University Chair in Radiology and Radiological Sciences and Biomedical Engineering and Physics
TODD R. GRAHAM, Stevenson Chair in Biological Sciences
SENNA VICTORIA GREENE, Stevenson Chair in Physics
RICHARD F. HAGLUND, JR., Stevenson Chair in Physics
BARBARA HAHN, Max Kade Foundation Chair in German Studies
JOSEPH H. HAMILTON, Landon C. Garland Distinguished Chair in Physics
JOEL HARRINGTON, Centennial Professor in History
DAVID J. HESS, James Thornton Fant Chair in Sustainability Studies
RUTH HILL, Andrew W. Mellon Chair in the Humanities
J. KELLY HOLLEY-BOCKELMANN, Stevenson Chair in Physics and Astronomy
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
SARAH E. IGO, Andrew Jackson Chair in American History
ATSUSHI INOUE, Cornelius Vanderbilt Chair in Economics
LARRY W. ISAAC, Gertrude Conaway Vanderbilt Chair in Sociology
MARK JARMAN, Centennial Professor in English
CHRISTOPHER M. S. JOHNS, Norman L. and Roselea J. Goldberg Chair in Art History
CARL H. JOHNSON, Cornelius Vanderbilt Chair in Biological Sciences
JEFFREY N. JOHNSTON, Stevenson Chair in Chemistry
VAUGHAN JONES, Stevenson Distinguished Chair in Mathematics
JON H. KAAS, Gertrude Conaway Vanderbilt Distinguished Chair in Psychology
CINDY D. KAM, William R. Kenan, Jr., Chair in Political Science
LUTZ KOEPNICK, Gertrude Conaway Vanderbilt Chair in German
VERA M. KUTZINSKI, Martha Rivers Ingram Chair in English
JOHN LACHS, Centennial Professor in Philosophy
Faculty Council

Jennifer Fay, Chair. Lucius Outlaw, Secretary. *Ex officio*: Dean of the College.

DIVISIONAL MEMBERS.
Terms expiring May 2020: Dietmar Bisch, Betsey Robinson, Mariano Sana

Terms expiring May 2021: William Caferro, Larisa DeSantis, Jennifer Fay, Doug Hardin, Mattias Polborn, Tariq Thachil

AT-LARGE MEMBERS.
Terms expiring May 2020: Paul Kramer, Lucius Outlaw, Tiffany Patterson

Rosters for the following Arts and Science committees are available at *as.vanderbilt.edu/faculty/committees.php*.

ADMINISTRATIVE COMMITTEE

ADMISSIONS 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
SECOND LANGUAGE STUDY COMMITTEE
STUDENT-FACULTY RELATIONS COMMITTEE
STUDY ABROAD COMMITTEE

Faculty

For a list of current faculty, please visit virg.vanderbilt.edu/webtools/registry.
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.

Faculty 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 more than 500 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 / Tutoring Services
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, 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

One-on-one tutoring in many subjects is available through Tutoring Services, also located at 1801 Edgehill Avenue. Consultations in the Writing Studio and in Tutoring Services are 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)
  Stevenson computer lab and lounge (Stevenson Center 2200)
  Wilson computer lab (Wilson Hall 120)

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 VUGmail and e-resources in the libraries, as well as course materials in Brightspace. While use of the above facilities is free, printing is charged per page.

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 weekdays until 1:00 a.m. All lab hours are posted by semester at 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 advisers from CASPAR (College of Arts and Science Pre-major Academic Advising Resources Center). These “pre-major 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 advisers are specially 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 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, several members of the Dean’s Office of Undergraduate Education, 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. Byrn 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 lectureship 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 lectureship 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.
Degree 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 2.000,
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).

**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, *Understanding Your Core Curriculum & Pre-major Advising*, a College of Arts and Science manual for entering students.

**Where to Get Advice**

Entering students are assigned pre-major advisers from CASPAR (College of Arts and Science Pre-major Academic Advising Resources Center). Pre-major 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 one-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 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 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.)

**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 of basic skills in English composition; completion of a First-Year Writing Seminar; completion of a writing course (indicated by a “W”) no later than the fourth semester in residence; and completion of a second writing course (indicated by a “W”) or an approved course in oral communication (CMST 2100, 2110, or 2120).

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 ENGL 1100 (appropriate test score or one course)
   b. First-Year Writing Seminar (one course)
   c. a W course before the end of the fourth semester (one course)
   d. a second W course or approved Oral Communication course (one 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.

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. Students beyond their second semester in residence may not register for First-Year Writing Seminars, nor may First-Year Writing Seminars be repeated after completion of the second semester in residence.

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. Competence is demonstrated by completion of ENGL 1100 or any of the following test-based or transfer-credit satisfiers:
   i. SAT: Combined score of at least 1220 on the Writing and Critical Reasoning sections, with a minimum score of 500 on each (test taken prior to March 2016).
   ii. SAT: Score of at least 660 on the Evidence-Based Reading and Writing section, with a minimum score of 27 on the Reading section and a minimum score of 28 on the Writing and Language section (test taken March 2016 or later).
   iii. ACT: Score of at least 30 on the English portion (beginning October 2016).
   iv. AP: Minimum score of 4 on the English Language or English Literature exam.
   v. IB: Minimum score of 6 on the Higher level English exam.
   vi. Transfer credit for English 1100
   vii. Transfer credit for English 1210W, 1220W, 1230W, 1250W, 1260W, 1270W, or 1300W. (If used to satisfy the English composition requirement, the transfer credit does NOT also count as the W course required to achieve
junior standing.)

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

c) All students must successfully complete at least one Arts and Science writing course (indicated by a “W”) at Vanderbilt University, regardless of AP or IB credits, SAT scores, or ACT scores earned prior to matriculation. The 1000-level writing-intensive courses emphasize general writing skills within the context of discipline-specific subject matter. The 2000 and higher-level writing-intensive 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. All students are required to complete a W course (other than ENGL 1100 or a First-Year Writing Seminar) no later than the fourth semester. All Arts and Science W courses also count in their appropriate distribution areas within the Liberal Arts Requirement.

d) All students must successfully complete either a second Arts and Science W course (other than ENGL 1100 or a First-Year Writing Seminar), or an approved course in oral communication (CMST 2100, 2110, 2120) at Vanderbilt University, regardless of AP or IB credits, SAT scores, or ACT scores earned prior to matriculation. 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 to enhance effective speaking skills. All students must complete Part d of the Writing Requirement before graduation.

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 cultures 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
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.

Note: All students who study abroad must register their travel in advance with Vanderbilt’s international security provider. Registration is completed on your behalf if you enroll in a program offered through the Global Education Office. Otherwise, information is available on the GlobalVU website: vanderbilt.edu/global.

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 Language Center; 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 available in YES. Using the advanced-class-search dialog box, use the pull-down menu under “Class Attributes” to select an AXLE category.

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

With the exception of basic English composition and the foreign language proficiency requirements, 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.

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 departmental majors offered in the following fields:

<table>
<thead>
<tr>
<th>African American and Diaspora Studies</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology</td>
<td>History of Art and Architecture</td>
</tr>
<tr>
<td>Architecture and the Built Environment</td>
<td>Jewish Studies</td>
</tr>
<tr>
<td>Art</td>
<td>Law, History, and Society</td>
</tr>
<tr>
<td>Asian Studies</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>Medicine, Health, and Society</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Molecular and Cellular Biology</td>
</tr>
<tr>
<td>Cinema and Media Arts</td>
<td>Philosophy</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>Physics</td>
</tr>
<tr>
<td>Earth and Environmental Sciences</td>
<td>Political Science</td>
</tr>
<tr>
<td>Ecology, Evolution, and Organismal Biology</td>
<td>Psychology</td>
</tr>
<tr>
<td>Economics</td>
<td>Religious Studies</td>
</tr>
<tr>
<td>English</td>
<td>Russian Studies</td>
</tr>
<tr>
<td>Environmental Sociology</td>
<td>Sociology</td>
</tr>
<tr>
<td>French</td>
<td>Spanish</td>
</tr>
<tr>
<td>Gender and Sexuality Studies</td>
<td>Spanish and Portuguese</td>
</tr>
<tr>
<td>German Studies</td>
<td>Theatre</td>
</tr>
</tbody>
</table>

**Defined Interdisciplinary Programs**

Students may also major in defined interdisciplinary programs (listed below). 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.

<table>
<thead>
<tr>
<th>American Studies</th>
<th>German and European Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry and Chemical Biology</td>
<td>Italian and European Studies</td>
</tr>
<tr>
<td>Classical and Mediterranean Studies</td>
<td>Latin American Studies</td>
</tr>
<tr>
<td>Communication of Science and Technology</td>
<td>Latino and Latina Studies</td>
</tr>
<tr>
<td>Economics and History</td>
<td>Neuroscience</td>
</tr>
<tr>
<td>European Studies</td>
<td>Public Policy Studies</td>
</tr>
<tr>
<td>European Studies: Russia and Eastern Europe</td>
<td>Spanish and European Studies</td>
</tr>
</tbody>
</table>

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.

Students officially declare their majors by registering with the chosen department(s) or interdisciplinary program(s), and with the Dean’s Office of Undergraduate Education 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, with whom they should work closely.

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 the “What is Liberal Education?” section 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.

Normally, no more than three introductory-level courses will be counted toward the interdisciplinary major.

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

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 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 2.000 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 Dean’s Office of Undergraduate Education 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 final 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 | Economics | Mediterranean Archaeology |
| American Studies | English | Mediterranean Studies |
| Anthropology | Environmental and Sustainability Studies | Nanoscience and Nanotechnology** |
| Arabic Language | European Studies | Neuroscience |
| Architecture and the Built Environment | French | Philosophy |
| Environment | Gender and Sexuality Studies | Physics |
| Art | German Studies | Political Science |
| Asian Studies | History | Portuguese |
| Astronomy | History of Architecture | Psychology |
| Biological Sciences | Islamic Studies | Religious Studies |
| Brazilian Studies | Italian Studies | Russian Studies |
| Chemistry | Japanese Language and Culture | Scientific Computing** |
| Chinese Language and Culture | Culture | Sociology |
| Cinema and Media Arts | Jewish Studies | South Asian Language and Culture |
| Communication of Science | Korean Language and Culture | Spanish |
| and Technology | Latin American Studies | Theatre |
| Communication Studies | Latino and Latina Studies | Undergraduate Business |
| Earth and Environmental Sciences | Mathematics | Minor^ |
| Medicine, Health, and Society | **Administered by the School of Engineering in collaboration with the College of Arts and Science

^Administered by the four undergraduate schools and the Owen Graduate School of Management
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. Students should contact the director of undergraduate studies in the field of interest for more information.

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 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 approved 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). The College only accepts credit from international schools and programs that have been approved by Vanderbilt faculty, and for which the University has a contract or agreement.

Pre-Professional Studies

Medicine

Students interested in the study of medicine should plan their undergraduate programs in consultation with Dr. Michelle Grundy, 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.

In light of the Medical College Admissions Test (MCAT) changes that took effect in 2015, it is recommended that students take one semester of biochemistry and one semester of introductory statistics. Additionally, through course work or self-directed study, students will need to be knowledgeable in basic concepts of psychology, sociology, and bioethics.

For more information, students are advised to visit the website of the Health Professions Advisory Office (vanderbilt.edu/hpao) and refer to the links for 1) “Premedical Preparation” and 2) “Threading a path through premedical expectations.”

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 Dr. Michelle Grundy, 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.

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 from the pre-architecture advisers: Professor Vesna Pavlović, Department of Art, and Professor Kevin Murphy, Department of the History of Art and Architecture.

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, in the Department of Political Science.

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 the director of undergraduate studies 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 Dean’s Office of Undergraduate Education in 350 Buttrick Hall, although students register for internships through their respective school. The deadline for submitting registration forms to the office of Dean Jones 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 Career Center.

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):
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, which 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; History of Art and Architecture; 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 the Dean’s Office of Undergraduate Education (350 Buttrick Hall), 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 as.vanderbilt.edu/academics/specialdegree/4plus1.php), 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 whether 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 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.

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 A&S Deans’ Office, 350 Buttrick Hall, or consult the website https://as.vanderbilt.edu/academics/specialdegree/4plus1.php.
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 three years’ Arts and Science graduating seniors.
- **Magna Cum Laude.** Students whose grade point average equals or exceeds that of the next 8 percent of the previous three years’ Arts and Science graduating seniors.
- **Cum Laude.** Students whose grade point average equals or exceeds that of the next 12 percent of the previous three years’ Arts and Science graduating seniors.

College Scholars Program
The College Scholars Program is the honors program for the College of Arts and Science. All first-year students in the College of Arts & Science are invited to apply at the end of their first semester. Students are selected to participate in the College Scholars program based on their academic record and achievements from their first semester on campus. These students have the opportunity to pursue advanced scholarly work in honors seminars and enriched courses or independent-studies projects. The College Scholars program is open only to Arts and Science students.

College Scholars may achieve the designation “Honors in the College of Arts and Science” on their diplomas by acquiring fifteen “honors points” in the program. The honors points system encourages breadth and depth. Students accomplish these goals by taking honors seminars in several AXLE categories and by doing independent projects (independent studies, enriching courses, departmental honors research, internships, service, and creative projects). A maximum of thirteen points may be earned in honors seminars, and a minimum of two research projects must be completed to earn fifteen points. Students must earn a grade of “B” or better in classes that earn honors points. 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 within their field, many departments and interdisciplinary programs of the College of Arts and Science offer honors programs for selected, superior candidates. Students often begin departmental honors work in the junior year, but some projects start in the senior year. 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 Dean’s Office of Undergraduate Education after nomination by the department(s) and/or interdisciplinary program(s) concerned.

Requirements to complete departmental honors vary 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 diplomas.

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 Language Center test scores.

Mathematics proficiency may be demonstrated by completing two semesters of calculus or one semester of calculus and one semester of statistics. Courses must be taken on a graded rather than a P/F basis. The mathematics requirement may be satisfied with Advanced Placement, International Baccalaureate, or A-Level exam 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 detailed 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 Gender and Sexuality 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 Dean’s Office of Undergraduate Education in 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. The Dean’s Office of Undergraduate Education does not grant excused absences for students. For more information please visit https://as.vanderbilt.edu/academics/policies/absences.php.

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 the Office of Student Access Services 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 350 Buttrick 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 350 Buttrick 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 Dean’s Office of Undergraduate Education 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. A minimum 12 graded credit hours is required.

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.

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 eligible to count toward the major or minor, regardless of whether the student has already satisfied major
or minor requirements;
7. Courses that have been specifically excluded from the P/F option;
8. Courses taken previously.

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. Pass/Fail rules, requirements, and deadlines are not petitionable.

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 for the student enrolled under the P/F option. Any grade of $D-$ or above is converted in the Student Records System to a $P$, while an $F$ will be recorded if a student enrolled under this option fails the course. The $P$ grade is not counted in the grade point average nor used in the determination of honors. The grade of $F$ earned under the Pass/Fail option is included in the calculation of the grade point average.

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 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 undergraduate 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 Dean’s Office of Undergraduate Education. 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.

**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. Failed courses may be repeated until passed; passed courses may be repeated only once.
2. Exactly the same course (same department and course number) is completed. A repeated First-Year Writing Seminar must have the same department and section number but cannot be repeated after completion of the second semester in residence.
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 some 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. These
are designated in the departmental course listings.

Courses taken in the College of Arts and Science may not be repeated elsewhere 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 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 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 350 Buttrick Hall. 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 Dean’s Office of Undergraduate Education 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, and in all cases must be approved 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 in the Academic Record application in YES. 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 Dean’s Office of Undergraduate Education 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; there 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 Dean’s Office of Undergraduate Education. 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 Dean’s Office of Undergraduate Education, 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 Dean’s Office of Undergraduate Education 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, no more than once in one course 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 and students taking fewer than 12 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 carefully and discuss it with their advisers. Any errors should be
reported immediately to the Dean’s Office of Undergraduate Education (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
I: incomplete in some requirement other than final examination
MI: absent from final examination and incomplete work
IP: first semester grade for two-semester Honors sequence

Plus and minus modifiers may be associated with letter grades A through D as shown in the table below. Grade
point averages are calculated using indicated grade point values.

Defined Grades with Corresponding Grade Points Per Credit Hour

\[
\begin{align*}
\text{A} & = 4.0 \\
\text{A–} & = 3.7 \\
\text{B+} & = 3.3 \\
\text{B} & = 3.0 \\
\text{B–} & = 2.7 \\
\text{C+} & = 2.3 \\
\text{C} & = 2.0 \\
\text{C–} & = 1.7 \\
\text{D+} & = 1.3 \\
\text{D} & = 1.0 \\
\text{D–} & = 0.7 \\
\text{F} & = 0.0
\end{align*}
\]

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 with 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, in consultation with the professor of the course, to notify the Dean’s Office of Undergraduate Education 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 arrange a makeup examination, in consultation with the instructor of the course. It is optimal that this makeup examination is administered during the first full week after the Change Period of the next semester, provided the student is in residence. 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 responsibility of the student who misses a final examination, in consultation with the professor of the course, to notify the Dean’s Office of Undergraduate Education immediately.

**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 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 required by the Office of the University Registrar to assess the program for which transfer of credit is requested. Work presented for transfer must be from a regionally accredited college and is subject to evaluation in light of the degree requirements of the College of Arts and Science. Credit will not be awarded for independent study, physical education, or dance performance courses.

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.

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 a regionally-accredited institution. To qualify for such credit, the student must be in good academic standing and must obtain prior authorization from the appropriate department by submitting courses through the Transfer Credit Submission application in YES. A detailed course syllabus is required in order for a course to be evaluated. 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. Students cannot transfer credit for summer work from outside of the country of their permanent home address.

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 academic 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 submitting courses through the Transfer Credit Submission application in YES. A detailed course syllabus is required in order for a course to be evaluated. 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. Students cannot transfer credit for semester work from outside of the country of their permanent home address.

Senior-in-Absentia
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 Dean’s Office of Undergraduate Education in the College of Arts and Science. All students who have completed one regular (fall/spring) semester at Vanderbilt 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. 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 appropriate documentation to the Dean’s Office of Undergraduate Education and the Office of Student Care Coordination.

Applications for leaves of this type must be filed with the committee at least one month before the close of the preceding semester. Requests for leave of absence for purpose of semester study away may be allowed if the semester study-away institution is domestic to the student. Requests for leave of absence plus semester study away are not allowed if the semester study-away institution is international to the student.

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 reinstatement.

**Withdrawal from the University**
Students proposing to withdraw from the university during a regular term must report to the Dean’s Office of Undergraduate Education in 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. They should notify the university, through the Office of the University Registrar, online or in writing, of any address changes as soon as possible. They are provided an opportunity to review address information at registration. The university will consider notices and other information delivered if mailed to the address on file in the Office of the University Registrar.

**Academic Discipline**
The College of Arts and Science requires each student to maintain an academic record that will permit graduation according to a specified schedule. Students are considered to fall short of the expected rate of progress when

1. They pass fewer than 12 credit hours in a semester or have a semester grade point average lower than 1.500; or
2. In a summer they take 12 or more credit hours but pass fewer than 12 credit hours or earn a grade point average lower than 1.500; or
3. They fail to achieve sophomore, junior, or senior standing within the time allowed; or
4. They accumulate more than two probations after the freshman year, in which case they will normally be dropped from the university; or
5. As first-semester freshmen they pass fewer than two courses or earn a semester grade point average lower than 1.000, in which case they may be required to take a probationary leave of absence; or
6. As first-semester freshmen they earn fewer than 9 credit hours or a semester grade point average lower than 1.500, in which case they may be offered a choice (see Semester Requirements below).
Any student who falls somewhat short of the prescribed levels of academic achievement is normally placed on probation. Any student who fails by a wide margin to reach these levels or who has been placed on probation more than once is reviewed by the Administrative Committee, and may be dropped from the university without having previously been placed on academic probation. The committee considers each case within the framework of the guidelines outlined below and may take any of several actions, among which are the following:

1. The student may be placed on probation;
2. The student may be advised to take a leave of absence or to withdraw from the university;
3. The student may be required to take a leave of absence;
4. The student may be dropped from the university.

Semester Requirements

Full-time students are expected to earn each semester at least 12 credit hours and a minimum grade point average of 1.500. Students who fall short of these levels are normally placed on probation. Students are removed from probation after earning at least 12 credit hours and a semester grade point average of 1.500 or better, assuming they have fulfilled the requirements for class standing stated below.

First-year students who pass fewer than two regular courses in their first regular semester or who earn a semester grade point average lower than 1.000 have so seriously compromised their academic standing that they may be required to take a probationary leave of absence until the beginning of the following fall semester.

First-year students who earn fewer than 9 credit hours or a grade point average lower than 1.500 in the fall may, at the discretion of the Administrative Committee, choose a probationary leave for the spring and return the next fall with two semesters in which to qualify for sophomore standing.

A student on probationary leave may not earn credit at another institution for transfer to Vanderbilt. In appropriate cases the Administrative Committee may prescribe conditions that must be satisfied before the student returns from a probationary leave. Students who do not choose to return at the end of a probationary leave but want to return later are required to apply for reinstatement.

After their first year, full-time students may not be placed on probation more than twice (continuance on probation for a second semester counts as another probation). If a student’s performance is deficient a third time, the student is dropped from the university.

Students who have been authorized to carry fewer than 12 credit hours because of illness or outside employment may be placed on academic probation if their work is deemed unsatisfactory by the Administrative Committee; they are removed from probation when the committee deems their work satisfactory. If they are not removed from probation after a reasonable period of time, such students are dropped.

The internal record of a student dropped from the university under these regulations shows the notation “Dropped for scholastic deficiency.”

Class Standing

The Administrative Committee determines how many semesters will be allowed for each part-time student to attain sophomore, junior, or senior standing.

The internal record of a student dropped from the university under these regulations shows the notation “Failed to qualify for class standing.”

Sophomore Standing

A student qualifies for sophomore standing upon completion of 24 credit hours of work with a grade point average of at least 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.
Junior Standing

A student qualifies for junior standing upon completion of 54 credit hours of work with a grade point average of 1.900, completion of four regular semesters (fall or spring), and completion of a W course at any level (other than ENGL 1100 or a First-Year Writing Seminar). Sophomores who fail to qualify for junior standing within two semesters after qualifying for sophomore 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 junior standing in this additional 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.

Seniors who fail to maintain a minimum grade point average of 2.000 are placed on probation and must have the permission of the Administrative Committee to register for another semester.

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 reinstatement. Students who are advised to withdraw from the university determine whether or not to return in consultation with the Dean’s Office of Undergraduate Education. Students who have been dropped may apply to the Office of the University Registrar for reinstatement; in most cases reinstatement 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. Reinstatement is competitive, and there is no assurance that it will be granted. Students reinstated 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 reinstatement. Application deadlines for reinstatement are as follows: July 15 for the fall semester, November 15 for the spring semester, and April 1 for the summer session.
Programs of Study

African American and Diaspora Studies

CHAIR Tracy D. Sharpley-Whiting
DIRECTOR OF UNDERGRADUATE STUDIES Claudine Taaffe
DIRECTOR OF GRADUATE STUDIES Gilman W. Whiting
PROFESSORS Victor Anderson, Houston Baker, David Ikard,
   Hector F. Myers, Alice Randall, Tracy D. Sharpley-Whiting,
   Paul C. Taylor, Rhonda Williams
ASSOCIATE PROFESSORS Tiffany R. Patterson, Gilman W. Whiting
SENIOR LECTURER Claudine Taaffe
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.

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.
6. 3 credit hours from 4270, Research Methods. Majors are advised to take this course in the second semester of their junior year.
7. 3 credit hours in either 4978 (fall) or 4979 (spring), Senior Thesis in African American and Diaspora Studies.

At least 6 credit hours of the concentration must focus on the Americas (outside of the United States) and/or Africa. No more than 9 credit hours of course work may be taken at the 1000 level (excluding 1010).

Honors Program
The only route to honors in the major is writing a 3-credit hour Senior Honors Thesis in AADS 4998 (fall) or 4999 (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.

At least 6 credit hours of the minor must focus on the Americas (outside of the United States) and/or Africa, and 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 second 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


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 of Study 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.


ASIAN AMERICAN STUDIES: 3155* Blackness and the Asian Century.

ECONOMICS: 2150 Economic History of the United States.

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


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

HISTORY OF ART AND ARCHITECTURE: 1750W African American Arts; 4960* Advanced Seminar in History of Art.

JEWISH STUDIES: 2240W Black-Jewish Relations in Post-War American Literature and Culture.


PHILOSOPHY: 2665 Race and Racism.

POLITICAL SCIENCE: 2237* African Politics.

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

SOCIOLOGY: 3207 Popular Culture Dynamics; 3701 Racial Domination, Racial Progress; 3304 Race, Gender, and Health; 3702 Racial and Ethnic Minorities in the United States; 3704 Race, Gender, and Sport; 3624 Prison Life; 3711* Women, Gender, and Globalization; 3722* Gender in Society; 3723* Gender, Sexuality, and the Body.

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

Course descriptions can be found in the courses section of this catalog.

American Studies

INTERIM DIRECTOR Paul Stob (Communication Studies)
ASSOCIATE DIRECTOR Gabriel A. Torres Colón (Anthropology)

PROFESSORS C. André Christie-Mizell (Sociology), Colin Dayan (English), Ted Fischer (Anthropology), Vivien Fryd (History of Art and Architecture), Sarah E. Igo (History), Dana Nelson (English), Cecelia Tichi (English), Emilie Townes (Divinity)

ASSOCIATE PROFESSORS Teresa A. Goddu (English), Ifeoma Kiddoe Nwankwo (English)

ASSISTANT PROFESSORS Aimi Hamraie (Medicine, Health, and Society), Gabriel A. Torres Colón (Anthropology)

SENIOR LECTURERS Alexander I. Jacobs, Susan Kevra (French)

LECTURERS Mario Rewers, Danyelle Valentine

Affiliated Faculty

PROFESSORS Dan Cornfield (Sociology), Kate A. Daniels (English), Marshall C. Eakin (History), Derek Griffith (Medicine, Health, and Society), Joni Hersch (Law), Larry Isaac (Sociology), Jonathan Metzl (Medicine, Health, and Society), Kelly Oliver (Philosophy), Lucius Outlaw Jr. (Philosophy), Laurel C. Schneider (Religious Studies), Dan Sharfstein (Law), Hortense Spillers (English), Dan Usner (History)

ASSOCIATE PROFESSORS Vanessa Beasley (Communication Studies), Claire Sisco King (Communication Studies), Richard Lloyd (Sociology), Jim Lovensheimer (Musicology), Leah Lowe (Theatre), Ken MacLeish (Medicine, Health, and Society, Paul Miller (French and Italian), Ann Neely (Teaching Learning), Paul Stob (Communication Studies)

ASSISTANT PROFESSORS Ashley Carse (Human and Organizational Development), Sara Safransky (Human and Organizational Development)

SENIOR LECTURER Chalene Helmuth (Latin American Studies)

OTHER AFFILIATED FACULTY Joe Bandy (Assistant Director of the Center for Teaching)

THE Program in American Studies is an interdisciplinary program fostering the in-depth study of American cultures from a variety of perspectives. Students choose their path through the major or minor based on their own intellectual commitments. Through course offerings, colloquia, and research opportunities, students examine questions of power and conflict, experience and identity, and tradition and social change—both within and beyond the territorial borders of the United States and the Americas. The program allows study at the local, subnational, national, and global levels, from in-depth investigation of Nashville communities to research on transnational nongovernmental organizations. Matters of class, race, region, gender, ethnicity, sexuality, religion, law, migration, environment,
technology, politics, and the arts are central to the curriculum. Students participate in a robust set of extracurricular events, including Road Trips, City Walks, and discussion of current events through the Beyond the Headlines series. The program also encourages and provides opportunities for on- and off-campus research, internships, study abroad, and individual and group projects under the guidance of participating faculty in the humanities, arts, and social sciences.

Program of Concentration in American Studies

The interdisciplinary major in American studies consists of 30 credit hours of course work, distributed as follows:

1. **Core Requirements** (9 credit hours)

Core Courses:
- AMER 1002, Introduction to American Studies (3 credit hours)
- AMER 4000, Research Methods Workshop (3 credit hours)
- AMER 4960, Senior Project (3 credit hours)

2. **International Requirement** (3 credit hours)

One of the following:

a) AMER 3200, Global Perspectives on the U.S. (3 credit hours)

b) With approval of the director of undergraduate studies, a 3 credit-hour course that explicitly addresses a global perspective on the United States

Examples of approved courses include:

- ANTHROPOLOGY: 3161, Colonial Encounters in the Americas.
- ECONOMICS: 4520, Seminar on Globalization.
- INTERDISCIPLINARY STUDIES: 3831, Global Citizenship and Service; 3832, Global Community Service; 3833, Seminar in Global Citizenship and Service.
- JEWISH STUDIES: 2450, The Jewish Diaspora.

3. **Interdisciplinary Requirement** (6 credit hours)

6 credit hours from at least two different interdisciplinary programs: African American and Diaspora Studies; American Studies; Asian Studies; Cinema and Media Arts; Earth and Environmental Sciences; Gender and Sexuality Studies; Jewish Studies; Latin American Studies; Latino and Latina Studies; Medicine, Health, and Society.

Note: See below for a list of approved courses in interdisciplinary programs.

4. **Electives** (12 credit hours)
Four courses pre-approved to form a study of concentration. See below for a list of approved courses.

Minor in American Studies
The interdisciplinary minor in American studies consists of 15 credit hours of course work, distributed as follows:

1. Core Requirements 6 credit hours
2. International Requirement 3 credit hours
3. Electives 6 credit hours

Note: No course may be counted twice in calculating 15 credit hours. No more than 6 credit hours at the 1000 level can count toward the interdisciplinary minor.

1. Core Requirements (6 credit hours)
Core Courses:
AMER 1002, Introduction to American Studies (3 credit hours)
AMER 4000, Research Methods Workshop (3 credit hours)

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

a) AMER 3200, Global Perspectives on the U.S. (3 credit hours)
b) A pre-approved course that explicitly addresses a global perspective on the U.S.; see part 2(b) of the major for sample courses.

3. Electives (6 credit hours)
Two courses pre-approved to form a plan of concentration. See below for a list of approved courses.

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.

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 Writing Seminar; our introductory course to the major, AMER 1002/1002W; or an introductory course in a particular discipline or program. 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 thematic focus or scholarly problem. We also highly encourage our majors to seek opportunities for study abroad or internship possibilities. Students may take the American Studies Workshop at any time during their coursework in order to facilitate their progress towards the capstone Senior Project, taken during the spring of senior year. Distributional requirements and electives should be selected in close conjunction with the adviser.

We also encourage our students to participate in American Studies programming that occurs outside the classroom, including our Road Trips, City Walks, and Beyond the Headlines series.

Please consult the American Studies program website for detailed descriptions of courses. For all 1111, 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:** 1111 in all departments receives credit when an American topic is offered.

**Approved List of Courses**

**INTERDISCIPLINARY PROGRAMS**

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

AMERICAN STUDIES: 1111, First-Year Writing Seminar; 2100, Sport, Culture, and Society; 2500, American Cultures; 3851, Independent Readings and Research; 3852, Independent Readings and Research; 3881, Internship Readings and Research; 3890, Topics in American Studies; 4100, Undergraduate Seminar in American Studies; 4998, Senior Honors Research; 4999, Senior Honors Thesis.

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

GENDER AND SEXUALITY STUDIES: 2243, Sociologies of Men and Masculinity; 2248, Humor and Cultural Critique in Fannie Flagg’s Novels; 2249, Women and Humor in the Age of Television; 2259/2259W, Reading and Writing Lives; 2268, Gender, Race, Justice, and the Environment; 3246W, Women’s Rights, Women’s Wrongs; 3250/3250W, Contemporary Women’s Movements; 3271, Feminist Legal Theory; 3891, Special Topics: Topics in Gender, Culture, and Representation; 3893, Selected Topics (when an American topic is offered).

JEWISH STUDIES: 2280/2280W, Jewish Humor; 2400, American Jewish Life; 2420W, American Jewish Music; 2560, Social Movements in Modern Jewish Life; 3830, Contemporary Jewish Issues.


**ELECTIVES**

ANTHROPOLOGY: 2105, Race in the Americas.

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

CLASSICAL STUDIES: 3000, Classical Tradition in America.


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.

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

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; 1427W, America in the Seventies; 1430W, American Indians and the Environment; 1440, African American History since 1877; 1660, American Enterprise; 1690, Sea Power in History; 1730, The U.S. and
the Cold War; 1740, The U.S. and the Vietnam War; 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; 2662, American Slavery; 2690, The Civil Rights Movement; 2691, Barack Obama: Man and President; 2700, The U.S. as a World Power; 2721, Globalizing American History, 1877–1929; 2730, American Masculinities; 2749, American Intellectual History to 1865; 2750, American Intellectual History since 1865; 2800, Modern Medicine; 2810, Women, Health, and Sexuality; 2840, Sexuality and Gender in the Western Tradition since 1700; 3010, Pornography and Prostitution in History; 3040, Health and the African American Experience; 3140, History of New Orleans; 3170, The Federalist Papers; 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).

HISTORY OF ART AND ARCHITECTURE: 2660, American Art to 1865; 2720, Modern Architecture; 2760, Early American Modernism, 1865–1945; 2765, Art since 1945; 3735, History of Art and Architecture; 3140, History of the African American Experience; 3170, The Federalist Papers; 3746, Workshop in English and History; 3890, Selected Topics in History (when an American topic is offered).

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

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

PHILOSOPHY: 2104, Nineteenth-Century Philosophy; 2110, Contemporary Philosophy; 3008, American 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; 3119, Martin Luther King, Jr., and the Social Roles of Religion; 3142, Slave Thought and Culture in the American South; 3304W, Evangelical Protestantism and the Culture Wars.

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

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.

Course descriptions can be found in the courses section of this catalog.

Anthropology

CHAIR Beth A. Conklin
DIRECTOR OF UNDERGRADUATE STUDIES Markus Eberl
DIRECTOR OF GRADUATE STUDIES John W. Janusek
PROFESSORS EMERITI Thomas A. Gregor, Ronald Spores
PROFESSORS Arthur A. Demarest, Tom D. Dillehay, Edward F. Fischer, Lesley Gill
RESEARCH PROFESSOR Charles E. Orser Jr.
ASSOCIATE PROFESSORS Jada Benn-Torres, Beth A. Conklin, Markus Eberl, William R. Fowler Jr., T. S. Harvey, John W. Janusek, Norbert Ross, Tiffany A. Tung, Steven A. Wernke
RESEARCH ASSOCIATE PROFESSOR Patricia Netherly
ASSISTANT PROFESSORS Carwil Bjork-James, Gabriel Torres Colón
ASSISTANT PROFESSOR OF THE PRACTICE Sophie Bjork-James
RESEARCH ASSISTANT PROFESSORS Teresa Franco, Anna Guengerich, Jacob J.auer
SENIOR LECTURER Mareike Sattler
ANTHROPOLOGY is the study of human diversity in all times and places. It brings together perspectives from the sciences and humanities 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 and descendants of the African diaspora.

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, community life, and power in society. Archaeology studies past cultures through their material remains. Linguistics explores relations between language and culture. Biological anthropology examines topics such as community health in the past and present, forensic science, genetics, evolution, human biology, and bioethics. 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, create, and interact 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 about the conditions that shape people’s lives.

Program of Concentration in Anthropology

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

1. 6 credit hours. Two 1000-level surveys selected from the subfields of anthropology: 1101 (Cultural Anthropology), 1201 (Archaeology), 1301 (Biological Anthropology), 1601 (Linguistic Anthropology). A course in a third subfield is strongly recommended (in consultation with the adviser).
2. 3 credit hours. A seminar on anthropological theory (2101 or 2102). The seminar may not be used to count toward theme credit below.
3. 3 credit hours. A course on anthropological methods; this class may not count towards the theme requirement. Courses that satisfy the methods requirement include 2211, 2603, 3120, 3150, 3260, 3261, 3262, 3372, 3866, 4373, 5112, 5604. Other anthropology courses can count in consultation with the adviser.
4. 12 credit hours. Students take four upper-level courses from a predesigned theme or from a theme that they design in consultation with their adviser:
   A. Environment, landscape, and place (2109, 2113, 2114, 2150, 2160, 2214, 2220, 2221, 2222, 2225, 2227, 3121, 3138, 3200, 3240, 3250, 4154, 4155)
   B. Healing, medicine, and culture (2113/W, 2227, 2342, 2370, 3121, 3125, 3138, 3143, 3144, 3145, 3343, 3344, 3345, 3346, 3371, 3372, 4345, 4373)
   C. Social politics and power (2105, 2106, 2108, 2109, 2110, 2130, 2242, 2342, 2375, 3121, 3122, 3125, 3130, 3132, 3133, 3134, 3135, 3138, 3161, 3162, 3241, 3232, 3243, 3250, 3343, 3345, 4152, 4153)
   D. Identity, ethnicity, gender (2105, 2110, 2113W, 2160/W, 2227, 2375, 3144, 3145, 3343)
   E. Biocultural foundations in health, genetics, forensics, and ethics (2227, 2342, 2370, 2371, 3138, 3141, 3143, 3344, 3345, 3446, 3371, 3372, 4345, 4373)
   F. Language, cognition, and culture (2601, 2602, 2603, 3140, 3150/W, 3243/W, 3620, 3622/W, 4155, 5614, 6614, 6615)
5. 3 credit hours. One capstone experience in engaged anthropology. In consultation with their adviser, students may fulfill this requirement by taking a formal course (3122 and 3125) or by completing an independent study. Formal classes may not count toward both the theme requirement and the capstone experience.
6. Minimum 3 credit hours of electives chosen from ANTH courses not already used to satisfy the requirements listed above, to total 30 credit hours toward the major.
7. 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 is 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 and Architecture 1330, 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 first semester 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 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, as follows:

1. 3 credit hours. One introductory course from one of the four subfields in Anthropology: 1101 (cultural anthropology), 1301 (biological anthropology), 1201 (archaeology), 1601 (linguistics).
2. 3 credit hours. One methods or one theory course listed in the major; see above.
3. 12 credit hours. Four courses from a theme in the major designed in consultation with the adviser; see above.

Course descriptions can be found in the courses section of this catalog.

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 can be found in the courses section of this catalog.

Art

CHAIR Mark Hosford
DIRECTOR OF UNDERGRADUATE STUDIES Mel Ziegler
PROFESSORS EMERITI Michael Aurbach, Marilyn L. Murphy
PROFESSORS Maria Magdalena Campos-Pons, Mel Ziegler
ASSOCIATE PROFESSORS Mark Hosford, Vesna Pavlovic
ASSOCIATE PROFESSOR OF THE PRACTICE Jana Harper
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 visual studies 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. The department offers a student-run art gallery. 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.

Since 1984 the department has supervised the awarding of the Margaret Stonewall Wooldridge Hamblet Award to an eligible senior art major. The Hamblet Award provides the means for travel and independent art activity for one year, culminating in a one-person exhibition at Vanderbilt. Our immersive program includes both junior and senior major trips to New York and other important art destinations.

Many other prizes are awarded in our department. 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 Plaza Artists Materials award is given to four students each year. All competitions are judged by outside professional artists.

Program of Concentration in Art

The art major requires 30 credit hours and presents 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. Our students are offered a strong grounding in traditional processes such as drawing, painting, ceramics, and sculpture, as well as the opportunity to explore contemporary processes involving 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. The Contemporary Art Maymester offers an opportunity to study contemporary art in a concentrated manner.

Requirements for the Program of Concentration in Art

Foundation Requirement (3 credit hours)
- 1101 or 1102

Studio Requirements (15 credit hours), which must include at least:
- One 2-D course (ARTS)
- One 3-D course (ARTS 1400, 1401, 1500, 1501, 1502, 2400, 2401, 2500)
- One time-based course (ARTS 1700, 1701, 1702, 2700, 2701, 2702)

Within the 15 credit hours, students must take at least one 2000-level or higher ARTS course.

Related Requirement (6 credit hours), which must include one course (3 credit hours) of each of the following:
• ARTS 1800
• Any HART course or one course from the following: ARTS 1099, 3891; CMA 1600, 2300; PHIL 3014

The department highly recommends taking ARTS 1800, Sources of Contemporary Art, course prior to the senior year.

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 3.30 cumulative GPA.
• At least a 3.5 GPA in courses that count toward the major in art.
• Completed the sophomore year.

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-or-higher level.

Course descriptions can be found in the courses section of this catalog.

Asian Studies

CHAIR Gerald Figal
PROFESSORS Robert Campany, Gerald Figal
ASSOCIATE PROFESSOR Ben Tran
ASSISTANT PROFESSORS Mabel Gergan, Guojun Wang, We Jung Yi
THE Department of Asian Studies provides students with a foundation in the languages, cultures, and societies of Asia necessary to pursue a career among a wide host of global companies, institutions, and agencies that do business in the United States and abroad with the many countries of Asia. Rich in diverse and ancient histories and cultures, present-day Asia and its peoples are at the center of the global future. A degree in Asian Studies equips its students with the linguistic competence and cultural knowledge to join in that global future, whether it be as a foreign press correspondent, investment banker, video game designer, translator/interpreter, educator, diplomat, tour operator, firm consultant, or traditional Chinese medicine practitioner. With the intensive study of modern Asian languages at its core, the program embraces a wide variety of courses in the art, culture, economics, history, film and media, politics, religion, medicine, and sociology of East Asia, South Asia, and Southeast Asia. Through their teaching and research, faculty members promote a better understanding of multiple facets of life in Asia and the region’s relationship with the rest of the world, past and present.

Majors and minors are strongly encouraged to complete a study abroad program in Asia. Up to 6 credit hours of Asia-related courses from Vanderbilt-approved study abroad programs may be applied toward the major or minor upon approval of the department chair or director of undergraduate studies. Students should consult with the chair or DUS before applying to a study abroad program.

Program of Concentration in Asian Studies
The major in Asian studies requires a minimum of 36 credit hours of course work and is designed to ensure that graduates have both depth and breadth in their understanding of Asia.

For the major in Asian studies, students must formally declare an area of concentration at the time the major is declared (China, Japan, or South Asia) and complete at least 36 credit hours from the Asian Studies Course List (see below), according to these rules:

1. At least 3 credit hours in an Asian language taught in the Program in Asian Studies at the 3301 (Advanced I) level or above. Asian languages not offered by the Asian studies program require the approval of the program director or the director of undergraduate studies.

2. At least 9 non-language credit hours of courses in area of concentration.

3. At least 6 non-language credit hours of courses eligible for Asian Perspectives.

4. No more than 18 credit hours of courses in any Asian language offered by the Program in Asian Studies may be applied to the total 36 credit hours.

Advanced Placement credits in language do not count toward credit hours required for the major or minors, but can figure into the assessment of initial placement within a language track.

Honors Program in Asian Studies
In addition to following the requirements set by the College of Arts and Science, the following must be satisfied:

1. All of the requirements for the major in Asian studies.

2. 3 credit hours of ASIA 3980 Juniors Honors Readings. If ASIA 3980 is not offered, this requirement may be substituted by an alternative course, with approval by the Asian studies program director or the director of undergraduate studies.

3. ASIA 4998 (3 credit hours) and 4999 (3 credit hours). Honors Research must be taken while in residence at Vanderbilt. The candidate will write an honors thesis while completing the two-semester Honors Research
The honors thesis is a research paper on a topic defined by the student in consultation with the faculty adviser and approved in advance by the Honors Committee (see below for definition of Honors Committee). Note: 3980, 4998, and 4999 may count toward the 36 credit hours required for the major.

4. A minimum 3.30 cumulative grade point average with a minimum 3.50 grade point average in courses that count toward the major in Asian studies upon completion of the Honors requirements.

5. An oral examination on the thesis typically scheduled within the two months prior to graduation.

Study abroad in a country relevant to the Honors Research project is strongly recommended.

A three-member Honors Committee of Asian studies faculty administers the Honors Program. The committee will set guidelines for the thesis topic proposal, publish deadlines each year, and administer the oral examination. Students submit the name of the faculty adviser and the proposed thesis topic to this committee for approval early in the second semester of the junior year. If the student is studying abroad that semester, the proposed thesis topic should be submitted in the first semester of the junior year, or arrangements should be made to submit the thesis topic from abroad during the second semester of the junior year.

Minor in Asian Studies

The minor in the Program in Asian Studies provides a broad knowledge of the languages, literatures, politics, histories, film and media, arts, and religions of China, Japan, Korea, and South Asia. Students cannot combine the Asian studies minor with other minors within the Program in Asian Studies.

For the minor in Asian studies, students must complete at least 17 credit hours from the Asian Studies Course List (see below), according to these rules:

1. At least 5 credit hours in any Asian languages taught in the Asian studies program at the 2201 (Intermediate I) level or above
2. At least 6 credit hours of History Survey Courses
3. At least 3 credit hours of Humanities Courses
4. At least 3 credit hours of Social Sciences Courses
5. No more than 5 credit hours of any Asian language courses taught in the Asian studies program may be applied to the total 17 credit hours

Minor in Chinese Language and Culture

The minor in Chinese language and culture is anchored by a firm foundation in language study that is complemented by electives in art, history, literature, film and media, politics, and religion. Students cannot combine the Chinese language and culture minor with other minors within the Asian studies program.

For the minor in Chinese language and culture, students must complete at least 18 total credit hours in China Concentration (CC) courses from the Asian Studies Course List (see below), according to these rules:

1. At least 3 credit hours in Chinese language at the 3301 (Advanced I) level or above
2. No more than 13 credit hours of Chinese language (CHIN) courses may be applied to the total 18 credit hours

Minor in Japanese Language and Culture

The minor in Japanese language and culture is anchored by a firm foundation in language study that is complemented by electives in art, history, literature, film and media, politics, and religion. Students cannot combine the Japanese language and culture minor with other minors within the Asian studies program.

For the minor in Japanese language and culture, students must complete at least 18 total credit hours in Japan Concentration (JC) courses from the Asian Studies Course List (see below), according to these rules:

1. At least 3 credit hours in Japanese language at the 3301 (Advanced I) level or above
2. No more than 13 credit hours of Japanese language (JAPN) courses may be applied to the total 18 credit hours

Minor in Korean Language and Culture

The minor in Korean language and culture is anchored by a firm foundation in language study that is complemented
by electives in history, literature, film, and media. Students cannot combine the Korean language and culture minor with other minors within the Asian studies program.

For the minor in Korean Language and Culture, students must complete at least 18 total credit hours in Korean Concentration (KC) courses from the Asian Studies Course List (see below), according to these rules:

1. At least 3 credit hours in Korean language at the 3301 (Advanced I) level or above
2. No more than 13 credit hours of Korean language (KOR) courses may be applied to the total 18 credit hours

Minor in South Asian Language and Culture

The minor in South Asian language and culture is anchored by a firm foundation in language study that is complemented by electives in art, history, literature, film and media, politics, and religion. Students cannot combine the South Asian language and culture minor with other minors within the Asian studies program.

For the minor in South Asian language and culture, students must complete at least 18 total credit hours in South Asia Concentration (SA) from the Asian Studies Course List (see below), according to these rules:

1. At least 3 credit hours in a South Asian language (Hindi-Urdu or Sanskrit) at the 3301 (Advanced I) level or above
2. No more than 13 credit hours of South Asian language (HNUR or SNSK) courses may be applied to the total 18 credit hours

Asian Studies Course List

All courses on this list count toward the credit-hour requirements for the major and the minors within the Program in Asian Studies. Their eligibility for specific requirements within the major and minors is indicated by the following codes:

- China Concentration = CC
- Japan Concentration = JC
- Korea Concentration = KC
- South Asia Concentration = SA
- Asian Perspectives = AP
- History Survey Course = HS
- Humanities Course = HU
- Social Science Course = SS

Any given course may be applied to only one category of requirement even if it may be eligible for more than one. Courses marked with an * require approval from the Asian Studies chair or director of undergraduate studies.

Chinese Language Courses

CHIN 1011. Basic Chinese (CC)
CHIN 1012. Basic Chinese (CC)
CHIN 1101. Elementary Chinese I (CC)
CHIN 1102. Elementary Chinese II (CC)
CHIN 1231. Calligraphy (CC, HU)
CHIN 2201. Intermediate Chinese I (CC)
CHIN 2202. Intermediate Chinese II (CC)
CHIN 2211. Chinese for Heritage Learners I (CC)
CHIN 2212. Chinese for Heritage Learners II (CC)
CHIN 3301. Advanced Chinese I (CC)
CHIN 3302. Advanced Chinese II (CC)
CHIN 3302W. Advanced Chinese II (CC)
CHIN 3851. Independent Study (CC)*
CHIN 3852. Independent Study (CC)*
CHIN 4001. Fourth-year Conversational Chinese (CC)
CHIN 4002. Fourth-year Conversational Chinese (CC)
CHIN 4401. Business Chinese I (CC)
CHIN 4402. Business Chinese II (CC)
CHIN 4403. Readings in Modern Chinese Media (CC)
CHIN 4404. Readings in Modern Chinese Media (CC)
CHIN 4405. Classical Chinese Literature and Philosophy. (CC, HU)
CHIN 4406. Readings in Modern Literary Chinese (CC, HU)

**Hindi-Urdu Language Courses**
- HNUR 1101. Elementary Hindi-Urdu I (SA)
- HNUR 1102. Elementary Hindi-Urdu II (SA)
- HNUR 2201. Intermediate Hindi-Urdu I (SA)
- HNUR 2202. Intermediate Hindi-Urdu II (SA)
- HNUR 3301. Advanced Hindi-Urdu I (SA)
- HNUR 3302. Advanced Hindi-Urdu II (SA)
- HNUR 3851. Independent Study (SA)*
- HNUR 3852. Independent Study (SA)*

**Japanese Language Courses**
- JAPN 1011. Basic Japanese I (JC)
- JAPN 1012. Basic Japanese II (JC)
- JAPN 1013. Practical Japanese Conversation (JC)
- JAPN 1101. Elementary Japanese I (JC)
- JAPN 1102. Elementary Japanese II (JC)
- JAPN 1231. Tadoku: Extensive Reading in Japanese
- JAPN 2201. Intermediate Japanese I (JC)
- JAPN 2202. Intermediate Japanese II (JC)
- JAPN 2232. Japanese through Manga (JC)
- JAPN 3301. Advanced Japanese I (JC)
- JAPN 3302. Advanced Japanese II (JC)
- JAPN 3851. Independent Study (JC)*
- JAPN 3852. Independent Study (JC)*
- JAPN 3891. Special Topics in Advanced Japanese (JC)

**Korean Language Courses**
- KOR 1101. Elementary Korean I (KC)
- KOR 1102. Elementary Korean II (KC)
- KOR 2201. Intermediate Korean I (KC)
- KOR 2202. Intermediate Korean II (KC)
- KOR 3301. Advanced Korean I (KC)
- KOR 3302. Advanced Korean II (KC)
- KOR 3851. Independent Study (KC)
- KOR 3852. Independent Study (KC)

**Sanskrit Language Courses**
- SNSK 1101. Elementary Sanskrit I (SA, AP)
- SNSK 1102. Elementary Sanskrit II (SA, AP)
- SNSK 2201. Intermediate Sanskrit I (SA, AP)
- SNSK 2202. Intermediate Sanskrit II (SA, AP)
- SNSK 3301. Advanced Sanskrit I (SA, AP)
- SNSK 3302. Advanced Sanskrit II (SA, AP)

**Asian Studies**
- ASIA 1111. First-Year Writing Seminar*
- ASIA 1201. Writing Southeast Asia (AP, HU)
- ASIA 1680. Inside China (CC, SS)
- ASIA 1682. Chinese Culture through Tai Chi and Qi Gong (CC)
- ASIA 1780. Health and Well-being at the Margins of Indian Society (SA)
- ASIA 1881W. The Body in Modern Japanese Culture (JC, HU)
- ASIA 2100W. Fashioning the Self: Coming of Age and Asian Modernities (AP, HU)
- ASIA 2210W. Hollywood Hanoi (AP, HU)
- ASIA 2220. Violence and Media in Southeast Asia (AP, HU)
- ASIA 2302. Popular Culture of South Asia (SA, HU)
- ASIA 2303. Classical India in the Modern World (SA, AP)
- ASIA 2411. Cultural History of Korea (KC, HS, AP)
- ASIA 2412. Global Korean Cinema (KC, AP, HU)
- ASIA 2413. History of Modern Korea (KC, HS, AP)
- ASIA 2414. Food and Family in Korean Pop Culture (KC, HU, AP)
- ASIA 2415W. Blood, Sweat, and Tears in Korean Literature (KC, HU)
- ASIA 2511. Popular Culture in Modern Japan (JC, HU)
- ASIA 2512. Explorations of Japanese Animation (JC, HU)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Instructor</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASIA 2513W</td>
<td>Media Monsters in Contemporary Japan (JC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 2560</td>
<td>Current Japan–U.S. Relations (JC, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 2605</td>
<td>Romancing the Nation in Modern Chinese Literature (CC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 2606</td>
<td>Martial Tradition in Chinese Literature (CC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 2607</td>
<td>Self and Society in Pre-modern Chinese Literature (CC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 2608</td>
<td>Chinese Drama: 13th to 20th Centuries (CC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 2609W</td>
<td>Writing and Gender in Traditional China (CC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 2630</td>
<td>Chinese Medicine (CC, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 3151</td>
<td>The Third World and Literature (AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 3155</td>
<td>Blackness and the Asian Century (AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 3633</td>
<td>Self-Cultivation in Ancient China (CC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 3851</td>
<td>Independent Study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 3852</td>
<td>Independent Study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 3891</td>
<td>Special Topics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 3892</td>
<td>Special Topics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 3980</td>
<td>Junior Honors Readings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 4998</td>
<td>Honors Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASIA 4999</td>
<td>Honors Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMA 3892</td>
<td>Special Topics in the Study of Film*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1210W</td>
<td>Prose Fiction: Forms and Techniques (as appropriate)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1260W</td>
<td>Introduction to Literary and Cultural Analysis (as appropriate)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 2319W</td>
<td>World Literature, Modern (as appropriate)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 3662</td>
<td>Asian American Literature (AP, HU)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 3681</td>
<td>Colonial and Post-Colonial Literature (as appropriate)*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1050</td>
<td>East Asia since 1800 (AP, SS, HS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1060</td>
<td>Premodern China (CC, SS, HS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1070</td>
<td>China from Empire to the People’s Republic (CC, SS, HS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1080</td>
<td>Premodern Japan (JC, SS, HS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1090</td>
<td>Modern Japan (JC, SS, HS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1160</td>
<td>Modern South Asia (SA, SS, HS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1161</td>
<td>India Before Europe: 3000 B.C.E–1750 C.E. (SA, SS, HS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1881</td>
<td>The Body in Modern Japanese Culture (JC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 1882W</td>
<td>Japan Through Historical Fiction (JC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2100</td>
<td>Politics and Catastrophe in Modern China (CC, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2105</td>
<td>Chinese Thought (CC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2106</td>
<td>A Global History of Tea (AP, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2110</td>
<td>Crisis Simulation in East Asia (AP, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2111</td>
<td>China and the United States: Intertwined Histories (AP, CC, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2115</td>
<td>Play and Pleasure in Early Modern Japan (JC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2119</td>
<td>The Pacific War in Cinematic Memory (JC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2120</td>
<td>Japan’s War and Postwar, 1931–1989 (JC, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2145</td>
<td>Religion and Politics in South Asia (SA, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 2150</td>
<td>India and the Indian Ocean (SA, AP, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 3090</td>
<td>Tokyo: History and Image (JC, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 3112W</td>
<td>China and the World (CC, AP, SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIST 3220W</td>
<td>Images of India (SA, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 1200</td>
<td>Arts of East Asia (AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 1205</td>
<td>Arts of South and Southeast Asia (SA, AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 1210W</td>
<td>Art and Ritual in Asia (AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 1220</td>
<td>History of Asian Architecture (AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 2100</td>
<td>Architecture and the Mapping of Empire in Asia (AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 2110</td>
<td>Arts of China (CC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 2120</td>
<td>Arts of Korea (KC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 2130</td>
<td>Arts of Japan (JC, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 2150</td>
<td>East Asian Architecture and Gardens (AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 2170</td>
<td>Religion and Politics in South and Southeast Asian Art (SA, AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HART 2175</td>
<td>Modern and Contemporary Indian Architecture (AP, HU)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HART 3112. The Arts of China during the Liao-Song Period (CC, HU)
HART 3140. Healing and Art in East Asia. (AP, HU)
HART 3164W. Art of Buddhist Relic and Reliquary (AP, HU)
HART 3172. Himalayan Art: Art of the Divine Abode (AP, HU)
HART 3174. The South Asian Temple (SA, HU)

Human and Organizational Development —
International Leadership and Policy
HODI 3260. Education in the Asia-Pacific Region: Development, Reform, and Innovation (AP, SS)

Medicine, Health, and Society
MHS 2310. Chinese Society and Medicine (CC, SS)

Political Science
PSCI 2216. The Chinese Political System (CC, SS)
PSCI 3894. Selected Topics in Comparative Politics (as appropriate)*

Religious Studies
RLST 1500. Introduction to Islam (AP, HU)
RLST 1637. Religions of Tibet and the Himalaya (AP, HU)
RLST 1700. Religions in China (CC, HU)
RLST 1710. Religions of Japan (JC, HU)
RLST 2134. Asian and American Religions in the United States (AP)
RLST 2644. Buddhist Traditions (AP, HU)
RLST 2664. Foundations of Hindu Traditions (AP, HU)
RLST 3561. Islam in South Asia (SA, HU)
RLST 3650. Classical Philosophies of India (SA, HU)
RLST 3669. Sacred Space in the Tibetan World (AP, HU)
RLST 3670W. Buddhism and the State (AP, HU)
RLST 3747. Daoist Tradition (AP, HU)
RLST 3749. Zen Buddhism (AP, HU)
RLST 3753. East Asian Buddhism (AP, HU)
RLST 3775. Chinese Religions through Stories (CC, HU)
RLST 4665. Mythologies and Epics of South Asia (SA, HU)
RLST 4666. Devotional Traditions of South Asia: Hindu, Muslim, Sikh (SA, AP, HU)
RLST 4774. Japanese Mythology (JC, HU)

Asian Studies
Course descriptions can be found in the courses section of this catalog.

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.

Biochemistry and Chemical Biology

CO-DIRECTORS Brian O. Bachmann, Michelle Sulikowski

Advisory Committee
PROFESSORS Brandt Eichman (Biological Sciences), Lawrence J. Marnett (Chemistry), John McLean (Chemistry), David W. Wright (Chemistry), John York (Biochemistry)
ASSOCIATE PROFESSOR Bruce M. Damon (Radiology and Radiological Sciences)
ASSISTANT PROFESSOR Lauren Parker Jackson (Biological Sciences)
SENIOR LECTURER Cynthia T. Brame (Biological Sciences)

THE study of chemical processes within living systems is an interdisciplinary enterprise that spans the fields of
chemistry, molecular and cellular biology, biophysics, and engineering. Chemical biology and biochemistry use chemical insight, techniques, and tools to study or manipulate biological systems. They are the cornerstones of medical technology and therapeutics. To provide students with training in modern principles at a chemistry-biology interface, Vanderbilt’s interdisciplinary major in biochemistry and chemical biology incorporates expertise from multiple departments in the university. Students receive a broad background in the natural sciences (chemistry, biology, physics) and mathematics, followed by fundamental core training in principles of biochemistry and chemical biology that involves both theoretical and laboratory course work. Students then pursue an area of emphasis in either biochemistry or chemical biology through upper-level elective courses. Students participate in independent research in laboratories of biochemistry and chemical biology faculty. Additional research experience is available in the Honors Program.

**Program of Concentration**

The biochemistry and chemical biology major tracks share fundamental core elements but have a distinct set of foundational courses, track-specific electives, and laboratory requirements. All students are required to complete a set of basic science and mathematics courses. The major consists of 32 credit hours beyond these basic science and mathematics courses. All students complete 12 credit hours of core courses, 14 credit hours of either biochemistry or chemical biology track, and 6 credit hours of general electives. For suggested paths of completion, see the Program in Biochemistry and Chemical Biology website.

**Required Math and Science Courses for Both Tracks**

(38 credit hours)

- Biological Sciences — BSCI 1510, 1511, 1510L, and either 1511L or 1512L
- Chemistry — CHEM 2221 or 2211, CHEM 2222 or 2212, CHEM 2221L and CHEM 2222L
- Mathematics — MATH 1200 or 1300 and MATH 1201 or 1301
- Physics — PHYS 1501 or 1601, PHYS 1502 or 1602, PHYS 1501L or 1601L, and PHYS 1502L or 1602L

*Note: These credit hours do not count toward the major. AP credit may satisfy some of these requirements.*

**Fundamental Core Courses for all Tracks (12 credit hours)**

- BCB 4965, BSCI 2520, CHEM 3710, CHEM 3310

**Tracks** (14 credit hours)

**Biochemistry Track**

- Biochemistry Foundations (3 credit hours) — BSCI 4265
- Biochemistry Electives (9 credit hours) — BCB 2101, BCB 4320, BSCI 2201, BSCI 2210, CHEM 2100, CHEM 4720
- Laboratory (2 credit hours) — BCB 3201

**Chemical Biology Track**

- Chemical Biology Foundations (5 credit hours) — CHEM 2100 and 2100L, BCB 2101
- Chemical Biology Electives (6 credit hours) — BCB 4320, BSCI 4265, CHEM 4720
- Chemical Biology Laboratory (3 credit hours) — BCB 3201, BCB 4966

**General Electives** (6 credit hours)

Electives may be chosen from any of the following:

- BCB 2101, BCB 3101, 3201, 4320; BME 2200, 3000, 4400, 4500; BSCI 2201, 2210, 3230, 3234, 3252, 3256, 3270, 4265, 4266; CHEM 2100, 3020, 3300, 3310, 3715, 4230, 4720, 4966; CS 1101, 1103, 2204; NSC 2201, 3245, 3260, 3269, 3274, 3891, 4961

Courses taken to fulfill track requirements are not eligible for elective credit.
**Honors Program**

Students in either Biochemistry or Chemical Biology track may apply to the Honors Program if they hold a minimum cumulative GPA of 3.3 and a GPA of at least 3.4 in courses that count toward the major at the end of their junior year. The purpose of the Honors Program is to provide students with an intensive independent research experience in a host laboratory. Honors candidates must complete two semesters (3 credit hours each semester) of Honors Research (BCB 4999). The successful completion of one semester of BCB 4999 may substitute for the BCB 4965 course requirement. Upon entering the program at the end of the junior year, candidates assemble a committee of the major research adviser and two additional faculty members appropriate to the area of research. As part of the research course work, the candidate will write an honors thesis. At the end of the graduating semester, honors candidates must submit a written thesis and give an oral defense of their research.

Course descriptions can be found in the courses section of this catalog.

---

**Biological Sciences**

CHAIR Brandt F. Eichman  
VICE CHAIR Katherine L. Friedman  
DIRECTOR OF UNDERGRADUATE STUDIES Mark A. Woelfle  
DIRECTOR OF GRADUATE STUDIES Julian F. Hillyer  
ASSOCIATE PROFESSORS D. Kilpatrick Abbot, Larisa DeSantis, Katherine L. Friedman, Daniel J. Funk  
ASSISTANT PROFESSORS Megan G. Behringer, Nicole Creanza, Lauren Parker Jackson, Jared T. Nordman, Maulik R. Patel, Lars Plate, Ann Tate  
PRINCIPAL SENIOR LECTURERS A. Denise Due-Goodwin, Mark A. Woelfle  
SENIOR LECTURERS Amanda R. Benson, Cynthia T. Brame, Jessica Gilpin, Allison Leich Hilburn, James D. Pask  
LECTURER Thomas Clements

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. 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 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.

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. It is strongly recommended that all students take one year of calculus or calculus/statistics, and one year of physics. Students are encouraged to work with their major advisers to choose
upper-level courses appropriate to their chosen majors.

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 (Chemistry 2211/2221–2212/2222) and lab (2211L–2222L).
- A total of 30 credit hours of Biological Sciences courses, including the 8 credit hours of 1510–1511 and 1510L and either 1511L or 1512L, is 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, 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).
- All majors must complete at least 2 credit hours of 3965, 3850, or 3861, though only one semester of 3965 may count toward the 30 credit hours.
- A total of no more than 7 credit hours of 3850, 3861, or 3961 may count toward the major.
- If option 1 (see below) is used to meet the laboratory requirement, then BSCI 3965 or 2 credit hours of 3850 is required.

For Honors, additional requirements must be met. For entry into Honors, students must satisfy the conditions required by the College of Arts and Science for admission to departmental honors programs. Students must have an overall grade point average equal to or greater than 3.3, and a grade point average in courses required for the appropriate biological sciences major equal to or greater than 3.4 at the time of entry. Applications must be approved by a majority vote of the faculty of the department. To receive honors or highest honors in biological sciences, a student in the departmental Honors Program must:
1) Complete the requirements for either the MCB, BioSci, or EEOB major, achieving a minimum cumulative grade point average of 3.4 in all courses that count toward the major;
2) Satisfactorily pursue a research project under the supervision of the adviser with a minimum of 10 credit hours of Honors Research, BSCI 4999;
3) Give a progress report to the Honors Committee at the end of the first semester of research. This will consist of a short, written progress report to be distributed to the Honors Committee one week before an oral presentation and meeting with the committee. The meeting must be scheduled before the start of finals week;
4) At the end of the second semester of Honors Research, prepare a thesis based on the research project, to be read and evaluated by the Honors Committee;
5) Present the thesis orally before the Honors Committee and faculty in the Department of Biological Sciences.

Minor in Biological Sciences

A minor in biological sciences requires a minimum of 18 hours including at least 9 credit hours earned in residence at Vanderbilt. Credit hours for the minor must include BSCI 1510–1511b, 1510L and either 1511L or 1512L; 2210; and one other intermediate course. No more than 2 credit hours of 3860, 3861, 3850, and 3961 may be counted toward the minor.

Specific Requirements for Individual Majors

<table>
<thead>
<tr>
<th>BIOLOGICAL SCIENCES (BSCI) MAJOR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intermediate Courses</strong></td>
</tr>
</tbody>
</table>

116
### BIOLOGICAL SCIENCES (BSCI) MAJOR

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Option 1: Lab</th>
<th>Option 2: Lab and Research</th>
<th>Option 3: Research Intensive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 labs (BSCI 2201L, 2210L, 2218, 2219, or 2238L). See note above regarding BSCI 3965 or 3850.</td>
<td>1 lab plus 2 semesters (at least 6 credit hours total) of directed &amp; independent research (BSCI 3861, 3961, 4999)</td>
<td>At least 12 credit hours of research in directed, independent and as needed, honors research courses (BSCI 3861, 3961, 4999)</td>
</tr>
</tbody>
</table>

### ECOLOGY, EVOLUTION, AND ORGANISMAL BIOLOGY (EEOB) MAJOR

<table>
<thead>
<tr>
<th>Intermediate Courses</th>
<th>BSCI 2205, 2210, and one of 2218 or 2219 or 2238</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory</td>
<td>Option 1: Lab</td>
</tr>
<tr>
<td></td>
<td>2 labs (one of BSCI 2210L, 2218, 2219, or 2238L; plus one of the following: BSCI 2201L, 2210L, 2218, 2219, or 2238L). See note above regarding BSCI 3965 or 3850.</td>
</tr>
</tbody>
</table>

### MOLECULAR AND CELLULAR BIOLOGY (MCB) MAJOR

<table>
<thead>
<tr>
<th>Intermediate Courses</th>
<th>BSCI 2201, 2210, and 2520</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory</td>
<td>Option 1: Lab</td>
</tr>
<tr>
<td></td>
<td>2 labs (one of BSCI 2201L or 2210L is required; plus one of the following: 2201L, 2210L, 2218, 2219, or 2238L). See note above regarding BSCI 3965 or 3850.</td>
</tr>
</tbody>
</table>

Course descriptions can be found in the courses section of this catalog.
Chemistry

CHAIR John A. McLean
DIRECTOR OF UNDERGRADUATE STUDIES Tara D. Todd
DIRECTOR OF GRADUATE STUDIES David E. Cliffel

PROFESSORS EMERITI Darryl J. Bornhop, Robert V. Dilts, Larry C. Hall, Thomas M. Harris, David M. Hercules, B. Andes Hess Jr., Melvin D. Joesten,
Charles M. Lukehart, Ned A. Porter, Joel Tellinghuisen, David L. Tuleen

PROFESSORS Brian O. Bachmann, Richard M. Caprioli, Walter J. Chazin, David E. Cliffel, Stephen W. Fesik, Timothy P. Hanusa, Frederick R. Haselton,
Jeffrey N. Johnston, Craig W. Lindsley, H. Charles Manning, Lawrence J. Marnett, Clare McCabe, Hassane S. Mchaourab, John A. McLean, Jens Meiler,
Prasad L. Polavarapu, Carmelo J. Rizzo, Sandra J. Rosenthal, Kevin Schey, Michael P. Stone, Gary A. Sulikowski, C. David Weaver, David W. Wright

ADJOINT PROFESSORS Cody Covington, Norma Dunlap, Terry P. Lybrand, Rongson Pongdee, Lidia Smentek
ASSOCIATE PROFESSORS Andrew Link, Janet E. Macdonald, René Robinson
ASSISTANT PROFESSORS Lauren E. Buchanan, Lars Plate, Nathan D. Schley, Steven D. Townsend, Zhongyue Yang

ADJOINT ASSISTANT PROFESSORS Jennifer M. Colby, Glenroy Dean Martin
PRINCIPAL SENIOR LECTURERS Adam K. List, Shawn T. Phillips, Michelle M. Sulikowski, Tara D. Todd
SENIOR LECTURERS Hemant Badgandi, Katherine Clements, Alissa Hare, Craig G. Tainter, Susan Verberne-Sutton
LECTURERS Aaron Daniel

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.

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 (2211–2222 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr. Hrs. toward major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chem 1601–1602 &amp; 1601L–1602L or AP credit</td>
<td>0</td>
</tr>
<tr>
<td>Chem 2221–2222 (or 2211–2212) &amp; 2221L–2222L</td>
<td>8</td>
</tr>
<tr>
<td>Chem 2100 &amp; 2100L</td>
<td>4</td>
</tr>
<tr>
<td>Chem 3300 or 3310</td>
<td>3</td>
</tr>
<tr>
<td>Chem 3315</td>
<td>1</td>
</tr>
<tr>
<td>BSCI 2520</td>
<td>3</td>
</tr>
<tr>
<td>Chem 3010</td>
<td>3</td>
</tr>
<tr>
<td>*Two in-depth chemistry courses</td>
<td>6</td>
</tr>
<tr>
<td>Chem 4965–4966</td>
<td>6</td>
</tr>
</tbody>
</table>

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, 3630, 2610, 3310, 2610, 3860, 5320, 5610, 5620.

Minor in Chemistry

The minor in chemistry requires 18 credit hours of course work, including 4 credit hours from 1602 and 1602L 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) 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 3980, 4980, and 4999 and pass an oral examination. Additional information may be found in the chapter on Special Programs in the College.

Licenses for Teaching
Candidates for teacher licensure in chemistry at the secondary level should refer to the chapter on Licenses 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 can be found in the courses section of this catalog.

Cinema and Media Arts

DIRECTOR Jennifer Fay
ASSISTANT DIRECTOR Jonathan Waters
PROFESSORS Jay Clayton, Jennifer Fay, Lutz Koepnick
ASSOCIATE PROFESSORS Claire Sisco King, James McFarland, Andrea Mirabile, Jonathan Rattner
ASSISTANT PROFESSORS Alejandro Aciero, Cesar Ignacio Ruiz Cortez, Haerin Shin
SENIOR LECTURERS Madeleine Casad, Jonathan Waters
WRITER IN RESIDENCE Krista Knight

Affiliated Faculty
PROFESSORS Joy Calico (Music), Colin Dayan (English), Gerald Figal (History), Jay Geller (Divinity School), Sam B. Girgus (English), Yoshikuni Igarashi (History), Daniel Levin (Psychology, Peabody), Kelly Oliver (Philosophy), Lynn T. Ramey (French), T. Sharpley-Whiting (African American and Diaspora Studies and French), Benigno Trigo (Spanish), Mark A. Wollaeger (English)
ASSOCIATE PROFESSORS Vanessa Beasley (Communication Studies), Phillip Franck (Theatre), Stanley Link (Music), Peter Lorge (History), Letizia Modena (French and Italian), Emanuelle Oliveira (Portuguese), Vesna Pavlovic (Art)
ASSISTANT PROFESSOR Alex Dubilet (English), Anand Taneja (Religious Studies)
SENIOR LECTURERS Scott Juengel (English)

CINEMA and Media Arts offers an interdisciplinary major and minor that combine 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 is comprised of film and media theory, history, and filmmaking. The major concludes with a senior seminar.

Program of Concentration in Cinema and Media Arts
The CMA major consists of 30 credit hours. The requirements are as follows:
CORE REQUIREMENTS
1. 1500 (Fundamentals of Film and Video Production).
2. 1600 (Introduction to Film and Media Studies).
3. 2250 (16mm Filmmaking).
4. 2260 (Digital Production Workshop).
5. 2300 (Film and Media Theory).
6. 2400 (History of World Cinema).
7. 3891 (Special Topics in Film and Video Production).
8. 3892 (Special Topics in the Study of Film).
9. Senior Seminar — 4961 or 4962.
10. One elective: 2600W (Advanced Screenwriting); 3891 (Special Topics in Film and Video Production); 3892 (Special Topics in the Study of Film); 3893 (Special Topics in National Cinemas and Movements). 3891 and 3892 may be repeated for elective credit provided there is no duplication in topic.

Honors Program
The Honors Program in Cinema and Media Arts offers excelling students the opportunity to undertake a high-level independent research and/or creative project during their senior year. Projects must be rigorous and demonstrate a student’s ability to sustain an argument, an aesthetic principle, or a narrative arc in a substantial form. For admission to the Honors Program, students must have and maintain until graduation a cumulative grade point average of 3.3 and a grade point 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 15 credit hours. The requirements are as follows:
1. 1500 (Fundamentals of Film and Video Production).
2. 1600 (Introduction to Film and Media Studies).
3. One course in intermediate filmmaking: 2250 (16mm Filmmaking); 2260 (Digital Production Workshop).
4. One course in intermediate cinema studies: 2300 (Film and Media Theory); 2400 (History of World Cinema).
5. One elective: 2600W (Advanced Screenwriting); 3891 (Special Topics in Film and Video Production); 3892 (Special Topics in the Study of Film); 3893 (Special Topics in National Cinemas and Movements).

Course descriptions can be found in the courses section of this catalog.

Classical and Mediterranean Studies
DIRECTOR William P. Caferro
DIRECTOR OF UNDERGRADUATE STUDIES Daniel P. Solomon
PROFESSORS EMERITI Robert Drews, F. Carter Philips, Jack. M. Sasson, Susan Ford Wiltshire
PROFESSORS William P. Caferro
ASSOCIATE PROFESSORS Philip I. Ackerman-Lieberman, Ari Z. Bryen, Kathy L. Gaca, David A. Michelson, Joseph L. Rife
ASSISTANT PROFESSORS Monica S. Park
The Program in Classical and Mediterranean Studies offers students an interdisciplinary perspective on the culture and history of a region at the crossroads of human civilization since antiquity. The study of the Mediterranean world examines the influential achievements and legacy of the Greeks and Romans alongside the emergence and spread of Judaism, Christianity, and Islam to the East. It also explores the premodern to modern development of southern Europe, North Africa, and western Asia, which have variously responded to the ancient and medieval past. The program offers courses in the history, religion, philosophy, art, literature, society, and culture of the Mediterranean world. In teaching and research, the faculty promote the integrated study of past and present through both written and material sources—textual, artifactual, visual, spatial—and they embrace analytical techniques in the digital humanities. Students thus have the opportunity to learn several ancient and medieval languages of Europe and the Middle East and to pursue experiential learning overseas, from intensive modern language study to archaeological fieldwork to the investigation of evolving cultural and natural landscapes.

Majors in classical and Mediterranean studies are introduced to the distinctive geography and history of the region but choose their courses in one of three tracks. These tracks have shared content but offer different viewpoints and training. Majors who expect to apply for graduate study should work closely with an adviser to devise an appropriate curriculum.

Students who pursue Classical and Near Eastern Languages and Cultures investigate one or more ancient to medieval cultural tradition(s) in the Greco-Roman and Near Eastern spheres through the study of original texts and their historical setting, such as Greek tragedy, Latin oratory, Hebrew scripture, the Qur’an, or early French romance. Students who pursue Mediterranean Archaeology explore human diversity and experience from Classical Antiquity to the Middle Ages through the study of material and visual culture. They too learn to read textual sources while acquiring the skills of archaeological and art-historical research.

Students who pursue Mediterranean Studies, the most flexible track for a broad range of interests, can choose to engage with a variety of ancient, medieval, or modern topics through focused or comparative study.

The Program in Classical and Mediterranean Studies also offers a minor in Mediterranean archaeology and a minor in Mediterranean studies. A student cannot earn more than one minor in the program.

The Honors Program requires the production of a thesis representing advanced, original, and substantial research. Students are strongly recommended to pursue study abroad in the Mediterranean or an adjacent region. The program has long supported the Intercollegiate Center for Classical Studies, the American Academy in Rome, and the American School of Classical Studies in Athens. Many different international experiences are possible through Vanderbilt-approved semester programs, Maymesters, research projects, and summer study, for example, in Italy, Greece, and Israel. The program encourages students to participate in local and regional conferences, where they can share the results of collaborative or independent work. Students concentrating on Greek and/or Latin language who qualify academically are invited to join Eta Sigma Phi, the national classics honor society.

Program of Concentration in Classical and Mediterranean Studies

Students majoring in classical and Mediterranean studies must take ten courses, including one foundation course (CLAS 1010). The major is arranged into four tracks. Students must formally declare track 1–3 at the time the major is declared. A score of 4 or 5 on the AP Latin exam earns 3 hours of credit for Latin 2202, which may be applied toward any of the major tracks. Any course for which a student has earned credit will count for one and only one of the requirements or sub-requirements for any of the major tracks or minors.

Track 1: Classical and Near Eastern Languages and Cultures

30–34 total credit hours including:

1. One foundation course: CLAS 1010 (3 credit hours);
2. Language/Literature: Five courses from Course List A (15 credit hours, or 19 credit hours if including ARA 1101–1102);
3. Culture: Four courses from Course Lists B–D numbered 2060 or above (12 credit hours).

Latin courses at the 1000 level do not count toward this major track. Students who fulfill their language/literature requirement (#2 above) by completing courses in one language must, in consultation with the director of undergraduate studies, earn credit for at least one course in a different cultural tradition (e.g., Greek, Roman, Jewish, Christian, Islamic) or period (e.g., ancient, medieval).

**Track 2: Mediterranean Archaeology**
30–34 total credit hours including:
1. Two foundation courses: CLAS 1010 and 1020 (6 credit hours);
2. Language/Literature: Two courses from Course List A (6 credit hours, or 10 if including ARA 1101–1102);
3. Method and Theory: One course from Course List E (3 credit hours);
4. Three courses in the history and in the art, architecture, and archaeology of the ancient to medieval Mediterranean world, including one from Course List B, one from Course List C, and one from Course List B or C (9 credit hours);
5. Electives: Two courses from Course Lists A–E or from the following (6 credit hours):

ANTHROPOLOGY: 1101, Introduction to Anthropology; 1201, Introduction to Archaeology; 1301, Introduction to Biological Anthropology; 1601, Introduction to Language and Culture; 2211, Archaeology; 2220, Human Landscapes; 2227, Food in the Ancient World; 2370, Death and the Body; 3160, Anthropologies and Archaeologies of Community; 3161, Colonial Encounter in the Americas; 3200, Ancient Cities; 3202, The Collapse of Civilizations.

With the permission of the director of undergraduate studies, students may fulfill the method and theory requirement (#3 above) by completing a program of practical archaeology (e.g., CLAS 3710, 3720, ANTH 3866, participation in an excavation or field survey, an internship in conservation or curation). No more than 15 credit hours of courses numbered below 2050 may count toward this major track.

**Track 3: Mediterranean Studies**
30 total credit hours including:
1. One foundation course: CLAS 1010 (3 credit hours)
2. Historical basis: Four courses from Course Lists A–D (12 credit hours);
3. Comparative perspectives: Five courses from Course Lists A–F (15 credit hours).

Students may apply up to three semesters of one Mediterranean language toward the historical basis requirement of this major track, including either an ancient to medieval language in Course List A or Catalan, French, Italian, Portuguese, or Spanish. French, Italian, Latin, and Spanish courses at the 1000 level do not count toward the major. No more than 12 credit hours of courses numbered below 2050 may count toward this major track.

**Honors Program**
The Honors Program in Classical and Mediterranean Studies offers students a more intensive concentration in their main field.
Candidates should signal their interest to the director of undergraduate studies by the beginning of the second semester of the junior year.
Admission requirements are:
1. A cumulative GPA of 3.3, and a GPA of 3.5 in courses that count toward the major.
2. Approval by the faculty of a 2–3 page thesis proposal, due by the middle of the second semester of the junior year.

In addition to maintaining the stated GPA throughout the senior year, Honors students must complete CLAS 4998 and 4999 for 3 credit hours each in addition to the 30–34 credit hours required by the major, culminating in a
written thesis that is defended orally. A committee of three faculty members (two of whom must hold sole or joint appointments in the Program in Classical and Mediterranean Studies) will evaluate the thesis and the oral defense.

**Minor in Mediterranean Archaeology**

Students are required to complete CLAS 1010, 1020, and 12 additional credit hours in courses that count toward Track 2 of the concentration, of which at least 9 credit hours must be from courses numbered 2060 or above.

**Minor in Mediterranean Studies**

Students are required to complete CLAS 1010 and 15 additional credit hours in courses that count toward Track 3 of the concentration, of which at least 9 credit hours must be from courses numbered 2060 or above.

**Approved List of Courses**

**A. Ancient to Medieval Mediterranean Languages and Literatures**

CLASSICAL HEBREW: 1101, Beginning Classical Hebrew I; 1102, Beginning Classical Hebrew II; 2200, Intermediate Classical Hebrew; 3010, Historical Hebrew Grammar; 3020, Classical Hebrew Poetry; 3030, West Semitic Inscriptions.

GREEK: 1101, Beginning Greek I; 1102, Beginning Greek II; 2201, Intermediate Greek I: Classical and Koiné Greek; 2202, Intermediate Greek II: Homer’s Iliad; 3010, The Greek Orators; 3020, The Greek Historians; 3040, Readings in Plato and Aristotle; 3100, The Greek Tragedians; 3110, Greek Lyric Poetry; 3200, Early Christian Writers; 3850, Independent Study; 3890, Special Topics in Greek Literature.

LATIN: 1101, Beginning Latin I; 1102, Beginning Latin II; 1103, Intensive Elementary Latin; 2201, Intermediate Latin I; 2202, Intermediate Latin II; 3010, The Writings of Caesar; 3020, Cicero and the Humanistic Tradition; 3030, Latin Letters; 3040, The Roman Historians; 3050, Suetonius; 3060, Tacitus; 3100, Roman Comedy; 3110, Catullus; 3120, Lucretius: De Rerum Natura; 3130, Vergil: The Aeneid; 3140, The Lyric Poetry of Horace; 3150, Latin Elegy; 3160, Ovid; 3170, Roman Satire; 3180, Neronian Writers; 3200, Early Christian Writers; 3850, Independent Study; 3890, Special Topics in Latin Literature.

ARABIC: ARA 1101, Elementary Arabic I; 1102, Elementary Arabic II; 2201, Intermediate Arabic I; 3301, Arabic of the Qur’an and Other Classical Texts; RLST 4593, Advanced Readings in Islamic Tradition.

UGARITIC: CHEB 2300, Ugaritic.

ARAMAIC AND CLASSICAL SYRIAC: ARAM 2400, Introduction to Classical Syriac; 2500, Egyptian Aramaic; CHEB 3030, West Semitic Inscriptions.

AKKADIAN: CLAS 3300, Elementary Akkadian I; 3301, Elementary Akkadian II.

OLD FRENCH: FREN 3224, Medieval French Literature.

MEDIEVAL TO RENAISSANCE ITALIAN: ITAL 3100, Literature from the Middle Ages to the Renaissance; 3240, Dante’s Divine Comedy; 3242, Dante in Historical Context; 3340, Famous Women by Boccaccio.

OLD SPANISH: SPAN 4400, Origins of Spanish Literature.

**B. Ancient to Medieval Mediterranean History**

CLASSICAL AND MEDITERRANEAN STUDIES: 2100, History of the Ancient Near East; 2110, History of Greece to Alexander the Great; 2120, Greece and the Near East from Alexander to Constantine; 2150, History of the Roman Republic; 2160, History of the Roman Empire; 2180, The Mediterranean World from Late Antiquity to the Middle Ages.

HISTORY: 1190, A History of Islam; 1350, Western Civilization to 1700; 1600, European Economic History 1000–1700; 2220, Medieval and Renaissance Italy, 1000–1700; 2230, Medieval Europe, 1000–1350.

**C. Ancient to Medieval Mediterranean Art, Architecture, and Archaeology**

CLASSICAL AND MEDITERRANEAN STUDIES: 1020, Introduction to Mediterranean Archaeology; 2200, Archaic and Classical Greek Art and Architecture, 1000 to 400 B.C.E.; 2210, Late Classical Greek and Hellenistic Art and Architecture; 2250, Roman Art and Architecture; 3200, The Greek City; 3210, The Archaeology of Greek Sanctuaries; 3220, The Trojan War in History, Art, and Literature; 3230, Alexander the Great.

HISTORY OF ART AND ARCHITECTURE: 2180, Islamic Art and Architecture; 2210, Art and Architecture of Ancient Egypt; 2220, Greek Art and Architecture; 2260, The Art of Pagans, Christians, and Jews; 2270, Early Christian and Byzantine Art; 2275, The Cross and the Crescent: Byzantine-Islamic Confluences in Art; 3224, Greek Sculpture; 3226, Greek Vases and Society; 3228W, Gender and Sexuality in Greek Art; 3240W, Ancient Landscapes; 3272, Portraits in Late Antiquity; 3274, Art and Empire from Constantine to Justinian.

**D. Ancient to Medieval Mediterranean Studies**

CLASSICAL AND MEDITERRANEAN STUDIES: 1111, First-Year Writing Seminar; 1120, Greek Civilization; 1130, The Greek Myths; 1150, Roman Civilization; 3000, Classical Tradition in America; 3030, Death, Disease, and Health in the Ancient World; 3100, Women, Sexuality, and Family in Ancient Greece and Rome; 3110, Warfare in the Ancient Mediterranean; 3120, Humor, Ancient to Modern; 3150, Roman Law; 3160,
Communication of Science and Technology

DIRECTOR David A. Weintraub (Physics and Astronomy)

PROFESSORS Michael Bess (History), Jay Clayton (English), Jennifer M. Fay (Cinema and Media Arts, English), David Hess, M. Shane Hutson (Physics and Astronomy), Sarah Igo (History), Kevin Johnson (Biomedical Informatics), Lutz Koepnick (German, Cinema and Media Arts), Jeffrey D. Schall (Psychology), Robert J. Scherrer (Physics and Astronomy), Mark Schoenfield (English), David W. Wright (Chemistry)

PROFESSOR OF THE PRACTICE Christopher Rowe (Engineering Management)

ASSOCIATE PROFESSORS Jeffrey A. Bennett (Communication Studies), Douglas H. Fisher (Computer Science and Computer Engineering), Suzana Herculano-Houzel (Psychology), Laura Stark (Medicine, Health, and Society), Paul H. Stob (Communication Studies)

ASSISTANT PROFESSOR Ole Molvig (History)

PRINCIPAL SENIOR LECTURER Daniel Morgan (Earth and Environmental Sciences)

SENIOR LECTURERS Kendra H. Oliver (Pharmacology), Stephen K. Ornes

LECTURER Shellie Richards

WRITER IN RESIDENCE Amanda Little
THE Program in Communication of Science and Technology (CSET) sits at the intersection of the sciences and the humanities, and it builds on the vast amount of effort at Vanderbilt devoted to interdisciplinary work that spans the natural sciences, engineering, the social sciences, and the humanities. CSET draws on both the scientific communities (natural sciences, social sciences, engineering, medicine) and the creative communities (public speaking, writing, digital media production) across multiple colleges at Vanderbilt.

CSET is designed for students who have an interest in science and technology and also are interested in communicating science and technology to both peer-professional audiences and to the larger world. CSET is ideal as a second major for students pursuing a first major in one of the natural sciences, any of several of the social sciences, engineering, the Science, Medicine and Technology concentration in History, and the Creative Writing track in English. In the twenty-first century scientists must be able to communicate their work and their ideas to their professional peers, to nonspecialists who review grant proposals, and to lay audiences who ultimately fund, support, and benefit from the discoveries made in laboratories around the world. In return, the scientific community needs support from professional writers, journalists, technical writing specialists, public speakers, film and video writers and producers, and bloggers in communicating modern science, technology, and medicine to lay audiences.

Program of Concentration in Communication of Science and Technology
At least 42 credit hours, as follows. See below for lists of courses that count for each requirement.
• One Introduction to the Communication of Science and Technology course (one 3 credit hour course).
• One public speaking course (one 3 credit hour course).
• One advanced non-science writing course (one 3 credit hour course).
• One advanced (2100 level or higher) CSET or science communication skills course(s) (3 credit hours).
• One course bridging science, engineering, or medicine and health with non-science content and issues (one 3 credit hour course).
• One statistics course (one 3 credit hour course).
• Five courses (15 credit hours; minimum 3 credit hours per course) from the natural sciences and/or engineering.
• Three electives (9 credit hours).

Additional notes:
• Students in the College of Arts and Science must count at least 24 credit hours for CSET that are not also used to fulfill any program requirements for any other major or minor in the College of Arts and Science.
• A course can only be used once to fulfill a single CSET requirement, even if it is eligible under more than one CSET requirement.
• A student may count no more than 3 total credit hours toward any and all requirements of the CSET major from courses in the following list: BME 4951, ChBE 4951W, CE 4950, CE 4951, ENGM 2210, and ES 2100W.

Approved Courses:

1) **Introductory Course:**
   CSET 2100, Science Communication Tools and Techniques.

2) **Public Speaking:** One course from
   CMST 1501, The Public Communication of Science; 2100, Argumentation and Debate; 2110, Persuasion; 2120, Business Communication.

3) **Advanced Non-Science Writing:** One course from
   CLAS 3030, Death, Disease, and Health in the Ancient World; 3190W, Augustan Rome.
   CMA 2500W, Screenwriting; 2600W, Advanced Screenwriting.
   CMST 3620/3620W, Rhetoric, Culture, and Critique; 3730/3730W, Communication, Culture, and Consciousness.
   CSET 3215W, The Art of Blogging
ENGL 3210, Intermediate Nonfiction Writing; 3215W, The Art of Blogging: Learning to Think and Write in the Age of Online Publishing; 3220, Advanced Nonfiction Writing; 3230, Intermediate Fiction Workshop; 3240, Advanced Fiction Workshop; 3250, Intermediate Poetry Workshop; 3260, Advanced Poetry Workshop; 3726, New Media; 3728/3728W, Science Fiction; all other 2100 level or higher W ENGL classes not included in other CSET requirement listings.

HART 3140, Healing and the Art of East Asia; 3240W, Ancient Landscapes; 3725W, The Skyscraper: Modern Urban Icon; 3810W, Exhibiting Historical Art.


MHS 3050W, Medicine and Literature; all other 2100 level or higher W MHS classes.

PHIL 3012W, Writing as Political Resistance; 3606W, Moral Problems; 3610W, Ethics and Law; 3618W, Philosophy and Literature.

RLST 2250W, History of the Bible; 3304W, Evangelical Protestantism and the Culture Wars; 3670W, Buddhism and the State.

THTR 2311W, Writing for the Stage and Screen.

- This requirement, in combination with both requirements #5 (Bridging) and #8 (Electives), is automatically fulfilled by students who have taken at least 15 credit hours of course work from the courses approved by the Department of History in Program G: Science, Medicine, and Technology.

- This requirement, in combination with requirement #8 (Electives), is automatically fulfilled by students who have completed at least 12 credit hours of the following:
  2100 level or higher ENGL courses,
  2100 level or higher “W” courses,
  3004–3661 PHIL courses,
  3000–4939 RLST courses.

4) **Advanced Science Writing or Science Communications Skills:** Three credit hours from

ANTH 3150W, Cognitive Anthropology.

BME 4951, Design of Biomedical Engineering Devices and Systems II.

CE 4950, Civil Engineering Design I, plus CE 4951, Civil Engineering Design II.

ChBE 4951W, Chemical Engineering Design Projects.

CHEM 3135W, Forensic Analytical Chemistry.


ENGL 3720/3720W, Literature, Science and Technology; 3730, Literature and the Environment; 3896, Special Topics in Investigative Writing in America.

ENG 2100W, Technology Strategy.

ES 2100W, Technical Communications.

ME 4951, Engineering Design Projects.

Any other 2100 level or higher “W” course also identified as an “MNS” course for purposes of AXLE.

5) **Bridging:** One course from

ANTH 2109, Food Politics in America; 2113W, Food, Identity, and Culture; 2160W, Creating Community; 2220W, Human Landscapes; 2242, The Archaeology of Ancient Maya Civilization; 3143, Medical Anthropology; 3343, Biology and Culture of Race; 3141, Anthropology of Healing; 3142, Medicine, Culture, and the Body; 3150W, Cognitive Anthropology; 3243W, Ancient Maya Gods and Rulers; 3345, Genetics in Society; 3347, Bioethics in Anthropology; 3622W, Classic Maya Language and Hieroglyphs; 4373, Health and
Disease in Ancient Populations.
ASIA 2630, Chinese Medicine.
ASTR 2130, The Trial of Galileo and Its Background.
CLAS 3030, Death, Disease, and Health in the Ancient World; 3730: The Roman to Medieval Near East: Caesarea Excavations, Israel.
CMST 2800, Rhetoric and Civic Life; 3730/3730W, Communication, Culture, and Consciousness; 3740, Rhetoric of Medicine and Health; 3750, Rhetoric of the Body.
CS 1151, Computers and Ethics.
CS 1151, Computers and Ethics.

ECON 2350, Health Care Policy.
ENGL 3720/3720W, Science Fiction; 3730, Literature and the Environment; 3896, Special Topics in Investigative Writing in America.
GSS (formerly WGS) 2240, Introduction to Women’s Health; 2268, Gender, Race, Justice, and the Environment; 2270, Ecofeminism: Theory, Politics, and Action.
HART 2815, Digital Heritage: Methods and Practice.
MATH 3000, History of Mathematics.
MHS: any 2100 level or higher course, with the exception of the following: 3000, Undergraduate Seminar; 3101, Human Anatomy and Physiology I; 3102, Human Anatomy and Physiology II; 3830, Service Learning; 3831, Service Learning Research and Readings; 3850, Independent Study; 3880, Internship Training; 3881, Internship Readings and Research; 3890, Special Topics; 4998, Honors Research, and 4999, Honors Thesis.
PHIL 3608, Ethics and Medicine; 3616, Philosophy and the Natural Sciences.
PSCI 2255, Public Policy Problems; 2256, Politics of Public Policy; 3253, Ethics and Public Policy; 3266, Climate Change Justice; 3268, American Health Policy.
PSY 3605, Industrial and Organizational Psychology; 3635, Health Psychology; 3705, Human Sexuality.
PSY-PC 3210, Hospitalized Child.
RLST 3921, Ethics and Ecology; 3941, Religion, Science, and Evolution.
RUSS 2273, Russian Science Fiction.
SCED 3320, Introduction to Literacies in Science; 3240 (Teaching Science in Elementary Schools), 3370 (Teaching Science in Secondary Schools), 3400 (Modeling in the Secondary Science Classroom)
SOC 3301, Society and Medicine; 3311, Climate Change and Society; 3313, Sociology of Health and Environmental Science; 3315, Human Ecology and Society; 3317, Energy Transitions and Society.

- This requirement, in combination with both requirements #3 (Advanced Non-Science Writing) and #8 (Electives), is automatically fulfilled by students who have taken at least 15 credit hours of course work from the
courses approved by the Department of History in Program G: Science, Medicine, and Technology.

6) **Statistics:** One course from

- BME 2400, Quantitative Methods I: Statistical Analysis; 3200, Analysis of Biomedical Data.
- BSCI 3270, Statistical Methods in Biology.
- CE 3300, Risk, Reliability, and Resilience Engineering.
- ChBE 3900W, Chemical Engineering Laboratory I.
- PSY 2100, Quantitative Methods.
- SOC 2100, Statistics for Social Scientists.

7) **Natural Sciences and Engineering:** Five courses (minimum 3 credit hours each)

- As used here, “Natural Science” includes all courses identified by the College of Arts and Science as MNS courses in AXLE, excluding MATH and PHIL courses.
- At least three of these five courses must be Natural Science (MNS) courses numbered 2100 or higher.
- The other two courses must be Natural Science (MNS) courses numbered 2100 or higher or courses taken at any level from the School of Engineering, except those identified below.
- 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.
- The following School of Engineering courses are excluded from this requirement: all 1000 level CS courses; any courses that may count toward requirement #4, requirement #5, or requirement #6; all research, special topics, design seminar, directed study, independent study, and service learning courses.
- This requirement is automatically fulfilled by students who have taken
  - at least 15 credit hours of 2100 level or higher level MNS courses that are not also counting toward any other CSET requirement; or
  - at least 15 credit hours of 2100 level or higher level ANTH courses that are not also counting toward any other CSET requirement; or
  - at least 15 credit hours of 2100 level or higher level PSY courses that are not also counting toward any other CSET requirement; or
  - at least 15 credit hours of courses from the Environmental Sociology Core that are not also counting toward any other CSET requirement; or
  - at least 15 credit hours of 2100 level or higher course work in the School of Engineering that are not also counting toward any other CSET requirement.

8) **Electives:** At least three courses totaling at least 9 credit hours selected from any of requirements #2, #3, #4, #5, and #7 and/or from the Cinema and Media Arts courses listed below and/or from other digital media production courses involving video, audio, visual communication, or social media, and/or any of the below-listed CSET courses.

*Digital media production courses* may be selected from the following:

- CMA 1500, Fundamentals of Film and Video Production; 1600, Introduction to Film and Media Studies; 2250, 16mm Filmmaking; 2260, Digital Production Workshop; 2500W, Screenwriting; 2600W, Advanced Screenwriting.
- THTR 2311W, Writing for the Stage and Screen.

*Additional CSET courses* may be selected from the following:

- CSET 1001, Commons iSeminar; 3840, Directed Study; 3841, Project in Science Writing and Communicating;
3890, Special Topics; or 4998, Honors Thesis.

- This requirement, in combination with both requirements #3 (Advanced Non-Science Writing) and #5 (Bridging), is automatically fulfilled by students who have taken at least 15 credit hours of course work from the courses approved by the Department of History in Program G: Science, Medicine, and Technology.
- This requirement, in combination with requirement #3 (Advanced Non-Science Writing), is automatically fulfilled by students who have completed at least 12 credit hours of the following:
  - 2100 level or higher ENGL courses,
  - 2100 level or higher “W” courses,
  - 3004–3661 PHIL courses,
  - 3000–4939 RLST courses.

**Honors Program**

Honors in CSET is a selective program of individual undergraduate work, supervised by a faculty adviser. Honors candidates propose, construct, and complete a project (written, visual, aural, digital, or a combination) that demonstrates the ability to communicate science, in depth, to a nonexpert audience.

**Requirements for Admission to Honors in CSET**

To be admitted to the Honors Program in CSET, a student must

- be a CSET major;
- have completed requirements #1, #2, either #3 or #4, and at least 21 credit hours of work that counts toward the CSET major;
- have a cumulative GPA of at least 3.30;
- have a GPA of at least 3.40 in all courses that count toward the CSET major.

**Requirements for Completion of Honors in CSET**

To earn Honors or Highest Honors in CSET, a student must

- complete the requirements of the CSET major;
- complete at least 6 credit hours of work in any combination of CSET 3840, 3841, and 4998, of which at least 3 credit hours must be in CSET 4998;
- present a written and oral defense of the CSET 4998 project before a faculty examination committee;
- have a cumulative GPA of at least 3.30;
- have a GPA of at least 3.40 in all courses that count toward the CSET major.

**Course of Study for Honors in CSET**

Interested students may apply in the fall or spring of their junior year or the fall of the senior year. The application includes a one- to two-page proposal of the planned Honors project and the signature of the faculty member who will be the project adviser.

Students in the Honors Program must earn at least 3 credit hours in CSET 4998 (Honors Thesis). Students may earn credit for CSET 4998 for up to four semesters.

An Honors candidate must pass an oral examination of the Honors project no later than the final week of classes in the students final semester. The examination committee is composed of the Honors project supervisor and two additional faculty members; at least one member of the examination committee must be a faculty member affiliated with the CSET program. The oral examination 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, for exceptional achievement, Highest Honors. Highest Honors is reserved for students whose projects are of dissemination quality and whose oral examinations are completed at the highest level.
Minor in Communication of Science and Technology

The minor in Communication of Science and Technology consists of six courses, totaling a minimum of 18 credit hours, distributed as follows:

1. One Introduction to the Communication of Science course (requirement #1 of the CSET major);
2. One public speaking course (requirement #2 of the CSET major);
3. One advanced CSET or science communications skills course (requirement #4 of the CSET major);
4. One bridging course (requirement #5 of the CSET major);
5. Two 2100 level or higher natural science courses (as defined in requirement #7 of the CSET major).

Additional notes for the minor in CSET:

- Students in the College of Arts and Science must count at least 15 credit hours for the minor in CSET that are not also used to fulfill any program requirements for any other major or minor in the College of Arts and Science.
- A course can be used only once to fulfill a single CSET requirement, even if it is eligible under more than one CSET requirement.

Course descriptions can be found in the courses section of this catalog.

Communication Studies

CHAIR Paul H. Stob
DIRECTOR OF UNDERGRADUATE STUDIES Jeffrey A. Bennett
PROFESSOR EMERITUS Kassian A. Kovalcheck
PROFESSORS Bonnie J. Dow, John M. Sloop
ASSOCIATE PROFESSORS Vanessa B. Beasley, Jeffrey A. Bennett, Claire Sisco King, Paul H. Stob, Isaac West
ASSISTANT PROFESSOR Bohyeong Kim
PRINCIPAL SENIOR LECTURER M. L. Sandoz (Director of Forensics)
SENIOR LECTURERS Neil Butt (Director of Debate), John P. Koch (Associate Director of Debate), Courtney C. Travers, Dustin A. Wood
SENIOR LECTURER, RETIRED John English

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

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, 3140, 3200, 3600, 3700, 3750; one of which must be 3000, 3001, or 3002.

4. Three courses (9 credit hours) in Culture, Theory, and Critique: 2800, 2950, 3100, 3150, 3620, 3620W, 3710, 3720, 3730, 3730W, 3740, 3800.

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 can be found in the courses section of this catalog.

Earth and Environmental Sciences

CHAIR Steven L. Goodbred
DIRECTOR OF UNDERGRADUATE STUDIES Lily L. Claiborne
DIRECTOR OF GRADUATE STUDIES David J. Furbish
PROFESSORS EMERITI Leonard P. Alberstadt, Calvin F. Miller, Molly Fritz Miller, Arthur L. Reesman, William G. Siesser, Richard G. Stearns
PROFESSORS John C. Ayers, Ralf Bennartz, David J. Furbish, Steven L. Goodbred, Guilherme Gualda, George M. Hornberger
ASSOCIATE PROFESSORS Larisa R. G. DeSantis, Jonathan M. Gilligan, Jessica L. Oster
ASSISTANT PROFESSORS Hiba Baroud, Simon A. F. Darroch, Ravindra Duddu, Kristen E. Fauria, Jesus Gomez-Velez, Maria Luisa Jorge, Neil P. Kelley, Garrett W. Tate
RESEARCH ASSISTANT PROFESSORS Christopher P. Vanags
PRINCIPAL SENIOR LECTURER Lily L. Claiborne, Daniel J. Morgan

THE Earth and environmental sciences are aimed at understanding Earth’s governing processes—how they operate and interact—as well as interpreting Earth’s dynamic history—its age and origin as recorded in rocks and the landscape—and finally, at understanding how geological processes affect modern environmental and ecological systems, including humans. 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 take a core set of lab science courses with field components, then propose a course plan that creates an area of concentration in solid Earth, Earth surface, or environmental science while maintaining breadth across the discipline. 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 science, geology, and natural resource and energy exploration, and for related fields such as land use planning, teaching, conservation, business, 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 the Earth’s crust, to the movement of mass and energy across land, ocean, and atmosphere, to the evolution of life and ecosystems, to the impacts of humans on the environment. Study areas, in addition to Tennessee, include the southwestern United States, the Pacific northwest, the southern Appalachians, Florida, Antarctica, South Asia, Brazil, Peru, Namibia, the Bahamas, Australia, and New Zealand.

For students with primary interests in environmental issues, there are three options. A student may major in EES with an environmental focus or may construct an individualized interdisciplinary major outside of the department. Alternatively, a student may major in another conventional discipline and augment that with an Earth and environmental sciences minor.

Program of Concentration in Earth and Environmental Sciences

The EES major is designed to provide a solid grounding in the Earth and environmental sciences while allowing flexibility in the particular focus. The major is organized into five parts, beginning with one of two introductory courses that serve as entry points. The second part involves three core courses with labs that provide all majors with a common background. At least one core course must be completed before students may enroll in the more advanced focus courses of part three. Also, prior to taking any focus courses, students must submit a one-page course plan for parts three and four that explains their choice of advanced courses based on expressed goals and interests. The course plan should be designed in consultation with a faculty adviser and must be approved by the director of undergraduate studies. In most cases, students will also declare the major at this time. The third part of the major defines a focus in the general areas of solid Earth, Earth surface, or environmental science. A brief description of each focus and a list of most relevant courses are given below. The fourth part follows the focus and allows three qualified electives to pursue depth in the focus or broaden to include another area of concentration. The fifth component of the major is a 1 credit hour seminar that serves as a capstone for senior students. In addition to the major, qualified students may elect to participate in the Honors Program designed for highly motivated students who want to pursue research as undergraduates. Opportunities for research may be available to other students outside of the Honors Program.

At least 37 credit hours toward the major are required as follows:

1. Introductory Course (3+1 credit hours each):
   1510/1510L or 1030/1030L  4

2. Core Courses with Lab (3 or 4 credit hours each):
   2510, 2550, and 2580 (2550 was formerly 3250)  11

   Note: Math 1100, 1201, or 1301 are prerequisite or corequisite for 2550 and 2580. Math 1100 provides the basic calculus skills required for the EES major but does not qualify students for any more advanced math courses at Vanderbilt. Math 1301 is recommended for students interested in taking additional math courses or calculus-based physics that may be suggested by some graduate programs.

3. Focus Courses with Lab (4 credit hours each):
   Three of the following per the approved course plan:
   3220, 3260, 3280, 3310, 3330, or 3340  12

4. Three electives, at least two at 4000 level (3 or 4 credit hours each):
   An additional 3000-level course, or 4420, 4550, 4600, 4650, 4680, 4750, 4760, 4820, 4830, or 48919–10

   Note: Does not include Directed and Independent Studies: 3841, 3842, 3851, or 3852

5. Senior Seminar:
   4961  1

   Total hours: 37–38

Additional supporting science and math courses are highly recommended for the major. Courses in chemistry, physics, math and possibly biological sciences are recommended and may be required for admittance into graduate school or for employment. Recommended selections include:
Chemistry (1601/1601L and 1602/1602L)
Physics (1601/1601L and 1602/1602L)
Calculus (Math 1200/1201, 1300/1301, or higher)
Biological Sciences (1100/1100L, 1103, 1510/1510L, 1511/1511L, 2218, 2219, or 2238/2238L)

Options for Area of Focus

In-depth Earth and Environmental Sciences courses can be chosen to define a focus area within EES. Students should consult with their major adviser about choosing a focus area and associated course options. Students may also formulate an individualized focus area that may incorporate components of several areas to maintain breadth. All parts of the Earth are interconnected, and students are encouraged to maintain some breadth in their plan to create a comprehensive understanding of the cycling of energy and materials through Earth’s spheres. Further descriptions of these focus options and recommended courses can be found in the EES major handbook on the EES department homepage.

**Solid Earth Focus**

This focus area most closely reflects a traditional geology degree, focusing on the processes and history of the Earth as recorded in its rocks, how those rocks are formed and how they change with changing conditions. Focus and elective courses appropriate for Solid Earth include: 3260, 3340, 3330, 3220, 4420, 4550, 4600, 4830.

**Earth Surface Focus**

This focus area considers interactions between Earth’s land surface, oceans, and atmosphere, for example governing how rivers, mountains, coasts, or the climate operate and evolve with time. Earth surface systems also define the planet’s critical zone that supports life and its ecosystems. Focus and elective courses appropriate for Earth Surface include: 3330, 3220, 3280, 4420, 4600, 4550, 4650, 4680.

**Environmental Focus**

This focus considers aspects of the hydrosphere, biosphere, atmosphere, and coupled human-environment systems, both present and past. Life on Earth impacts and is impacted by Earth’s environments and is therefore central to this focus. Focus and elective courses most appropriate for Environmental include: 3220, 3280, 3310, 4650, 4680, 4820, 489, 4750, 4760.

**Honors in Earth and Environmental Sciences**

The EES Honors Program provides research experience and mentoring in preparation for a career or graduate studies in Earth and environmental sciences. Interested students should apply to the undergraduate adviser for entry into the Honors Program fall semester, junior year. A grade point average of 3.3 or higher both cumulatively and in courses that count toward the EES major is required for admission to 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 grade point average both in the EES major and cumulatively; (2) complete the required courses for the EES major; (3) complete Senior Honors Seminar (4996, 4997) and Senior Honors Research (4998, 4999); (4) 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). 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.

**Licensure for Teaching**

EES majors may choose a second major in science education which includes teaching licensure, a prudent choice if interested in teaching. Peabody offers a fifth-year master’s program for science majors interested in teaching. Upon graduating with a B.A. in EES, EES majors in the fifth-year program would spend the next summer and academic year earning their M.Ed. and teaching licensure.

Students seeking teacher certification in science disciplines at the secondary level should refer to the chapter on Certification for Teaching in the Peabody College section of the Undergraduate Catalog. Please contact Professor Heather Johnson, coordinator of science secondary education, at heather.j.johnson@vanderbilt.edu for more information.

Course descriptions can be found in the courses section of this catalog.

---

**Economics**

CHAIR Peter L. Rousseau
VICE CHAIR Joel Rodrigue
DIRECTOR OF UNDERGRADUATE STUDIES Rupinder Saggi
DIRECTOR OF GRADUATE STUDIES Mattias Polborn
PROFESSORS Kathryn H. Anderson, Eric W. Bond, Christopher (Kitt) Carpenter, William J. Collins, John Conley, Mario Crucini, Robert A. Driskill, Benjamin Eden, Kevin X. D. Huang, Gregory Huffman, Atsushi Inoue, Tong Li, David Parsley, Mattias Polborn, Peter L. Rousseau, Kamal Saggi, W. Kip Viscusi, John A. Weymark, Myrna Wooders
PROFESSORS, RETIRED John Vrooman, Diana N. Weymark
ASSOCIATE PROFESSORS Andrea Moro, Joel Rodrigue, Yuya Sasaki, Lesley J. Turner
ASSISTANT PROFESSORS Brian Beach, Andrew Dustan, Malin Hu, Gregory Leo, Michelle Marcus, Kathleen McKiernan, Analisa Packham, Sarah Quincy, Pedro Sant’Anna, Matthew Zaragoza-Watkins, Ariell Zimran
PRINCIPAL SENIOR LECTURERS Ana Regina Andrade, Stephen G. Buckles, Christina H. Rennhoff, Rupinder Saggi
SENIOR LECTURERS Kent Dolezal, Hojjatallah Ghandi, Heather Luea, Adugna Olan, Zaruhi Sahakyan

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 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

MATH 1201 (or MATH 1301) is a prerequisite for Economics courses numbered 3000 and above.

Minor in Economics

The minor in economics requires 21 credit hours, including 1010, 1020, 1500 or 1510 (or Math 2820L with Math 2810 or Math 2820), 3012, and 9 credit hours of electives. At least one elective must be numbered above 3015. Students who complete either Economics 3032 or 3035 with Math 2820L and Math 2810 or Math 2820 as a prerequisite need not take Economics 1500 or 1510. Financial Economics (FNEC) courses do not count toward the economics minor.

Honors Program

An honors program is available in economics. This program is designed for highly motivated students interested in doing independent research. 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. Honors candidates must complete 36 credit hours in economics, including the 18 credit hours of courses required of all economics majors. Honors candidates should complete 3032 or 3035 before senior year. In addition, the Honors Program requires completion of (1) Economics 3698 Junior Honors Research (1 credit hour), (2) Economics 3851–3852 Senior Thesis (6 credit hours), culminating in a written thesis, (3) Economics 4981–4982 Honors Seminar (2 credit hours), (4) 9 credit hours of electives including at least 6 credit hours in Economics courses above 3035. Honors candidates are 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.

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 can be found in the courses section of this catalog.

Economics and History

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: One semester of calculus is a prerequisite for ECON 1500 and 1510. MATH 1201 (or MATH 1301) is a prerequisite for Economics courses numbered 3000 and above.
The description of the Concentration in Economics and History below will apply to students who matriculate at Vanderbilt in August 2018 and thereafter.

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 1039, 1352, 1600, 1640, 1660, 1665, 2138, 2150, 2255, 2660, 2700, 2710, 3190, 3200, ECON 2150, 3150, 3160.

*Note*: ECON 3012 is a prerequisite for ECON 3150, and 3160.

**Economics (18 credit hours)**

ECON 1010, 1020, 1500 or 1510, 3012, 3022; one ECON course above 3022 not included in the economic history core.

*Note*: The following course sequences may be substituted for ECON 1500 or 1510:

Option 1: MATH 2810, 2820L, and either ECON 3032 or 3035.
Option 2: MATH 2820, 2820L, and either ECON 3032 or 3035.
In these cases, ECON 3032 or 3035 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. Electives may include any courses, not used to satisfy any of the above requirements, offered by the Department of History, including any courses listed for the history major.

**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, 4999. 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 D. Nelson
DIRECTOR OF UNDERGRADUATE STUDIES Lynn Enterline
DIRECTOR OF CREATIVE WRITING PROGRAM Lorraine López
PROFESSORS EMERITI Vereen M. Bell, Paul Elledge, Roy K. Gottfried,
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.

**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. 6 credit hours in History (literature before 1800)
2. 6 credit hours of Diverse Perspectives (ethnic American or Anglophone literature)
3. 18 additional credit hours of electives in English, chosen from the courses that count toward the major

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

Courses that fulfill the requirement in numbers 1, 2, and 3 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. 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.
2. 3 credit hours in History (literature before 1800)
3. 3 credit hours in Diverse Perspectives (ethnic American or Anglophone literature)
4. 12 credit hours from courses that count toward the English major (see below), which may include one additional creative writing workshop (beyond the four required in number 1, 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, and 4 above are described below under General Requirements and Advice for Majors and Minors in All Programs.

Program III: Specialized Critical Studies (30 credit hours)

Students design their own specialized course of study with a descriptive name and develop a contract of courses for it.

30 total credit hours including:

1. 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.

2. 6 credit hours in History (literature before 1800)

3. 6 credit hours in Diverse Perspectives (ethnic American or Anglophone literature)

4. 6 credit hours from any of the courses that count toward the English major.

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

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

Minors Offered

Minor in English: Literature

At least 18 credit hours of course work in English are required. These courses must include 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.

Minor in English: Creative Writing

At least 18 credit hours of course work in English are required. These courses must include three upper-level workshops (9 credit hours) in any genre (3210, 3220, 3230, 3240, 3250, or 3260).

General Requirements and Advice for Majors and Minors in All Programs

All courses numbered 2050 and above (except 4999) count toward the major. Additionally, students may elect to count one of the following 1000-level courses toward their major: 1111, 1210W, 1220W, 1230W, 1240, 1250W, 1260W, 1270W, 1280, 1290. 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, 2316W, 2318, 2318W, 2319, and 2319W are recommended for sophomores to provide a background for advanced courses.

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, 2318, 2318W, 3310, 3314, 3316, 3318, 3330, 3332, 3335, 3335W, 3336, 3337, 3340, 3340W, 3346, 3348, 3360, 3361, 3364, 3370.

Courses that fulfill the Diverse Perspectives requirement (ethnic American or Anglophone literature) include 3650, 3650W, 3654, 3654W, 3658, 3662, 3662W, 3664, 3670, 3670W, 3674, 3678, and appropriate courses from other departments as approved by the director of undergraduate studies.

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 high 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. 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.

Licenses 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 can be found in the courses section of this catalog.

Environmental and Sustainability Studies

DIRECTOR David Hess

HUMAN beings and their societies necessarily interact with and alter the 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.

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: (A) one Natural Science- and Technology-Intensive course; (B) one Humanities course; (C) one Social-Behavioral Sciences and Policy-Intensive course; (D) two additional courses from B and/or C; and (E) 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 2480, EES 2510, EES 3220, EES 3220W, EES 3310, EES 4650, EES 4680, EES 4750, EES 4760, EES 4760, ENVE 3610, ENVE 4615, ENVE 4700, ES 1115*

B) Humanities Courses: AMER 1111*, AMER 4000*, AMER 4100*, ENGL 2316/2316W*, ENGL 3720/3720W*, ENGL 3730, ENGL 3898/3898W*, GSS (formerly WGS) 2268, GSS (formerly WGS) 2270, HART 2150, HART 3240W, HART 2782, HART 3790, HIST 1470, HIST 1480, HIST 1520, HIST 2139, HIST 2413, HIST 2413W.
PHIL 1111*, PHIL 3611, PHIL 3612, RLST 2472, RLST 3921

C) Social-Behavioral Sciences and Policy Intensive Courses: ANTH 1111*, ANTH 2109, ANTH 2150, ANTH 2220, ANTH 2220W, ANTH 2225, ANTH 2227, ANTH 3138, ANTH 3261, ANTH 4154, ECON 2170, GSS (formerly WGS) 1111*, HOD 3270, PSCI 3266, PSY 1111*, SOC 1020/1020W*, SOC 1030, SOC 1111*, SOC 3311, SOC 3312, SOC 3313, SOC 3314, SOC 3315, SOC 3316, SOC 3317, SOC 3318, SOC 3319, SOC 3321

D) Two additional courses from lists B and/or C above.

E) Capstone: ENVS 4101 or ENVS 4101W, 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 can be found in the courses section of this catalog.

---

**European Studies**

DIRECTOR Ari Joskowicz
PROFESSORS Michael Bess, Joy H. Calico
ASSOCIATE PROFESSORS Emily Greble, Ari Joskowicz, Meike Werner, Christoph Zeller, Letizia Modena
VISITING ASSOCIATE PROFESSOR Alexander Schmidt

**Program of Concentration in European Studies**

Designed for students who seek to broaden their understanding of European societies 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.

In consultation with an adviser in European Studies, students choose a focus and specific courses that will fulfill the requirements for the major. This focus can consist of a thematic or comparative topic (such as Central European literature or Law and Economics in the European Union) 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.

**Required Core Courses (12 credit hours)**
- EUS 2201, European Society and Culture or EUS 2203, The Idea of Europe (3 credit hours)
- EUS 4960, Senior Tutorial (3 credit hours) to write a senior thesis
- 6 credit hours in European Studies courses or equivalent approved by 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 at the intermediate level in one European language;
- course work through the beginner level in two European languages;
- demonstration of proficiency equivalent to either of the preceding options; or
- participation for at least one fall or spring semester in a Vanderbilt study abroad program 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).

European languages recognized for the major include Albanian, Bulgarian, Czech, Croatian/Bosnian/Serbian, Danish, Finnish, French, German, Greek, Hungarian, Ladino (Judeo-Spanish), Italian, Norwegian, Polish, Portuguese, Romanian, Romanian, Russian, Slovak, Spanish, Swedish, Turkish, and Yiddish. Other languages may be approved by the major adviser.
Electives (12–18 credit hours)

The remainder of the 30 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.

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. Students who have fulfilled their language requirements by demonstrating equivalent proficiency or through participation in a Vanderbilt study program in Europe may also count up to two language courses in a European language toward their major.

Students seeking a second major may count a maximum of 6 credit hours of course work to meet requirements in both majors.

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; successfully defend the honors thesis before a committee normally consisting of the adviser, the director of EUS, and another 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 good 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, or EUS 2203, The Idea of Europe
- 6 additional credit hours selected from EUS-labeled courses (or approved substitute)
- 9 hours of topical courses on Europe, approved by the major adviser

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

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, East European 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, German, Russian, and East European Studies, and Spanish and Portuguese, and consist of 30 credit hours of course work each. 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.

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.
ANTHROPOLOGY: 3371, Social and Health Consequences of Pandemics.
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; 3335W, English Renaissance Poetry; 3336, Shakespeare: Comedy and Histories; 3337, Shakespeare: Tragedy and Romance; 3340, Shakespeare: Representative Selections; 3340W, Shakespeare: 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; 3610, 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); 3890W, Movements in Literature (with appropriate topic); 3892, Problems in Literature (with appropriate topic); 3892W, Problems in Literature (with appropriate topic); 3894, Major Figures in Literature (with appropriate topic); 3894W, Major Figures In Literature (with appropriate topic); 3898, Special Topics in English and American Literature (with appropriate topic); 3898W, Special Topics In English and American Literature (with appropriate topic).


FRENCH: 2501W, French Composition and Grammar; 2614, Advanced Conversational French; 2891, Cross Cultural Communication; 3101, Texts and Contexts: Middle Ages to the Enlightenment; 3102, Texts and Contexts: Revolution to the Present; 3111, French for Business; 3112, Medical French in Intercultural Contexts; 3113, Advanced French Grammar; 3180, 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; 3620, 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 Italian Avant-garde; 4221, Literature of the Fantastic; 4232, Literature and Law; 4284, Art and Literature of the Nineteenth Century; 4285, Art and Literature of the Twentieth Century; 4320, French Feminist Thought: Literary and Critical; 4322, Adultery and Transgressions in Literature; 4430, Jews and Arab-Muslims in France; 4432, French Intellectual History.

GERMAN: 1111, First-Year Writing Seminar; 1482, Borders and Crossings: German Literature and Culture from Romanticism to the Present; 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; 2552, Topics: 18th and 19th Century Culture and Literature; 2554, Topics in Visual Culture and Media; 2570, The Holocaust; 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; 4458, Business German; 4535, German Romanticism; 4537, Women and Modernity; 4548, German Lyric Poetry—Form and Function; 4563, The Age of Goethe-Weimar 1775 to 1805; 4564, Pleasures and Perils in Nineteenth-Century Theatre; 4565, Revolutionizing 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.

GENDER AND SEXUALITY STUDIES: 1272, Feminism and Film.

GERMAN: 1111, First-Year Writing Seminar; 1482, Borders and Crossings: German Literature and Culture from Romanticism to the Present; 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; 2552, Topics: 18th and 19th Century Culture and Literature; 2554, Topics in Visual Culture and Media; 2570, The Holocaust; 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; 4458, Business German; 4535, German Romanticism; 4537, Women and Modernity; 4548, German Lyric Poetry—Form and Function; 4563, The Age of Goethe-Weimar 1775 to 1805; 4564, Pleasures and Perils in Nineteenth-Century Theatre; 4565, Revolutionizing 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 AND ARCHITECTURE: 1100, History of Western Art I; 1110, History of Western Art II; 1111, First-Year Writing Seminar (with appropriate topic); 1500W, Impressionism; 2220, Greek Art and Architecture; 2270, Early Christian and Byzantine Art; 2285, Medieval Art; 2310, Italian Art to 1500; 2320W, The Italian Renaissance Workshop; 2325, Great Masters of the Italian Renaissance; 2330, Italian Renaissance Art after 1500; 2360, Northern Renaissance Art; 2362, Fifteenth-Century Northern European Art; 2390, Seventeenth-Century Art; 2600, Eighteenth-Century Art; 2620, Eighteenth-Century European Art; 2622, Neoclassicism and Romanticism; 2650, Nineteenth-Century Architecture: Theory and Practice; 2652, French Art in the Age of Impressionism; 2680, British Art: Tudor to Victorian; 2708, Twentieth-Century British Art; 2710, Twentieth-Century European Art; 2720, Modern Architecture; 2722, Modern Art and Architecture in Paris; 3224, Greek Sculpture; 3226, Greek Vases and Society; 3228W, Gender and Sexuality in Greek Art; 3274, Art and Empire from Constantine to Justinian; 3320, Early Renaissance Florence; 3320W, Early Renaissance Florence; 3332, Raphael and the Renaissance; 3334, Michelangelo’s Life and Works; 3334W, Michelangelo’s Life and Works; 3364W, The Court of Burgundy; 3366, 16th-Century Northern European Art; 3605W, French Art in the Age of Louis XV; 3606, French Art from Rococo to Neoclassicism; 3790, Monumental Landscapes of Provence.

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; 1584W, Foreigners and Citizens: Law and Rights in Modern Europe; 1600, European Economic History, 1000–1700; 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 USSR 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; 2293, Muslims in Modern Europe; 2295, The Migrant Crisis in the Netherlands; 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.

ITALIAN: 1111-01, First-Year Writing Seminar: Italian History and Culture Through Cinema; 2203, Italian Journeys; 2501W, Grammar and Composition; 2614, Conversation; 3000, Introduction to Italian Literature; 3041, Italian Civilization; 3100, Literature from the Middle Ages to the Renaissance; 3240, Dante’s Divine Comedy; 3242, Dante in Historical Context; 3340, Famous Women by Boccaccio; 3500, Baroque, Illuminismo, and Romanticism in Italy; 3600, Twentieth-Century Literature: Beauty and Chaos; 3640, Classic Italian Cinema; 3641, Contemporary Italian Cinema; 3642, Italian Visual Culture; 3701, City Fictions; 3702, Topics in Contemporary Italian Civilization; 3802, Contemporary Italian Society and Culture.


MUSIC LITERATURE AND HISTORY: 1220, The Symphony; 1230, Survey of Choral Music; 2200W, Music in Western Culture; 3220, Opera in the 17th and 18th Centuries; 3221, Opera in the 19th Century; 3222, Mahler Symphonies: Songs of Troy; 3223, Music in the Age of Beethoven and Schubert; 3224, Haydn and Mozart; 3225, Brahms and the Anxiety of Influence; 3227, Music in the Age of Revolution, 1789–1848; 3228, J. S. Bach: Learned Musician and Virtual Traveler; 3229, Robert Schumann and the Romantic Sensibility; 3230, Music and the Construction of National Identity; 3890, Selected Topics in Music History (with appropriate topic).

PHILOSOPHY: 1111, First-Year Writing Seminar (with appropriate topic); 1200, The Meaning of Life: 1200W, The Meaning of Life; 2102, Medieval Philosophy; 2103, Modern Philosophy; 2104 Nineteenth-Century Philosophy; 2109, Twentieth-Century Continental Philosophy; 2110, Contemporary Philosophy; 2660, Philosophy of Music; 3005, Jewish Philosophy; 3007, French Feminism; 3009, Existential Philosophy; 3010, Phenomenology; 3011, Critical Theory; 3013, History of Aesthetics; 3014, Modernistic Aesthetics; 3103, Immanuel Kant; 3104, Kierkegaard and Nietzsche; 3105, Hegel; 3602, Philosophy of History; 3620, Political and Social Philosophy; 3621, Early Modern Political Philosophy; 3622, Contemporary Political Philosophy; 3623, Modern Philosophies of Law.

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; 3211, The European Union; 4238, Comparative Political Parties.

PORTUGUESE: 2203, Intermediate Portuguese; 3301, Portuguese Composition and Conversation; 3892, Special Topics in Portuguese Language, Literature, or Civilization (with appropriate topic).


RUSSIAN: 1111, First-Year Writing Seminar; 1500, Introduction to Russian and East European Studies; 1874, Russian Fairy Tales; 1910W, 19th Century Russian Literature; 1911W, 20th Century Russian Literature; 2210, Russia Today: Politics, Economics, and Culture; 2230, Russia at War; 2273, Russian Science Fiction; 2310, Survey of Russian Literature in English Translation; 2311, Survey of Russian Literature in English Translation; 2434, The Russian Cinema; 2435, Leo Tolstoy: Anna Karenina and Other Masterpieces; 2436, Tolstoy’s War and Peace; 2438, Dostoevsky’s Major Novels: Philosophy and Aesthetics; 2537, Vladimir Nabokov; 2639, The Story of Siberia; 2745, Art After Zero: The Russian Avant-Garde; 2800, Viewing Communism in Eastern Europe.

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

SPANISH: 1111-03, First-Year Writing Seminar: Travel Matters; 2990, Images of the Feminine in Spanish Cinema; 3301W, Intermediate Spanish Writing; 3302, Spanish for Oral Communication through Cultural Topics; 3325, The Way of Saint James; 3340, Advanced Conversation; 3345, Spanish for Business and Economics; 3355, Advanced Conversation through Cultural Issues in Film; 3360, Spanish Civilization; 3365, Film and Recent Cultural Trends in Spain; 4340, History of the Spanish Language; 4345, The Languages of Spain; 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 the Short Story; 4445, Development of the Novel; 4450, The Contemporary Novel; 4455, 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.

Course descriptions can be found in the courses section of this catalog.
French and Italian

CHAIR Meike G. Werner
DIRECTOR OF UNDERGRADUATE STUDIES IN FRENCH Paul B. Miller
DIRECTOR OF UNDERGRADUATE STUDIES IN ITALIAN Elsa Filosa
DIRECTOR OF GRADUATE STUDIES Lynn Ramey
PROFESSORS EMERITI Dan Church, Virginia M. Scott, Patricia A. Ward, Ruth G. Zibart
PROFESSORS Robert Barsky, William Franke, Lynn Ramey, Tracy Sharpley-Whiting, Holly A. Tucker
ASSOCIATE PROFESSORS Nathalie Debrauwere-Miller, Paul B. Miller, Andrea Mirabile, Letizia Modena, Anthère Nzabatsinda
ASSISTANT PROFESSORS, Raisa Rexer
ASSISTANT PROFESSOR OF THE PRACTICE: Elsa Filosa
PRINCIPAL SENIOR LECTURERS Nathalie Dieu-Porter, Susan Kevra
SENIOR LECTURER EMERITUS Tracy Barrett
SENIOR LECTURER Elyse B. Petit
LECTURER Rebecca Peterson, Elena Sergio

THE Department of French and Italian offers a wide range of courses in the language, culture, and literatures of Italy, France, and other Francophone communities. Most language, literature, and culture courses are taught in French or Italian. Students may use courses in both French and Italian to satisfy some requirements of AXLE.

The department offers a program of concentration in French as well as two interdisciplinary programs: a concentration in French and European studies and a concentration in Italian and European studies. Qualified French majors may also participate in the Honors Program in French. Minors in French and Italian are offered. On the graduate level, the department offers a doctoral program in French.

Many students participate in French or Italian study abroad programs. The department offers Maymester programs in France and Italy. On-campus activities include films, symposia, concerts, and lectures by visiting professors. The department has chapters of national honor societies for both French and Italian students. Students may also apply to live on the French Hall in McTyeire International House.

Program of Concentration in French

Students who choose to major in French are expected to achieve advanced proficiency in oral and written French and to demonstrate a general understanding of the history of French and Francophone literatures and cultures. No more than 6 credit hours of AP or IB credit may count toward the 30 credit hours required for the major (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 abroad. Majors should consult their advisers about their choice of major courses each semester.

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, 2891, 3111, 3112, 3113
Five courses from Literatures and Cultures (15 credit hours): 2332, 3185W, 3222, 3224, 3230, 3232, 3233, 3234, 3332, 3620, 3621, 3634, 3730, 3880, 3881, 3891, 3892, 4023, 4025, 4027, 4029, 4232, 4234, 4320, 4430, 4432.

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 30-credit-hour major in French.
2. One graduate-level French course during the senior year for at least 3 credit hours; this course may substitute for one 3000- or 4000-level course required for the major.
3. Earn a 3.5 grade point average in courses that count toward the French major.
4. Six credit hours of thesis credit under French 4998 and 4999 (Senior Honors Thesis), culminating in a written thesis.
5. 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 30 credit hours of course work. A semester of study at a French study abroad program is strongly encouraged. Course work for the joint major is distributed as follows:

**French (24 credit hours)**

- *French Language, Literature, and Culture (9 credit hours):* 2501W, 3101, 3102
- Communications (3 credit hours): 2611, 2614, 2891, 3111, 3112, or 3113
- *Literatures and Cultures (6 credit hours):* 2332, 3185W, 3224, 3230, 3232, 3234, 3620, 3621, 3634, 3730, 3880 and 3881, 3891, 4023, 4027, 4029, 4232, 4234, 4320, 4430, 4432.

**European Studies (12 credit hours)**

- *European Studies core courses (3 credit hours):* EUS 2201, 2203
- Courses in EUS or alternative topical courses as approved by major adviser (6 credit hours)

**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 a French study abroad 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, Intermediate Italian (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 and Architecture, 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, Illuminismo, 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; 3703, The Cultural and Linguistic Worlds of Italy; 3740, Gangsters, Lovers, Madonnas, and Mistresses; 3802, Contemporary Italian Society and Culture; 3890, Special Topics in Italian Literature.
- CLASSICAL 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 AND ARCHITECTURE: 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 participate in study abroad programs 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 30 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 (18 credit hours)

- Italian language and literature — 12 credit hours from the following courses: ITA 2501W, 3000, 3041, 3240, or appropriate substitute in consultation with the adviser in Italian
- Electives in Italian Studies (6 credit hours): ITA 2614, 3100, 3600, 3702, or 3640 or any other course approved by the major adviser in Italian

European Studies (12 credit hours)

- European Studies core courses (3 credit hours): EUS 2201, 2203, and 4960
- EUS thesis seminar (EUS 4960 Senior Tutorial) or equivalent course in Italian (3 credit hours)
- Courses in EUS or alternative topical courses as approved by major adviser (6 credit hours)

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 can be found in the courses section of this catalog.

Italian

Students with high school Italian on their records should consult the director of undergraduate studies in Italian for advice on placement. 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 can be found in the courses section of this catalog.
Gender and Sexuality Studies

CHAIR Katherine Crawford
DIRECTOR OF UNDERGRADUATE STUDIES Elizabeth R. Covington
PROFESSOR EMERITA Charlotte Pierce-Baker
PROFESSORS Dana Nelson, Kelly Oliver
PRINCIPAL SENIOR LECTURER Julie Fesmire
SENIOR LECTURERS Elizabeth R. Covington, Rory Dicker (Women’s Center), K. Allison Hammer, Kristen Navarro, Stacy C. Simplican, Danyelle Valentine

Affiliated Faculty

PROFESSORS Brooke A. Ackerly (Political Science), Ellen T. Armour (Divinity School), Houston A. Baker (English), Robert F. Campany (Asian Studies), Ellen W. Clayton (Pediatrics, Law), Katherine B. Crawford (History), Cynthia J. Cyrus (Blair), Kate Daniels (English), Colin Dayan (English), Bonnie J. Dow (Communication Studies), Lynn E. Enterline (English), Jennifer Fay (Cinema and Media Arts), Gerald Figal (History and Asian Studies), Earl E. Fitz (Portuguese), Vivien G. Fryd (History of Art and Architecture), Tracey E. George (Law), Derek M. Griffith (Medicine, Health, and Society), Joni L. Hersch (Law), Sarah Igo (History), Vera M. Kutzinski (English), Amy-Jill Levine (New Testament Studies), Jonathan M. Metzl (Medicine, Health, and Society), Holly J. McCallmon (Sociology), Thomas A. McGinn (History), Bonnie J. Miller-McLemore (Religion, Psychology, and Culture), Lynn T. Ramey (French), Laurel C. Schneider (Religious Studies), Kathryl L. Schwarz (English), Mark L. Schoenfeld (English), Tracy D. Sharples-Whiting (African American and Diaspora Studies, French), John M. Sloop (Communication Studies), Hortense J. Spillers (English), Cecelia Tichi (English), Benigno L. Trigo (Spanish and Portuguese), Emilie Townes (Divinity), Arleen M. Tuchman (History), Holly A. Tucker (French and Italian), Edward N. Wright-Rios (History)

ASSOCIATE PROFESSORS Vanessa B. Beasley (Communication Studies), Laura M. Carpenter (Sociology), Beth A. Conklin (Anthropology), Nathalie A. Debrauwere-Miller (French), Idit Dobbs-Weinstein (Philosophy), Christin Essin (Theatre), Kathy L. Gaca (Classical and Mediterranean Studies), Teresa A. Goddu (English), Rolanda L. Johnson (Nursing), Scott Juengel (English), Christina Karageorgou-Bastia (Spanish and Portuguese), Shaull J. Keltner (Sociology, Jewish Studies), Claire S. King (Communication Studies), Melanie D. Lowe (Blair), Richard J. McGregor (Religious Studies), Adam S. Meyer (Jewish Studies), Tracy Miller (History of Art and Architecture and Asian Studies), Catherine A. Molinex (History), Ifooma C. Nwanwko (English), Emanuele Oliveira-Monte (Spanish and Portuguese), Bridget E. Orr (English), Richard N. Pitt (Sociology), Nancy B. Reisman (English), Ruth Rogaski (History), Allison H. Schachter (Jewish Studies), C. Melissa Snarr (Ethics and Society), Meike G. Werner (German, Russian and East European Studies)

ASSISTANT PROFESSORS Candice Amich (English), Gilbert Gonzales (Medicine, Health, and Society), Aimi Hamraie (Medicine, Health, and Society), Jessie Hock (English), Mireille M. Lee (History of Art and Architecture), Luis Leyva (Teaching and Learning), Linda G. Manning (Human and Organizational Development), N. Michelle Murray (Spanish and Portuguese), Monica Park (Classical and Mediterranean Studies), Kimberly Welch (History), Alexis Wells-Oghoghomeh (Religious Studies)

ASSISTANT PROFESSOR OF THE PRACTICE Sophie Bjork-James (Anthropology),

SENIOR LECTURERS Alexandre Sargent Capps (Theatre), Amy Cooter (Sociology), Yollette T. Jones (History), Elizabeth S. Meadows (English), Courtney Sanders Peterson (Medicine, Health, and Society), JulaLeigh Petty (Medicine, Health, and Society)

LECTURERS Melinda Brown (Librarian), Alexsey Dubilet (English), Cara Turtle Bell (Project Safe)

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

THE Department of Gender and Sexuality Studies offers an interdisciplinary curriculum that examines the formation of gender and its intersections with other relations of power, such as sexuality, race, ability, class, nationality, religion, locality and age. The department encourages students to develop new theoretical approaches and to transform the analytical tools of many fields of study. Our courses and instructors pay particular attention to how lives are impacted by systemic inequalities. The goal of our scholarship, teaching, and activism is to make gender and sexuality central rather than peripheral terms of analysis. Our curriculum compels us to recognize the problems and possibilities of our current world and also empowers us to affect change. The Department of Gender and Sexuality Studies offers a major and a minor, and a graduate certificate, which provide a foundation for students who plan to enter professional schools in law, medicine, business, the humanities, and the social sciences.

NOTE: During the 2020/2021 academic year, the Department of Gender and Sexuality Studies will be converting its courses to new subject code, GSS.

Program of Concentration in Gender and Sexuality Studies

The interdisciplinary major in gender and sexuality studies consists of 30–36 credit hours of course work, distributed at the Introductory, Intermediate, and Advanced levels, as follows:

Introductory-Level Courses (3 credit hours)
Students must take either GSS (formerly WGS) 1150/1150W (Sex and Gender in Everyday Life) for 3 credit hours or GSS (formerly WGS) 1160/1160W (Sex and Society), also for 3 credit hours.
**Intermediate-Level Courses (24 credit hours)**
With the exception of GSS (formerly WGS) 4960, GSS (formerly WGS) 1272 and above are intermediate-level courses. GSS (formerly WGS) 1111 (First-Year Writing Seminar) also counts as an intermediate-level course. Of the required 24 intermediate-level credit hours, students must earn credit for at least one course in each of the following areas: international/global feminism; history/social movements; and sex/sexuality and society. Courses that meet these requirements are listed below. Students may earn up to 6 credit hours for internship training, independent research, and readings: GSS (formerly WGS) 3881, GSS (formerly WGS) 3882, or GSS (formerly WGS) 3883.

**Advanced-Level Course (3 credit hours)**
Students must earn credit for GSS (formerly WGS) 4960 (Senior Seminar), generally taken in the second semester of the student’s final year.

**Honors Program**
The Honors Program in Gender and Sexuality Studies requires 36 credit hours of course work and is designed to afford exceptional students the opportunity to undertake independent research on a topic in feminist and/or gender scholarship in consultation with faculty members. The program is open to all gender and sexuality 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 courses counting toward the gender and sexuality studies major. Students must be approved for acceptance into the Honors Program by the department chair. To graduate with honors in gender and sexuality 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 Chair of Gender and Sexuality Studies no later than second semester of the junior year;
(d) Complete 6 credit hours of independent research, 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 the second semester of the senior year; and
(f) Pass an oral examination on the topic of the Honors project/thesis.

Information concerning the Honors Program is available from the Chair of the Gender and Sexuality Studies program. College regulations governing honors may be found in this catalog under Honors Programs.

**Minor in Gender and Sexuality Studies**
The minor in gender and sexuality studies consists of 18 credit hours of course work, distributed as follows:

**Introductory-Level Courses (3 credit hours)**
Students must take either 1150/1150W (Sex and Gender in Everyday Life) for 3 credit hours or 1160/1160W (Sex and Society), also 3 credit hours.

**Intermediate-Level Courses (12 credit hours)**
Of the required 12 intermediate-level credit hours, students must earn credit for at least one course in each of the following areas: international/global feminism; history/social movements; and sex/sexuality and society. Courses that meet these requirements are listed below.

**Advanced-Level Course (3 credit hours)**
Students must earn credit for GSS (formerly WGS) 4960 (Senior Seminar), generally taken in the second semester of the student’s final year.

**Courses approved to fulfill the international/global feminism(s) requirement:**
ASIA 2609W (Writing and Gender in Traditional China)
ENGL 3658 (Latino-American Literature)
ENGL 3670W (Colonial and Postcolonial Literature)
ENGL 3742 (Feminist Theory)
FREN 3223 (The Querelles des femmes) [in French]
FREN 4320 (French Feminist Thought) [in French]
GSS (formerly WGS) 3201 (Women and Gender in Transnational Context)
GSS (formerly WGS) 3281 (Globalization and Policy Making)
GSS (formerly WGS) 3610 (Womanism in Global Context)
ITA 3340 (Famous Women by Boccaccio)
PHIL 3007 (French Feminism)
PSCI 3264W (Global Feminisms)
SOC 3711 (Women, Gender, and Globalization)
SPAN 2990 (Images of the Feminine in Spanish Cinema)

Courses approved to fulfill the history/social movements requirement:
  AADS 2214 (History and Myth: Black Women in the U.S.)
  CMST 3110 (Women, Rhetoric, and Social Change)
  ENGL 3622 (Nineteenth-Century Women Writers)
  GSS (formerly WGS) 3246/W (Women’s Rights, Women’s Wrongs)
  GSS (formerly WGS) 3250/W (Contemporary Women’s Movements)
  HIST 2835 (Sexuality and Gender to 1700)
  HIST 2840 (Sexuality and Gender since 1700)
  HIST 2855 (Women and Gender in the U.S. to 1865)
  HIST 2860 (Women and Gender in the U.S. since 1865)
  ITA 3740 (Gangsters, Lovers, Madonnas, and Mistresses)
  RLST 3930 (Women and Religion)
  RLST 3926 (Ancient Goddesses)
  SOC 3722 (Gender and Society)

Courses approved to fulfill the sex, sexuality, and society requirement:
  AADS 2104 (Popular Culture and Black Sexual Politics)
  ANTH 3145 (Sexuality, Gender, and Culture)
  CLAS 3100 (Women, Sexuality, and the Family in Ancient Greece and Rome)
  CMST 3720 (Communicating Gender)
  FREN 4322 (Adultery and Transgressions in Literature) [in French]
  GSS (formerly WGS) 2252 (Sex and Scandals in Literature)
  GSS (formerly WGS) 2256 (Literary Lesbians)
  GSS (formerly WGS) 2612 (LGBT Studies)
  GSS (formerly WGS) 2613 (Compulsory Couplehood)
  GSS (formerly WGS) 2614 (Cowboys, Gangsters, and Drag Kings: Introduction to Critical Masculinity)
  GSS (formerly WGS) 2615 (Transgender Lives in Literature and Film)
  HART 3228W (Gender and Sexuality in Greek Art)
  HIST 2240 (Sex Law)
  HIST 2810 (Women, Health, and Sexuality)
  LAS 4550 (Gender, Sexuality and Family in Latin America)
  PHIL 3604 (Gender and Sexuality)
  RLST 1820 (Religion, Sexuality, Power)
  RLST 3225 (Sexuality in the Hebrew Bible and Ancient Near East)
  SOC 3723 (Gender, Sexuality, and the Body)

Additional courses approved for intermediate-level GSS credit from other departments:
  AADS 1111*, AADS 1204, AADS 2214, AADS 4262, CLAS 1111*, CMST 1111*, CMST 2950, CMST 3100,
  CMST 3890, ENGL 1111*, ENGL 1111.19, ENGL 1230W*, ENGL1260W*, ENGL 3670/W*, ENGL 3674, ENGL
German, Russian and East European Studies

CHAIR Lutz Koeppnick
DIRECTOR OF UNDERGRADUATE STUDIES IN GERMAN
James McFarland
DIRECTOR OF UNDERGRADUATE STUDIES IN RUSSIAN
Denis Zhernokleyev
DIRECTOR OF GRADUATE STUDIES Meike G. Werner
PROFESSORS EMERITI Barbara Hahn, Konstantin V. Kustanovich, John A. McCarthy, Richard Porter, Peggy Setje-Eilers
PROFESSORS Celia Applegate, David Blackbourn, Joy Calico, Jennifer Fay, Joel Harrington, Lutz Koeppnick, Helmut Smith, David Wood
ASSOCIATE PROFESSORS Emily Greble, Alexander Joskowicz (Jewish Studies), James McFarland, Allison Schachter (Jewish Studies),
Frank Wcislo, Meike G. Werner, Christoph Zeller
ASSISTANT PROFESSORS Karen Ng, Simone Stirner
ASSISTANT PROFESSORS OF THE PRACTICE Albina Khabibulina
MELLON ASSISTANT PROFESSOR
SENIOR LECTURERS Silke Schade, Denis Zhernokleyev
LECTURER David Matthew Johnson

German, Russian and East European Studies takes students beyond the headlines to gain in-depth understanding of some of the world’s most influential nations and cultures. The department’s interdisciplinary curriculum provides a wide range of intellectual experiences, whether your primary interest is in literature, film, visual culture, music, history, thought, or politics. For students who want to engage with German, Russian, or East European culture in a more substantive way, the department offers programs of concentration in German Studies and in Russian Studies.

The department sponsors lectures on topics related to German, Russian and East European 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. German Studies majors with sufficient academic qualifications are invited to join Delta Phi Alpha, the national German honor society. Russian Studies majors with sufficient qualifications are invited to join Dobro Slovo, the national Slavic honor society.

Many students majoring in German Studies enroll in study abroad programs in Bremen or Freiburg, Germany. Less formal activities, such as a weekly Kaffeestunde or the Stammtisch at a local pizza parlor, are also open to undergraduates. For further information, please see as.vanderbilt.edu/grees.

The Russian and East European Studies program has a special commitment to undergraduate training in all aspects of Russian language and the cultures and histories of the larger region. Students have several possibilities for studying abroad in Russia, including summer-, semester- and year-long programs in Moscow and St. Petersburg, where they have the option of studying history, politics, economics and/or culture alongside the Russian language. For further information, please see as.vanderbilt.edu/grees.

Program of Concentration in German Studies

A major in German Studies offers deep engagement with the language, history, and culture of Germany and other German-speaking cultures. Students majoring in German Studies gain advanced proficiency in speaking and writing German, a detailed understanding of the complex and often haunting history of modern Germany, and rich insights into the unique work of German writers, filmmakers, artists, musicians, and thinkers. Students are required to complete a total of 30 credit hours of course work beyond GER 1102, including the following:
• **Core courses:**
  3 credit hours in 2440, 2441, or 2443  

• **German language in context:**
  12 credit hours of 2201, 2202, 3201, 3202W

• **Electives in German culture and history taught in German:**
  at least 9 credit hours of any course in German between 4551–4558

• **Electives in German culture and history taught in English:**
  at least 6 credit hours of courses taught in English above 2443

Total credit 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 director of undergraduate studies in German; such course work will count toward the 6 credit hour total for elective courses in German culture and history taught in English. Up to 6 credit hours 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 during their junior year and will be required to submit a paper written for one of their courses due the semester prior to graduation. The director of undergraduate studies in German should be consulted for details on these special learning outcome assessments.

**Honors Program in German Studies**

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 3 credit hours beyond the basic course requirements, in the form of a course taught in German above GER 4550;
- maintain at least a 3.30 cumulative GPA in courses that count toward the German major and a 3.30 cumulative GPA;
- complete 3 credit hours of 4999. Write an honors thesis and pass an oral examination during their final semester.

**Minor in German Studies**

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 2440, 2441, or 2443 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.

**Study Abroad**

Students majoring in German Studies are strongly encouraged to complete an immersive German-language experience in a German-speaking country. Further information is available through the director of undergraduate studies and the Global Education Office.

**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 30 credit hours of course work. A semester of study
abroad in a German-speaking country is recommended. Course work for the major is distributed as follows:

German (15 credit hours)
- Language courses (6 credit hours): GER 3201 and 3202W
- Great German Works, History of German Thought, or History of German Cinema (3 credit hours): GER 2440, 2441, or 2443
- German culture in English (3 credit hours); any course between GER 2551–2557, or appropriate substitute approved by the director of undergraduate studies in German
- German culture (3 credit hours): any course between GER 4551–4558

European Studies (15 credit hours)
- European Studies core courses (3 credit hours): EUS 2201 or 2203
- European Studies courses or alternative topical courses as approved by major adviser (9 credit hours)
- Senior Tutorial (3 credit hours); EUS 4960 or equivalent course in German

Program of Concentration in Russian Studies
A major in Russian Studies entails deep and sustained engagement with the language, history, and culture of Russia and Russian speaking communities around the world. As one of the most dynamic actors on the world stage, Russian culture has been at the forefront of the history of literature, film, and visual arts, has produced some of the world’s deepest aesthetic engagements with the human condition, and has been at the vanguard of politics both repressive and progressive. Students are required to complete a minimum of 30 credit hours of course work. 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. A maximum of 6 credit hours toward the language or elective requirements may be earned from Vanderbilt-approved courses taken from other U.S. institutions or through study abroad programs.

Core course
- RUSS 1500 3 credit hours

Language courses in Russian
- RUSS 1102 [prerequisite 1101] 4 credit hours
- RUSS 2201–2202 8 credit hours
- Two courses in Russian above RUSS 3000 6 credit hours

Elective courses 9 credit hours minimum

The 9 credit hours of elective credit may be earned from RUSS courses in Russian above 3000, or in English-language courses with the RUSS subject code (see the list of qualifying courses below). Students concentrating in Russian will be expected to take an assessment exam prior to graduation.

Study Abroad
Students majoring in Russian studies are strongly encouraged to complete an immersive Russian-language experience in the Russian Federation or another Russian-speaking country. Further information is available through the director of undergraduate studies and the Global Education Office.

Honors Program
Majors with a cumulative GPA of 3.30 or higher may apply to the Honors Program prior to registration of second semester junior year. They will submit a 6 credit hour program of study that couples a RUSS-designated course above 2202 in the first semester senior year with RUSS 4999, Senior Honors Thesis, in the second semester of the senior year. This program must have the approval of the departmental faculty member who will serve as the senior thesis adviser. The senior thesis is defended in the second semester of the senior year before a faculty committee,
which may award Honors or High Honors in Russian to the baccalaureate degree.

Minor in Russian Studies
Requirements for a minor in Russian studies include a minimum of 17 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 with approval of the director of undergraduate studies. A maximum of 6 credit hours toward the Russian minor may be earned from Vanderbilt-approved 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.

Russian- and English-language courses with the RUSS subject code that qualify for the elective credit hours required for the concentration and minor in Russian:
1874, 1910W, 1911W, 2201–2202 [minor only], 2210, 2230, 2273, 2434, 2435, 2438, 2485, 2537, 2639, 2745, 2800, 2810, 2910, all 3000-level courses, and 4999.

Program of Concentration in European Studies: Russia and Eastern Europe
Students pursuing the interdisciplinary European Studies major in Russia and Eastern Europe combine their focus on Russian and East European societies with a study of modern Europe in its political, economic, and cultural diversity. Students may elect this interdisciplinary major consisting of 29 credit hours of course work. A semester of study abroad in Russia or Eastern and Central Europe is recommended. Course work for the major is distributed as follows

**Russian and East European Studies (17 credit hours)**
- 8 credit hours in Russian language: either RUSS 1101–1102 (8 credit hours), or equivalent in another East European language, or RUSS 2201–2202 (8 credit hours), or equivalent in another East European language. Other East European languages include Albanian, Bulgarian, Czech, Croatian/Bosnian/Serbian, Hungarian, Romani, Romanian, Polish, Slovak, or Yiddish.
- 9 credit hours of topical courses on Russia or Eastern Europe in RUSS or as approved by the major adviser

**European Studies (12 credit hours)**
- EUS 2201, European Society and Culture (3 credit hours) or EUS 2203, The Idea of Europe (3 credit hours)
- 6 credit hours of courses in EUS or alternative topical courses as approved by the major adviser
- EUS 4960, Senior Tutorial (3 credit hours) or equivalent
  3 credit hour course in RUSS

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 can be found in the courses section of this catalog.
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 can be found in the courses section of this catalog.

Hebrew

DIRECTOR OF UNDERGRADUATE STUDIES Rebecca Epstein-Levi
ASSISTANT PROFESSOR Mazalit Haim

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 can be found in the courses section of this catalog.

History

CHAIR Edward Wright-Rios
VICE CHAIR Leor Halevi
DIRECTOR OF UNDERGRADUATE STUDIES Thomas Alan Schwartz
DIRECTOR OF UNDERGRADUATE STUDIES FOR LAW, HISTORY, AND SOCIETY Thomas Alan Schwartz
DIRECTOR OF GRADUATE STUDIES Emily Greble
PROFESSORS EMERITI Richard J. M. Blackett, David Lee Carlton, Paul K. Conkin, James A. Epstein, Jimmie L. Franklin, Matthew Ramsey, V. Jacque Voegeli, Donald L. Winters
ASSOCIATE PROFESSORS Ari Bryen, Celso Castilho, Lauren Clay, Emily Greble, Paul A. Kramer, Peter Lorge, Catherine Molineux, Ruth Rogaski, Samira Sheikh, Francis W. Wcislo
ASSISTANT PROFESSORS Ari Bryen, Brandon Byrd, Sara E. Mayeux, Ole Molvig, Tasha Rijke-Epstein, Frank Robinson, Kimberly Welch
RESEARCH ASSISTANT PROFESSORS Samuel Fullerton, Mario Rewers
SENIOR LECTURER Yollette T. Jones

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; a major in law, history, and society; 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.

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 or 3980 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
1038, 1039, 1050, 1060, 1070, 1080, 1085W, 1090, 1160, 1161, 1200, 1881, 1882W, 2100, 2105, 2110, 2111, 2115, 2119, 2120, 2140, 2145, 2150, 2160, 2180, 2658, 3090, 3110, 3112W, 3190, 3220, 3230, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980, 4981, 4999; ASIA 2411, 2413, 2511, 2630; MHS 2310.

Program B. Latin America
1038, 1039, 1368, 1370, 1378, 1379W, 1380, 1383, 1385W, 1469, 1650, 2450, 2457, 2470, 2480, 2490, 2510, 2530, 2535, 2540, 2542, 2570, 2845, 3100, 3230, 3280, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, and 4999; AADS 4256.

Program C. Europe
1038, 1039, 1040W, 1200, 1345, 1350, 1352, 1355W, 1360, 1470, 1480, 1500, 1510, 1510L, 1520, 1580, 1582W, 1584W, 1586W, 1600, 1695W, 1700, 1725W, 1760, 2130, 2135, 2140, 2160, 2170, 2190, 2220, 2230, 2237, 2238, 2240, 2250, 2255, 2260, 2270, 2280, 2290, 2293, 2294, 2300, 2310, 2330, 2340, 2380, 2382, 2383, 2385, 2410, 2450, 2595W, 2658, 2660, 2720, 2760, 2760W, 2800, 2835, 2840, 3010, 3050, 3070W, 3100, 3110, 3120, 3150, 3180, 3190, 3210, 3230, 3240, 3260, 3270, 3275, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, and 4999; CLAS 2100, 2110, 2120, 2150, 2160, 2180, 3110; ECON 3160; EUS 2201, 2208, 2220; GER 2442, 2554, 2563; JS 1111.09, 1220, 1240, 2450, 2540, 3100, 3210; PHIL 2100; RLST 2250W, 3316, 3350, 4371; RUSS 2800, 2810, 2820, 2910, 2915.
Program D. Early America and the United States
1038, 1039, 1200, 1383, 1385W, 1390, 1395, 1400, 1410, 1420, 1422W, 1427W, 1430W, 1438, 1440, 1469, 1480, 1500, 1520, 1650, 1660, 1665, 1690, 1691, 1693, 1699, 1710W, 1725W, 1730, 1740, 1770, 1780W, 2111, 2119, 2239, 2240, 2530, 2535, 2542, 2580, 2590, 2595W, 2600, 2610, 2620, 2640, 2650, 2655, 2660, 2662, 2684, 2685, 2686, 2689, 2690, 2691, 2692W, 2700, 2710, 2720, 2721, 2722, 2725, 2730, 2735, 2740, 2749, 2750, 2752, 2760, 2780, 2800, 2810, 2840, 2845, 2855, 2860, 3010, 3112, 311D, 3130, 3135, 3140, 3170, 3190, 3230, 3240, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, and 4999; AADS 2214; AMER 1700W; ECON 2150, 3150; HOD 1115; JS 1240, 2540, 2560; MHS 2110.

Program E. Middle East and Africa
1038, 1039, 1161, 1190, 1200, 1269, 1270, 1270W, 1271W, 1280, 1281W, 1725W, 2137, 2138, 2139, 2140, 2154, 2155, 2160, 2170, 2180, 2190, 2413, 2413W, 2510, 2660, 3150, 3190, 3200, 3209, 3210, 3230, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 4960, 4980–4981, and 4999; AADS 2106; CLAS 2180, 3010; JS 1111.09, 1200, 1220, 1240, 2540, 2600, 2620, 3210; RLST 4371.

Program F. Global and Transnational
1038, 1039, 1040W, 1190, 1200, 1270, 1270W, 1271W, 1345, 1368, 1370, 1378, 1379W, 1380, 1383, 1385W, 1469, 1470, 1600, 1650, 1665, 1691, 1692, 1695W, 1700, 1725W, 1740, 1881, 2106, 2110, 2130, 2135, 2137, 2138, 2139, 2140, 2150, 2160, 2170, 2180, 2190, 2238, 2294, 2413, 2413W, 2450, 2457, 2480, 2490, 2530, 2535, 2540, 2542, 2570, 2595W, 2658, 2660, 2700, 2710, 2721, 2722, 2725, 2735, 2740, 2760W, 2835, 2840, 2845, 3010, 3100, 3110, 3112W, 3120, 3150, 3190, 3209, 3220, 3230, 3240, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, and 4999; ASIA 2413, 2630; CLAS 2120, 2180, 3010; JS 1111.09, 1200, 1220, 1240, 2845, 3000, 3100; EUS 2220; MHS 2110; RLST 3306, 4371; RUSS 2810, 2820, 2910, 2915.

Program G. Science, Medicine, and Technology
Students may meet the requirement by taking five courses from the SMT list, among which not more than two may be courses outside the Department of History.
1385W, 1470, 1480, 1500, 1510, 1510L, 1520, 1780W, 2139, 2160, 2413W, 2780, 2800, 2810, 3040, 3045W, 3050, 3070W, 3110, 3230, and, as appropriate, 3746, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, and 4999; ANTH 4373; ASIA 2630; ASTR 2130; ENGL 3720 or 3720W; MATH 3000; MHS 2110, 2310, 2320, 2430; and other courses, as appropriate, with approval of the director of undergraduate studies.

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)

Program of Concentration in Law, History, and Society
As a human institution self-consciously aware of its past, “The Law” raises a complex set of issues that can be addressed historically. Legislation and jurisprudence, for example, allow historians a privileged perspective into how societies sought to define themselves, their values, and their membership. Constitutions provide maps of political power, and serve as sites of struggle over goods both real and symbolic. Records of legal practice are often
well preserved, allowing access to the voices and actions of people who are usually left out of systems of political organization.

This major approaches law from both a historical and an interdisciplinary perspective. Emphasis will be placed on close reading of legal documents, research in legal archives, and analytical writing. Students will be encouraged to develop reading programs and research topics that stretch across national and chronological boundaries, and to think comparatively. Students may not major both in history and in law, history, and society. Students majoring in law, history, and society may apply to receive honors through the History Honors Program.

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. No more than 6 credit hours may be from courses outside the Department of History.

Course work is distributed as follows:
1. History Workshop. 3000W or 3980 (3 credit hours)
   Note: 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. Law, History, and Society: Five courses from the following:
   1040W, 1271W, 1345, 1352, 1379W, 1383, 1385W, 1430W, 1580, 1584W, 1667, 2130, 2135, 2155, 2190, 2237, 2238, 2239, 2240, 2290, 2293, 2294, 2450, 2580, 2590, 2610, 2658, 2662, 2690, 2691, 2692W, 2760, 2760W, 2855, 2860, 3170, 3209 and, as appropriate, 3850, 3882, 3883, 3890, 3980, 4960, 4980–4981, and 4999; CLAS 3150, 3160; CMST 3150; ECON 4210; ENGL 3734; FREN 4232; GSS (formerly WGS) 3271, 3281; JS 2150; MHS 2320; PSCI 1103, 2208, 2226, 2251, 2262, 2265, 2266, 3260; RUSS 2485, 2810, 2820, 2910, 2915; SOC 3605, 3611, 3613, 3621; 3624; and other courses, as appropriate, with approval of the director of undergraduate studies of Law, History, and Society.
   Note: First-Year Writing Seminars (1111) in history may be used to satisfy the relevant program concentration with approval of the director of undergraduate studies of Law, History, and Society.

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, the topic of which must be approved by the director of undergraduate studies of law, history, and society. Any capstone course on a topic concerning law, history, and society will count toward the five-course requirement for the program 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 enrolled in the History Honors Program.
   Note: At the discretion of the director of honors and the director of undergraduate studies in law, history, and society, 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 in history, depending on the nature of the capstone course)
   Electives may include any courses, not used to satisfy any of the above requirements, offered by the Department of History or listed above in major requirement #2.

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
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.

Licensure for Teaching

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

Minor in History

The minor in history requires a minimum of 18 credit hours in courses that are offered by the Department of History or that are listed above in programs A–G of the history major, among which no more than two courses may be outside the Department of History. At least 9 credit hours must be taken at the 2000 level or higher. Students must complete 3000W. No more than 3 credit hours of AP or IB credit may count toward this total. Course descriptions can be found in the courses section of this catalog.

History of Art and Architecture

CHAIR Kevin D. Murphy
DIRECTOR OF UNDERGRADUATE STUDIES Sheri Shaneyfelt
DIRECTOR OF GRADUATE STUDIES Betsey A. Robinson
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, David Price
ASSOCIATE PROFESSORS Tracy Miller, Elizabeth J. Moodey, Betsey A. Robinson
ASSISTANT PROFESSORS Mireille M. Lee, Rebecca K. VanDiver
MELLON ASSISTANT PROFESSOR Heeryoon Shin
ASSISTANT PROFESSOR OF THE PRACTICE Matthew Worsnick
PRINCIPAL SENIOR LECTURER Sheri Shaneyfelt

THE Department of History of Art and Architecture treats critically the major fields in world art, from ancient to contemporary, and serves to connect the arts to the other humanities. Many students will use the program in history of art and architecture 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 or architecture, 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 and architecture participate in the activities of the Vanderbilt History of Art Society and work closely with departmental advisers. The History of Art Society and the department sponsor 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, Anthropology, Asian Studies, Cinema and Media Arts, Classical and Mediterranean Studies, European Studies, Gender and Sexuality Studies, Latin American Studies, and Religious
The Department of History of Art and Architecture offers a major and minor in history of art, and a major and minor in architecture and the built environment.

**Program of Concentration in History of Art**

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.

**Course work is distributed as follows:**

1. 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, 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 credit will not be accepted.

2. 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, 3224, 3226, 3228W, 3240W, 3252; CLAS 2250, 3200
   b. **Medieval:** HART 2270, 2275, 2285, 2288, 2290, 3364W
   c. **Renaissance/Baroque:** HART 2310, 2320W, 2325, 2330, 2362, 2390, 3320, 3320W, 3332, 3334, 3334W
   d. **Modern:** HART 2600, 2620, 2622, 2625, 2650, 2660, 2665, 2710, 2720, 2722, 2740, 2750, 2755, 2760, 2765, 3605W, 3712W, 3718W, 3725W, 3740, 3757W, 3766W, 3767W
   e. **Non-Western:** HART 2100, 2110, 2120, 2150, 2175, 2180, 2192, 3112, 3140, 3164W, 3173W, 3174

3. Electives (6 credit hours)—two upper-level courses in history of art (HART 2100 to 3850 and 3890; CLAS 2250, 3200, 3720) in addition to the area requirements.

4. Advanced Seminars (6 credit hours)—HART 3000W, 4960

**Program of Concentration in Architecture and the Built Environment**

The track in architecture and the built environment requires 30 credit hours and promotes interdisciplinary and transinstitutional study. It enables students to develop breadth and expertise in the history and theory of architecture, landscape architecture, and constructed environments; design studies; and theoretical and historical approaches to analyzing urban scale and city planning. Students can build a foundation for graduate work in these fields as well as for spatially related specializations in cognate disciplines such as anthropology, political science, public policy, sociology, demography, public health, environmental studies, civil engineering, computer science, and geography and geographic information systems.
Course work is distributed as follows:

1. 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, 1121, 1200, 1205, 1210W, 1220, 1300, 1330W, 1400, or 1740W. This course is not a prerequisite for further history of art course work but must be taken at Vanderbilt; AP credit will not be accepted.

2. Three courses (9 credit hours) in architectural, design, landscape, or urban history selected from HART 2100, 2110, 2120, 2130, 2150, 2175, 2180, 2210, 2220, 2270, 2275, 2285, 2290, 2650, 2665, 2720, 2722, 2740, 2780, 2782, 2815, 3112, 3140, 3174, 3252, 3790; and CLAS 2250.

3. One advanced seminar in architectural history (3 credit hours) selected from HART 3240W, 3725W, 3757W, 3766W, or 3810W (when the course topic concerns architecture and the built environment, landscape architecture, design studies, or urban planning).

4. Five electives (15 credit hours): Electives may include any HART courses listed above in major requirements 1-3 not used to satisfy any of those requirements, or courses chosen from the list below. A maximum of two electives may be taken from any one department (with the exception of History of Art and Architecture), and a maximum of two electives may be taken at the 1000 level.

Students will work with the Director of Undergraduate Studies and departmental advisers to design a program of study that addresses their academic interests and career goals. Students interested in graduate programs in architecture and design should review elective selections with the pre-architecture adviser.


AMERICAN STUDIES: 3200, Global Perspectives on the U.S.

ANTHROPOLOGY: 2101, Theories of Culture; 2110, Gender and Cultural Politics; 2130, Global Infrastructure and Everyday Life; 2150, Urban Ecology; 2214, Art and Architecture in the Ancient Americas; 2220W, Human Landscapes; 2225, Climate Change, Collapse, and Sustainability in History; 3161, Colonial Encounters in the Americas; 3200, Ancient Cities; 3202, The Collapse of Civilizations; 3261, Introduction to Geographic Information Systems and Remote Sensing; 4154, Environmental Anthropology

ART STUDIO: 1101, Introduction to Studio Art; 1102, Drawing and Composition I; 1200, Photography I; 1201, Alternative Photography; 1202, Digital Imaging I; 1300, Painting; 1400, Ceramics; 1401, Sculptural Ceramics; 1500, Sculpture; 1501, Assemblage; 1502, Installation Art; 1503, Text and Image; 1600, Printmaking: Etching and Relief; 1601, Printmaking: Screen and Lithography; 1700, Video Art; 1702, Portable Media I; 1900, Social Collective Art Practice; 2100, Drawing and Composition II; 2102, Drawing: Color Media I; 2200, Photography II; 2202, Digital Imaging II; 2300, Painting II; 2400, Ceramics II; 2401, Concept and Clay: Composite Forms; 2500, Sculpture II; 2600, Printmaking II; 2700, Video Art II; 2702, Portable Media II; 3100, Drawing and Composition III; 3102, Drawing: Color Media II; 3200, Photography III; 3300, Painting III; 3600, Printmaking III

ASIAN STUDIES: 2100W, Fashioning the Self: Coming of Age and Asian Modernities

BIOLOGICAL SCIENCES: 1103/1103L, Green Earth: The Biodiversity and Evolution of Plants; 2238/2238L, Ecology; 3233, Conservation Biology

CINEMA AND MEDIA ARTS: 1600, Introduction to Film and Media Studies; 2400, History of World Cinema
CIVIL ENGINEERING: 2101, Civil and Environmental Engineering Information Systems; 2120, Sustainable Design Civil Engineering; 2200, Statics; 2205, Mechanics of Materials; 3200, Structural Analysis; 3205, Structural Design; 3501, Transportation Systems Engineering; 3600, Environmental Engineering; 4100, Geographic Information Systems (GIS); 4205, Intelligent Transportation Systems; 4320, Data Analytics for Engineers; 4415, Construction Materials and Methods; 4425, Building Information Modeling; 4430, High Performance and Green Buildings; 4505, Urban Transportation Planning; 4950, Civil Engineering Design I; 4951, Civil Engineering Design II


COMMUNICATION STUDIES: 2800, Rhetoric and Civil Life; 2950, Rhetoric of Mass Media; 3100, Rhetoric of Social Movements; 3700, Politics and Mass Media

COMPUTER SCIENCE: 1000, The Beauty and Joy of Computing; 1101, Programming and Problem Solving; CS 1103 Introductory Programming for Engineers and Scientists; CS 1104 Programming and Problem Solving in Python; 1151, Computers and Ethics

EARTH AND ENVIRONMENTAL SCIENCES: 1510/1510L, The Dynamic Earth: Introduction to Geological Sciences; 2110, Global Climate Change; 2150, Science, Risk, and Policy; 4750, Sustainability: An Environmental Science Perspective; 4760, Agent- and Individual-Based Computational Modeling

ECONOMICS: 1010, Principles of Macroeconomics; 1020, Principles of Microeconomics; 2170, Environmental Economics; 2340, Plunder and Pillage: The Economics of Warfare and Conflict; 3230, Urban Economics

ENGINEERING SCIENCE: 2700, Engineering Career Development; 2900, Engineering and Public Policy

ENGLISH: 3692, Desire in America: Literature, Cinema, and History; 3694, America on Film: Art and Ideology; 3695, America on Film: Performance and Culture; 3730, Literature and the Environment

ENVIRONMENTAL ENGINEERING: 3610, Sustainable Development; 4615, Environmental Assessments; 4700, Energy and Water Resources

EUROPEAN STUDIES: 2201, European Society and Culture; 2203, The Idea of Europe; 2800, Pursuing Utopia: Social Justice and Romanticism in the Alps; 2260, European Cities

FRENCH: 3634, Parisian Geographies: Paris in 19th and 20th Century Art and Literature

GENDER AND SEXUALITY STUDIES: 1160, Sex and Society; 2268, Gender, Race, Justice, and the Environment


HISTORY OF ART AND ARCHITECTURE: 1111.09, Seven Wonders of the Ancient World; 1111.11, Sacred Geographies of China; 1111.12, Pompeii: Life and Death of a Roman City; 1111.17, New York City Architecture
HUMAN AND ORGANIZATIONAL DEVELOPMENT: 3202, Community Development Theory; 3212, Community Development Organizations and Policies

ITALIAN: 3642, Italian Visual Culture; 3701, City Fictions


MATHEMATICS: 1100, Survey of Calculus; 1200, Single-Variable Calculus I; 1201, Single-Variable Calculus II; 1300, Accelerated Single-Variable Calculus I; 1301, Accelerated Single-Variable Calculus II; 2300, Multivariable Calculus; 2310, Multivariable Calculus with Matrix Algebra; 2400, Differential Equations with Linear Algebra

MECHANICAL ENGINEERING: 2160, Introduction to Mechanical Engineering Design; 3248, Heat Transfer; 4258, Engineering Acoustics; 4259, Engineering Vibrations; 4262, Environmental Control

MEDICINE, HEALTH, AND SOCIETY: 1950, Theories of the Body; 2240, Bionic Bodies, Disability Cultures; 3040, Designing Healthy Publics; 3120, Medicine, Technology, and Society

MUSIC LITERATURE: 1660, Music and Tourism: Music City Museum and Memorabilia; 2350, The Music and Culture of Venice; 3230, Music and the Construction of National Identity

NEUROSCIENCE: 2201, Neuroscience

PHILOSOPHY: 1005, Introduction to Ethics; 1111.05, Green Cities; 3013, History of Aesthetics; 3014, Modernistic Aesthetics; 3611, Environmental Philosophy; 3615, Philosophy of Film; 3661, Topics in Aesthetics

PHYSICS: 1010/1010L, Introductory Physics; 1601/1601L, General Physics I; 1602/1602L, General Physics II; 2255/2255L, Modern Physics and the Quantum World; 2275, Classical Mechanics


PSYCHOLOGY: 3110, Social Psychology

PUBLIC POLICY STUDIES: 3100, Cities in the 21st Century


RUSSIAN: 2745, Radical Art: The Avant-Garde Revolution; 2800, Viewing Communism in Eastern Europe; 2810, Revolutions and Post-Communisms in Eastern Europe and Eurasia, 1981-2010

SOCIOLOGY: 1030, Environment and Society; 3001, Sociological Perspectives; 3204, Tourism, Culture, and Place; 3206, Creativity and Innovation in Society; 3221, The Family; 3311, Climate Change and Society; 3312, Environment and Development; 3314, Environmental Inequality and Justice; 3315, Human Ecology and Society; 3316, Business, Civil Society, and the Environment; 3317, Energy Transitions and Society; 3321, Population and Society; 3601, Self, Society, and Social Change; 3612, Class, Status, and Power; 3615, Human Behavior in Organizations; 3723, Gender, Sexuality, and the Body

SPANISH: 4810, Images of the City

THEATRE: 1010, 1010W, Fundamentals of Theatre; 1751, Fundamentals of Theatre Design

UNIVERSITY COURSES: 3200, Race, Place, and Power; 3279, Virtual Reality Design; 3350, Design Thinking, Design Doing; 3360, Data Science Methods for Smart City Applications
Honors Program

The honors program in history of art and architecture allows exceptional undergraduate students to undertake independent research on a topic in art or architectural history in consultation with faculty members. The program is open to all history of art and architecture majors with junior standing who have earned 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 defense of the thesis. These independent research credit hours are in addition to the 30 credit hours required for the major in history of art or architecture and the built environment. Students meeting these requirements receive honors or highest honors in history of art or architecture and the built environment, depending on the quality of the thesis, grades in history of art and architecture courses, and defense results. Successful departmental honors students will receive a Vanderbilt diploma that records honors or highest honors in history of art or architecture and the built environment.

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, 1121, 1200, 1205, 1220, 1300, or 1400, plus any four upper-level history of art courses (HART 2100 to 3850 and 3890, 4960), and classes designated CLAS 2250, 3200, 3720.

Minor in Architecture and the Built Environment

The minor in architecture and the built environment requires 18 credit hours of course work, distributed as follows:

1. 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, 1121, 1200, 1205, 1210W, 1220, 1300, 1330W, 1400, or 1740W.

2. Three courses (9 credit hours) in architectural, design, landscape, or urban history selected from HART 2100, 2110, 2120, 2130, 2150, 2175, 2180, 2210, 2220, 2270, 2275, 2285, 2290, 2650, 2665, 2720, 2722, 2740, 2780, 2782, 2815, 3112, 3140, 3174, 3252, 3790; and CLAS 2250.

3. Two electives (6 credit hours): Electives may include any HART courses listed above in minor requirements 1-2 not used to satisfy either of those requirements or courses chosen from the Electives list for the architecture and the built environment major. No more than one elective course may be taken at the 1000 level.

Course descriptions can be found in the courses section of this catalog.

Honors

COURSES designated “Honors” are parts of a special honors program in liberal education called the College Scholars program. 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. All first-year students in the College of Arts and Science may apply to the associate dean for honors programs for admission to the College Scholars program; only first-year students are considered for admission.

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). They are designed to cover topics through the intensive analysis afforded by the seminar setting and format. An honors
interdisciplinary seminars will satisfy the requirement for a first-year writing seminar. Honors 1810W, 1820W, 1830W, 1840W, 1850W, and 1860W count toward the AXLE requirements identified by the seminars’ titles. Honors 1810W are Humanities and the Creative Arts (HCA) courses; Honors 1820W are Perspectives (P) courses; Honors 1830W are Social and Behavioral Sciences (SBS) courses; Honors 1840W are History and Culture of the United States (US) courses; Honors 1850W are Mathematics and Natural Sciences (MNS) courses; Honors 1860W are International Cultures (INT) courses.

In addition to regular credit hours and grade points, honors seminars 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 project 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.

Course descriptions can be found in the courses section of this catalog.

Interdisciplinary Studies

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 3880/3884(summer) 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 can be found in the courses section of this catalog.

Jewish Studies

CHAIR Allison Schachter
DIRECTOR OF UNDERGRADUATE STUDIES: Rebecca Epstein-Levi
PROFESSORS Amy-Jill Levine, David Price, David J. Wasserstein
ASSOCIATE PROFESSORS Phillip Ackerman-Lieberman, Julia Phillips Cohen, Shaul Kelner, Adam Meyer, Allison Schachter
ASSISTANT PROFESSORS Rebecca Epstein-Levi, Mazalit Haim
SENIOR LECTURER Judith Klass

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.

**Program of Concentration in Jewish Studies**

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

1. *Introductory course, 3 credit hours.* JS 1002 or 1002W, Introduction to Jewish Studies; JS 1010: Introduction to Judaism, or JS 1040: Introduction to Modern Jewish History.

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 Judaeo-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. *Electives (minimum of 21 credit hours)—* Any of the courses listed below that are not used to fulfill another requirement toward 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. *Introductory course, 3 credit hours.* JS 1002 or 1002W, Introduction to Jewish Studies; JS 1010: Introduction to Judaism, or JS 1040: Introduction to Modern Jewish History.

2. *Electives (minimum of 15 credit hours).* Any of the courses listed below that are not used to fulfill another 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.
LANGUAGE:

Jewish Studies: 4301, Jewish Language and Paleography.


ELECTIVES:

Jewish Studies: 1002 or 1002W, Introduction to Jewish Studies; 1010, Introduction to Judaism, or 1040, Introduction to Modern Jewish History; 1111.01, In a Pluralistic Age: Jews, Christians, and Muslims in Spain; 1111.02, Music and Identity in Jewish Traditions; 1111.03, Radical Jews from Karl Marx to Noam Chomsky; 1111.04, Civil Rights and Civil Wrongs: Black–Jewish Relations in the 1950s and 1960s; 1111.05, Gender, Sexuality, and Desire in Jewish Literature; 1111.06, Reading across the Boundaries: Arab and Israeli Literature and Culture; 1111.07, From Einstein to Chomsky: Revolutionary Sciences in Jewish America; 1111.09, Jews and Muslims: A Modern History; 1111.10, Jewish Response to Catastrophe; 1111.12, Jews and Hollywood; 1200, Classical Judaism: Jews in Antiquity; 1111.13, The Cold-War Struggle to Free Soviet Jews; 1210W, The Bible as Literature/The Bible and Literature; 1220, Jews in the Medieval World; 2100, The New Testament in Its Jewish Contexts; 2150, Issues in Rabbinic Literature; 2210W, Hebrew Literature in Translation; 2220, Israeli Culture Through Film; 2230W, American Southern Jews in Life and Literature; 2240W, Black–Jewish Relations in Post-War American Literature and Culture; 2250W, Witnesses Who Were Not There: Literature of the Children of Holocaust Survivors; 2260, Coming of Age in Jewish Literature and Film; 2260W, Coming of Age in Jewish Literature and Film; 2270, Jewish Storytelling; 2270W, Jewish Storytelling; 2280, Jewish Humor; 2280W, Jewish Humor; 2290W, Imagining the Alien: Jewish Science Fiction; 2300, Modern Jewish Thought; 2320, Freud and Jewish Identity; 2330, Is G-d Guilty? The Problem of Evil in Judaism; 2340, Jewish Philosophy after Auschwitz; 2400, American Jewish Life; 2420W, American Jewish Music; 2450, The Jewish Diaspora; 2500, Modern Israel; 2520, Zionism: Politics, Religion, and Ethnicity; 2540, Power and Diplomacy in the Modern Middle East; 2560, Social Movements in Modern Jewish Life; 2600, Islam and the Jews; 2620, Jews in Egypt; 2640, Jews and Greeks; 2700W, Judaism and Medicine; 3000, Major Themes in Jewish Studies; 3100, The Holocaust; 3210, Reading across Boundaries: Jewish and Non-Jewish Texts; 3400W, Jerusalem; 3830, Contemporary Jewish Issues; 3883, Internship Research; 3890, Special Topics; 3892, Topics in Ancient and Medieval Jewish History; 3894, Topics in Modern Jewish History; 4301, Jewish Language and Paleography; 4960, Senior Seminar; 4970, Senior Project in Jewish Studies.

Anthropology: 3140, Myth, Ritual, Belief: The Anthropology of Religion.

Classics: 2100, History of the Ancient Near East; 2120, Greece and the Near East from Alexander to Theodosius; 2160, History of Roman Empire; 3010, The Ancient Origins of Religious Conflict in the Middle East.

English: 3370, The Bible in Literature; 3664, Jewish American Literature.

European Studies: 2208, Conspiracy Theories and Rumors in European and U.S. History.

French: 4430, Jews and Arab Muslims in France.

German: 1111, Representing the Holocaust; 2443, German Cinema: Vampires, Victims, and Vamps; 2445, Nazi Cinema: The Manipulation of Mass Culture; 3344, Women at the Margins: German Jewish Women Writers; 4574, Who Am I? German Autobiographies.

History: 1111.18, The Life, Science, and Times of Albert Einstein; 1190, A History of Islam; 1200, The Arab Spring; 2155, Muhammad and Early Islam; 2160, Medicine in Islam; 2170, Islam and the Crusades; 2190, Last Empire of Islam; 2280, Europe, 1900–1945; 2290, Europe since 1945; 2300, Twentieth-Century Germany; 2720, Art of Pagans, Christians, and Jews; 2765, Art since 1945.


Philosophy: 2101, Hellenistic and Late Ancient Philosophy; 2102, Medieval Philosophy; 2103, Modern Philosophy; 2109, Twentieth-Century Continental Philosophy; 3005, Jewish Philosophy; 3006, Islamic Philosophy; 3011, Critical Theory; 3607, Philosophy of Religion; 3657, Humanity, Evolution, and God.

Political Science: 2230, Middle East Politics; 2263, Religion and Politics; 3235, Political Islam.


Sociology: 3204, Tourism, Culture, and Place; 3222, Sociology of Religion; 3702, Racial and Ethnic Minorities in the United States.

Course descriptions can be found in the courses section of this catalog.
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, Haitian Creole, 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, Haitian Creole 2202, or K’iche’ 2202. Individual standardized testing may also be used to demonstrate knowledge.

II. Core Courses (6 credit hours)

LAS 2101, Introduction to Latin America
LAS 4901, Research Seminar

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

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; 1378, Social Movements in Latin America, 1780–1912; 1379W, The Inquisition in the New World; 1380, Modern Latin America; 1383, Slave Resistance in the Americas; 2450, Reform, Crisis, and Independence in Latin America, 1700–1820; 2457, Drug Trafficking and Society in Latin America; 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; 3850, Independent Study; 3890, Selected Topics in History.

LATIN AMERICAN STUDIES: 2102, Brazil: Past, Present, and Future.

B. Language, Literature, History of Art.

AFRICAN AMERICAN AND DIASPORA STUDIES: 1706, Capoeira: Afro-Brazilian Race, Culture, and Expression; 2148, Blacks in Latin America and the Caribbean; 2356, African Spirits in Exile: Diaspora Religions in the Americas; 3248, Atlantic African Slave Trade.

CREOLE: 1101, Elementary Creole I; 1102, Elementary Creole II; 2201, Intermediate Creole I; 2202, Intermediate Creole II.


K’ICHE’: 1101, Elementary K’iche’ I; 1102, Elementary K’iche’ II; 2201, Intermediate K’iche’ I; 2202, Intermediate K’iche’ II.
LATIN AMERICAN STUDIES: 2102, Brazil: Past, Present, and Future; 2301, Music of Protest and Social Change in Latin America; 4550, Gender, Sexuality, and Family 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; 3850, Independent Study; 3892, Special Topics in Portuguese Language, Literature, or Civilization; 4350, Brazilian Culture through Native Material; 4420, Brazilian Literature through the Nineteenth Century; 4425, Modern Brazilian Literature.

SPANISH: 2203, Intermediate Spanish; 2995, Contemporary Latin American Prose Fiction in English Translation; 3303, Introduction to Spanish and Spanish American Literature; 3320, Introduction to Hispanic Cultural Studies; 3330, Cultural Studies in the Andes; 3340, Advanced Conversation; 3345, Spanish for Business and Economics; 3350, Spanish for the Legal Profession; 3355, Advanced Conversation through Cultural Issues in Film; 3360, Spanish Civilization; 3375, Film and Culture in Latin America; 3830, Spanish for the Medical Profession; 3835, Latino Immigration Experience; 3850, Independent Study; 3891, Special Topics in Hispanic Culture; 3892, Special Topics in Spanish Language and Linguistics; 3893, Special Topics in Hispanic Literature; 4310, Translation and Interpretation; 4325, Dialectology; 4340, History of the Spanish Language; 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; 4440, Development of the Short Story; 4445, Development of the Novel; 4450, The Contemporary Novel; 4455, Development of Drama; 4465, The Theory and Practice of Drama; 4470, Development of Lyric Poetry; 4620, Love and Honor in Medieval and Golden Age Literature; 4640, Don Quixote; 4720, Literary Genres and National Identities in Latin America; 4725, Jungle Narratives in Latin America; 4730, Modern Latin American Poetry; 4750, Afro-Hispanic Literature; 4755, Latina and Latin American Women Writers; 4760, Literature and Medicine; 4810, Images of the City.

C. Social and Natural Sciences.


Note: Students who successfully complete an Economics course on this list numbered 4520W or higher may also receive Area of Concentration credit for successfully completing either Economics 3010 or 3020.


POLITICAL SCIENCE: 2213, Democratization and Political Development; 2219, Politics of Mexico; 2225, International Political Economy; 2236, The Politics of Global Inequality; 3217, Latin American Politics; 3218, Public Opinion and Democracy in Latin America; 3219, La política de América Latina; 3228, International Politics of Latin America; 3897, Selected Topics; 3851–3852, Independent Research.

SOCIOLOGY: 3232, Contemporary Mexican Society; 3321, Population and Society; 3322, Immigration in America; 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, Haitian Creole 2202 or K’iche’ 2202. Courses taken to satisfy the language requirement may not be counted toward the 15 credit hours of core courses. Individual standardized testing 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: Brazil: Past, Present, and Future
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; 1383, Slave Resistance in the Americas; 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 can be found in the courses section of this catalog.

Latino and Latina Studies

DIRECTOR Gretchen Selcke
FACULTY DIRECTOR Lorraine López

LATINO and Latina Studies focuses on cultural production and political and socioeconomic experiences of people inculcated with the US experience, self-identifying as Latinx 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 Latinx 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.

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 Capstone, which is usually 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 Capstone (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

AFRICAN AMERICAN AND DIASPORA STUDIES: 1706, Capoeira: Afro-Brazilian Race, Culture, and Expression; 2148, Blacks in Latin America and the Caribbean.


HISTORY: 2725, Race, Power, and Modernity; 2540, Race and Nation in Latin America; 3280, Popular Cultures in Modern Latin America.

HUMAN AND ORGANIZATIONAL DEVELOPMENT: 3221, Health Service Delivery to Diverse Populations.

LATINO AND LATINA STUDIES: 3831, Latino and Latina Business and Entrepreneurship; 3880 and 3881, Latino and Latina Studies Internship Training and Internship Readings and Research; 3850, Independent Study.


SPANISH: 2995, Contemporary Latin American Prose Fiction in English Translation; 3302, Spanish for Oral Communication Through Cultural Topics; 3303, Introduction to Spanish and Spanish American Literature; 3345, Spanish for Business and Economics; 3375, Film and Culture in Latin America; 3830, Spanish for the Medical Profession; 3835, Latino Immigration Experience; 3893-01, Special Topics in Hispanic Literature—Latinx US Literature; 3893-02, Special Topics in Hispanic Literature—Contemporary Mexican Literature and Culture; 4350, Communicating Across Cultures; 4450, The Contemporary Novel; 4720, Literary Genres and National Identities in Latin America; 4725, Jungle Narratives in Latin America; 4730, Modern Latin American Poetry; 4750, Afro-Hispanic Literature; 4755, Latina and Latin American Women Writers; 4765, Latina American Fiestas: Mexico, The Andes, and the Caribbean; 4810, Images of the City.

Category B: Historical Context


ANTHROPOLOGY: 1111 FYWS, Conquest of Mexico; 2106, Culture and Power in Latin America; 2108, Indigenous Peoples of Lowland South America; 2214, Art and Architecture in the Ancient Americas; 2220/2220W, Human Landscapes; 2230, South American Archaeology; 2231, Ancient Andean Civilizations; 2242/2242W The Archaeology of the Ancient Maya Civilization; 2160/2160, Creating Community; 2371, Reading the Bones: Bioarchaeology and Forensic Studies in the Peruvian Andes; 3130, Andean Culture and Society; 3161, Colonial Encounters in the Americas; 3162, Material Culture of New World Slavery; 3202, The Collapse of Civilizations; 3240, Ancient Mesoamerican Civilizations; 3241, The Aztecs; 3243/3243W, Ancient Maya Gods and Rulers; 3250, The Inca Empire; 3622/3622W, Classic Maya Language and Hieroglyphs.

ENGLISH: 3654, African American Literature; 3674, Caribbean Literature.

HISTORY: 1111 FYWS, Destruction of the Indies; 1370, Colonial Latin America; 1378, Social Movements in Latin America; 1379W, The Inquisition in the New World: Law, Deviance, and Heresy in Colonial Mexico; 1380, Modern Latin America; 1383, Slave Resistance in the Americas; 1383W, Disease and Disorder in the Atlantic World; 2450, Reform, Crisis, and Independence in Latin America, 1700–1820; 2457, Drug Trafficking and Society in Latin America; 2470, Revolutionary 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; 2542, Cuba and the United States; 2544, Panama: Global Crossroads; 2570, Caribbean History, 1492–1983; 2570, Immigration, the United States, and the World; 2580, American Indian History before 1850; 2590, American Indian History since 1850; 2845, Race, Gender, and Slave Emancipation.

LATIN AMERICAN STUDIES: 2101, Introduction to Latin America; 2301, Music of Protest and Social Change in Latin America; 3891, Special Topics in Latin American Studies; 4550, Gender, Sexuality, and Family in Latin America.

MUSIC LITERATURE: 2110, Music in Latin America and the Caribbean.

PORTUGUESE: 2900, Brazilian Civilization through English Language Material.

SOCIOMETRY: 3231, Contemporary Latin America; 3602, Change and Social Movements in the Sixties.

SPANISH: 3320, Introduction to Hispanic Cultural Studies; 3330, Cultural Studies in the Andes; 3365, Film and Recent Cultural Trends in Spain; 3892, Special Topics in Spanish Language and Linguistics; 4450, The Contemporary Novel; 4465, The Theory and Practice of Drama; 4740, Spanish-American Literature of the Boom Era; 4741, Spanish-American Literature of the Post-Boom Era; 4760, Literature and Medicine.

Category C: Critical Perspectives

AFRICAN AMERICAN AND DIASPORA STUDIES: 1010, Introduction to African American and Diaspora Studies.


ECONOMICS: 2100, Labor Economics; 2220 Latin American Development.

ENGLISH: 3742, Feminist Theory.

PHILOSOPHY: 3617, Philosophy of Language.


SOCIOMETRY: 3312, Environment and Development; 3322, Contemporary Mexican Society; 3314, Environmental Inequality and Justice; 3612, Class, Status, and Power; 3701, Racial Domination, Racial Progress; 3704, Race, Gender, and Sport.

WOMEN’S AND GENDER STUDIES: 1150/1150W, Sex and Gender in Everyday Life; 3201, Women and Gender in Transnational Context.

Course descriptions can be found in the courses section of this catalog.
Managerial Studies

DIRECTOR Joseph J. Rando
PROFESSOR OF THE PRACTICE Gary R. Kimball
ASSOCIATE PROFESSORS OF THE PRACTICE Willis J. Hulings, Michael K. Lawson, Patrick R. Leddin, Joseph J. Rando, Garnett H. Slatton, Brent E. Trentham
LECTURERS Jamie P. Leddin, Gary McClure, Leonora Williamson

THE College of Arts and Science offers select courses in the liberal arts tradition to help students understand management functions, corporate strategy, and financial economics. These select courses are offered by the Managerial Studies program.

The program is directed by Professor Gary R. Kimball, 215 Calhoun Hall, (615) 322-4021.

Mathematics

INTERIM CHAIR Mark N. Ellingham
VICE CHAIR Gieri Simonett
DIRECTOR OF UNDERGRADUATE STUDIES John Rafter
DIRECTOR OF GRADUATE STUDIES Alexander Powell

PROFESSORS EMERITI Philip S. Crooke, Richard R. Goldberg, Matthew Gould, Robert L. Hemminger, Ettore F. Infante, Gennadi Kasparov, Richard J. Larsen, Michael D. Plummer, Eric Schechter, Daoxing Xia
RESEARCH PROFESSORS Philip S. Crooke, Stephen G. Simpson
ASSOCIATE PROFESSORS Jesse Peterson, Jared Speck, Ioana Suvaina, Steven T. Tschantz
RESEARCH ASSOCIATE PROFESSOR Rares Rasdeaconu
ASSISTANT PROFESSORS Anna Marie Bohmann, Alexander Cameron, Marcelo Disconzi, Spencer Dowdall, Cain Edie-Michell, Matthew Haulmark, William Holmes, Wóden Kusner, Chenyun Luo, Adam Prenosil, Larry Rolen
PRINCIPAL SENIOR LECTURERS Derek Bruff, Linda Hutchison, Pamela Pigg, John Rafter, Lori Rafter
SENIOR LECTURER EMERITA Jo Ann W. Staples
SENIOR LECTURERS Henry Chan, José Gil-Férez, Alice Mark, Jakayla Robbins
POSTDOCTORAL SCHOLARS Simon André, Angelica Babei, Mitchell Faulk, James Hateley, Jocelyne Ishak, Ivan Medri, Lauren Ruth, Ian Wagner

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.

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 are preparing 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 including at least 15 credit hours taken at Vanderbilt, 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 including at least 15 credit hours taken at Vanderbilt 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 including at least 15 credit hours taken at Vanderbilt, 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, 3230, 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, fulfill the Honors requirements listed below, 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. Graduate with a minimum grade point average of 3.6 in courses that count toward the mathematics major.
3. Completion of a senior thesis, typically 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 a summer 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 maintain a minimum grade point average of 3.6 in courses that count toward the mathematics major.

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, 2310, 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 (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; 1300-1301-2310.

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 or in the 1300-1301-2310 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.

Course descriptions can be found in the courses section of this catalog.

Medicine, Health, and Society

DIRECTOR Jonathan M. Metzl
ASSISTANT DIRECTOR JuLeigh Petty
DIRECTOR OF UNDERGRADUATE STUDIES Dominique Behague
DIRECTOR OF GRADUATE STUDIES JuLeigh Petty
DIRECTOR OF ADVISING Courtney S. Peterson
DIRECTOR OF EVALUATION JuLeigh Petty
PROFESSORS Christopher Carpenter (Economics), Derek Griffith, Jonathan M. Metzl, Hector Myers
ASSOCIATE PROFESSORS Dominique Behague, Aimi Hanraie, Martha W. Jones, Kenneth MacLeish, Lijun Song, Laura Stark
ASSISTANT PROFESSORS Lauren Gaydosh, Gilbert Gonzales, Bianca Manago (Sociology), Tara McKay
ASSISTANT PROFESSORS OF PRACTICE Jamie Pope
SENIOR LECTURERS Celina Callahan-Kapoor, Courtney S. Peterson, JuLeigh Petty, Danielle Picard
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 declare and 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; inequality, intersectionality, and health justice; medicine, humanities, and arts; or critical health studies. 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. The major will be of particular interest to students preparing for careers in health-related professions as well as to students interested in 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.

Program of Concentration in Medicine, Health, and Society

The major requires a minimum of 36 credit hours of course work, 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):
   MHS 1920, Politics of Health
   MHS 1930, Social Dimensions of Health and Illness
   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
   ANTH 2342, Biology of Inequality

2. Concentration — Students must complete four courses not used to satisfy the core course requirement or the elective requirements in one of the following six concentrations (12 credit hours). Students must declare one of the following concentrations when they declare the major.

   Note: Courses must be from at least two subject areas.
   A. Global health
B. Health policies and economies
C. Health behaviors and health sciences
D. Inequality, intersectionality, and health justice
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 2213W, Food, Identity, and Culture
   - ANTH 3143, Medical Anthropology
   - ANTH 3141, Anthropology of Healing
   - ANTH 3345, Genetics in Society
   - ECON 2350, Health Care Policy
   - ECON 3350, Economics of Health
   - HIST 2800, Modern Medicine
   - MHS 1960, Health Humanities
   - MHS 3050W, Medicine and Literature
   - MHS 3120, Medicine, Science, and Technology
   - PHIL 1008, 1008W, Introduction to Medical Ethics
   - PHIL 3608, Ethics and Medicine
   - PSY 3635, Health Psychology
   - SOC 3301, Society and Medicine
   - SOC 3304, Race, Gender, and Health
   - SOC 3306, Gender and Medical Work

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 courses that count toward the Medicine, Health, and Society major.
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, 3 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 first day of final exams in the second semester of the senior year, and approved by a committee of at least two faculty members (one of whom must have their primary appointment in 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 coursework, 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). Students must declare one of the following concentrations when they declare the minor.
   A. Global health
   B. Health policies and economies
   C. Health behaviors and health sciences
   D. Inequality, intersectionality, and health justice
   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 2213W, Food, Identity, and Culture
   ANTH 3143, Medical Anthropology
   ANTH 3141, Anthropology of Healing
   ANTH 3345, Genetics in Society
   ECON 2350, Health Care Policy
   ECON 3350, Economics of Health
   HIST 2800, Modern Medicine
   MHS 1960, Health Humanities
   MHS 3050W, Medicine and Literature
   MHS 3120, Medicine, Science, and Technology
   PHIL 1008, 1008W, Introduction to Medical Ethics
   PHIL 3608, Ethics and Medicine
   PSY 3635, Health Psychology
   SOC 3301, Society and Medicine
   SOC 3304, Race, Gender, and Health
   SOC 3306, Gender and Medical Work

Approved Courses

(Please consult the director of undergraduate studies for approval of “as appropriate” courses in concentration areas.)

CONCENTRATION A: Global Health

AMERICAN STUDIES: 3200, Global Perspectives on the U.S.

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 2113W, Food, Identity, and Culture; 3122, The Anthropology of Globalization; 3138 Global Food Politics; 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.

GENDER AND SEXUALITY STUDIES: 1111, First-Year Writing Seminar (as appropriate); 2267, Seminar on Gender and Violence; 3201, Women and Gender in Transnational Context.
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).

LATIN AMERICAN STUDIES: 2102, Brazil: Past, Present, and Future.

MEDICINE, HEALTH, AND SOCIETY: 2110, American Medicine and the World; 2310, Chinese Society and Medicine; 2410, HIV/AIDS in the Global Community; 2420, Economic Demography and Global Health; 2610, Global Health Crises; 2940, Race, Citizenship, and Health; 3000, Undergraduate Seminar (as appropriate); 3010, Perspectives on Global Public Health; 3110, Global Health and Social Justice; 3310, Healthcare Systems Comparisons; 3900, 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); 3314, Environmental Inequality and Justice; 3321, Population and Society.

SPANISH: 3830, Spanish for the Medical Profession; 4760, Literature and Medicine.

CONCENTRATION B: Health Policies and Economies

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 2109, Food Politics in America; 3144, Politics of Reproductive Health; 3890, Special Topics (as appropriate).

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.

GENDER AND SEXUALITY STUDIES: 1111, First-Year Writing Seminar (as appropriate).

HISTORY: 1111, First-Year Writing Seminar (as appropriate); 2800, Modern Medicine.

HUMAN AND ORGANIZATIONAL DEVELOPMENT (PEABODY): 3231, Introduction to Health Services; 3241, Introduction to Health Policy; 3331, Managing Health Care Organizations; 3205, Policy Analysis Methods.

LATIN AMERICAN STUDIES: 2102, Brazil: Past, Present, and Future.

MEDICINE, HEALTH, AND SOCIETY: 2120, Health Social Movements; 2520, Autism in Context; 2320, Medicine, Law, and Society; 2420, Economic Demography and Global Health; 2920, Medicine on Trial; 3000, Undergraduate Seminar (as appropriate); 3120, Medicine, Science, and Technology; 3320, Introduction to U.S. Health Care Policy; 3900, 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; 3893, Selected Topics in American Government (as appropriate); 3894, Selected Topics in Comparative Politics (as appropriate).

SOCIOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3302, Poverty, Health, and Politics; 3306, Gender and Medical Work; 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); 2227, Food in the Ancient World; 3344, Genetic Anthropology Lab Techniques; 3345, Genetics in Society; 3346, Human Adaptation and Disease; 3890, Special Topics (as appropriate); 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; 3965, Undergraduate Seminar (as appropriate).

BIOMEDICAL ENGINEERING: 3200, Analysis of Biomedical Data.

GENDER AND SEXUALITY STUDIES: 1111, First-Year Writing Seminar (as appropriate); 2240, Introduction to Women’s Health.

HUMAN AND ORGANIZATIONAL DEVELOPMENT (PEABODY): 3221, Health Service Delivery to Diverse Populations; 3311, Introduction to Health Promotion.

MEDICINE, HEALTH, AND SOCIETY: 1920, Politics of Health; 2120, Health Social Movements; 2520, Autism in Context; 2320, Medicine, Law, and Society; 2420, Economic Demography and Global Health; 2920, Medicine on Trial; 3000, Undergraduate Seminar (as appropriate); 3120, Medicine, Science, and Technology; 3320, Introduction to U.S. Health Care Policy; 3900, Special Topics (as appropriate).
NEUROSCIENCE: 2201, Neuroscience; 3235, Biological Basis of Mental Disorders.

PSYCHOLOGY: 1111, First-Year Writing Seminar (as appropriate); 1200, General Psychology; 2100, Quantitative Methods; 2150, Principles of Experimental Design; 3100, Abnormal Psychology; 3620, Schizophrenia; 3625, Depression; 3635, Health Psychology; 3705, Human Sexuality; 3750, Perception; 3760, Mind and Brain; 3785, Brain Damage and Cognition; PSY-PC-1250, Developmental Psychology; PSY-PC 2102, Statistical Analysis; PSY-PC 2110, Introduction to Statistical Analysis; PSY-PC-2250, Cognitive Aspects of Human Development; PSY-PC-2300, PSY-PC-Social and Emotional Context of Cognition; PSY-PC-2550, Adolescent Development; PSY-PC-3650, Advanced Topical Seminar (approval dependent upon topic).

SOCIOLOGY: 1010, 1010W, Introduction to Sociology; 1020, 1020W, Contemporary Social Issues; 1111, First-Year Writing Seminar (as appropriate); 2100, Statistics for Social Scientists; 3002, Introduction to Social Research; 3003, Research Practicum; 3301, Society and Medicine; 3303, Social Dynamics of Mental Health; 4961, Seminars in Selected Topics (as appropriate). *Only one of SOC 1010 or 1020 may be counted towards the major or minor.

CONCENTRATION D: Inequality, Intersectionality, and Health Justice
AFRICAN AMERICAN AND DIASPORA STUDIES: 1016, Race Matters; 1111, First-Year Writing Seminar (as appropriate); 3214, Black Masculinity: Social Imagery and Public Policy.

ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 2213W, Food, Identity, and Culture; 2342, Biology of Inequality; 3120, Sociocultural Field Methods (as appropriate); 3144, Politics of Reproductive Health; 3343, Biology and Culture of Race; 3345, Genetics in Society; 3890, Special Topics (as appropriate); 4345, Human Evolutionary Genetics.

GENDER AND SEXUALITY STUDIES: 1111, First-Year Writing Seminar (as appropriate); 2268, Gender, Race, Justice, and the Environment.

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; 2240, Bionic Bodies, Disability Cultures; 2330, Men’s Health Research and Policy; 2940, Race, Citizenship, and Health; 3000, Undergraduate Seminar (as appropriate); 3030, Community Health Research; 3040, Designing Healthy Publics; 3890, Special Topics (as appropriate).

SOCIOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3301, Society and Medicine; 3304, Race, Gender, and Health; 3306, Gender and Medical Work; 3321, Population and Society; 3723, Gender, Sexuality, and the Body; 4961, Seminars in Selected Topics (as appropriate).

CONCENTRATION E: Medicine, Humanities, and Arts
ANTHROPOLOGY: 1111, First-Year Writing Seminar (as appropriate); 2370, Death and the Body; 3141, Anthropology of Healing; 3142, Medicine, Culture, and the Body; 3143, Medical Anthropology; 3345, Genetics in Society.

ASIAN STUDIES: 2630, Chinese Medicine.

COMMUNICATION STUDIES: 3750, Rhetoric of the Body.

ENGLISH: 1111, First-Year Writing Seminar (as appropriate); 3720, 3720W, Literature, Science, and Technology (as appropriate); 3730, Literature and the Environment: Contemporary Climate Fiction; 3891, Special Topics in Creative Writing (as appropriate).

GENDER AND SEXUALITY STUDIES: 1111, First-Year Writing Seminar (as appropriate); 2267, Seminar on Gender and Violence; 2612, Lesbian, Gay, Bisexual, and Transgender Studies.

HISTORY: 1111, First-Year Writing Seminar (as appropriate); 2160, Medicine in Islam; 2800, Modern Medicine; 2810, Women, Health, and Sexuality; 2835, Sexuality and Gender in the Western Tradition to 1700; 2840, Sexuality and Gender in the Western Tradition since 1700; 3040, Health and the African American Experience.

HISTORY OF ART AND ARCHITECTURE: 3140, Healing and Art in East Asia.

MEDICINE, HEALTH, AND SOCIETY: 1111, First-Year Writing Seminar: Medicine, Health, and the Body; 1960, Health Humanities; 2230, Masculinity and Men’s Health; 2250, War and the Body; 2950, Healing Animals; 3000, Undergraduate Seminar (as appropriate); 3050W, Medicine and Literature; 3120, Medicine, Science, and Technology; 3150, Death and Dying in America; 3250, Perspectives on Trauma; 3450, Medical Illness Narratives; 3890, Special Topics (as appropriate); 4010, Psychiatry, Culture, and Globalization; 4050, Narrative and Medicine: Stories of Illness and the Doctor-Patient Relationship.

PHILOSOPHY: 1008, 1008W, Introduction to Medical Ethics; 1111, First-Year Writing Seminar (as appropriate); 3606, 3606W, Moral Problems; 3608, Ethics and Medicine; 3630, Philosophy of Mind.


SOCIOLOGY: 1111, First-Year Writing Seminar (as appropriate).

SPANISH: 4760, Literature and Medicine.
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 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 (same as PSY-PC); 3890, Health Promotion Delivery.


MEDICINE, HEALTH, AND SOCIETY: 1001, Commons Seminar; *1500, Introduction to Microbiology; *1600, Introduction to Nutrition and Health for a Changing World; *3101–3102, Anatomy and Physiology; 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).

PHILOSOPHY: 1111, First-Year Writing Seminar (as appropriate); 3606, 3606W, Moral Problems; 3630, Philosophy of Mind.

PSYCHOLOGY: 1111, First-Year Writing Seminar (as appropriate); 3600, Personality; 3610, Introduction to Clinical Psychology OR PSY-PC-3200, Introduction to Clinical Psychology; 3615, Emotion; PSY-PC-1205, PSY-PC-1207, Minds, Brains, Cultures, and Contexts; PSY-PC-2400, Social and Personality Development; PSY-PC-2500, Infancy; PSY-PC-2550, PSY-PC-3650, Advanced Topical Seminar (as appropriate).

SOCIOLOGY: 4961, Seminars in Selected Topics (as appropriate).

Course descriptions can be found in the courses section of this catalog.

Nanoscience and Nanotechnology

DIRECTORS Paul E. Laibinis, 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 Douglas G. McMahon
DIRECTOR OF UNDERGRADUATE STUDIES Elizabeth Catania
SENIOR LECTURER Meredyth Wegener

Steering Committee
PROFESSORS René Marois (Psychology), Lisa Monteggia (Pharmacology), Brandt F. Eichman (Biological Sciences)
ASSOCIATE PROFESSOR Suzanna Herculano-Houzel (Psychology and Biological Sciences)
ASSISTANT PROFESSORS Elizabeth Catania (Neuroscience), Alexander Maier (Psychology)
PRINCIPAL 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.

Program of Concentration

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. Students majoring in neuroscience are additionally required to complete a core of introductory courses in mathematics, statistics or computer science, biology and physics that provide the broad scientific background necessary to 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 or programs. 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 (8 credit hours)
BSCI 1510, 1511, 1510L, and either 1511L or 1512L.

Chemistry (8 credit hours)
CHEM 2211 or 2221; CHEM 2212 or 2222; and CHEM 2221L and 2222L.

Mathematics, Statistics, Computer Science (6–8 credit hours)
MATH 1100, 1200, or 1300; and one of MATH 1201, 1301, BSCI 3270, PSY 2100, PSY-PC 2110, CS 1101, 1103.
Physics (8 credit hours)
PHYS 1501, 1601 or 2051; PHYS 1502, 1602 or 2053; PHYS 1501L, 1601L or 2052; and PHYS 1502L, 1602L or 2054.

Neuroscience Courses

Introduction to Neuroscience (3 credit hours)
NSC 2201.

Cellular and Molecular Neuroscience (6 credit hours)
BSCI 3252, 3256; NSC 3235, 3240, 3245, 3260, 3269, 3891; PSY 3630, 3892.

Systems, Integrative, and Cognitive Neuroscience (6 credit hours)
BSCI 3230, 3254; NSC 3270, 3274, 3892, 4961, 4969; PSY 3120, 3620, 3700, 3730, 3750, 3760, 3765, 3775, 3780, 3785, 3892; PSY-PC 3190.

Neuroscience Laboratory (4 credit hours)
NSC 3861, 3862.

Neuroscience Electives (6 credit hours)
Two additional courses from the Cellular and Molecular Neuroscience and/or Systems, Integrative, and Cognitive Neuroscience courses listed above. NSC 3863 or NSC 4999 may be used to count for one elective course.

Related Course Electives
(6 credit hours; two courses not used to satisfy the Required Math and Science course requirement above.)
BSCI 2201, 2201L, 2210, 2210L, 2520, 3270, 4265; BME 3100, 3101; CHEM 2100, 3310, 3710, 4720; CS 1101 or 1103 or 1104; MATH 2300, 2400 or 2420; PHIL 3616, 3630; PSY 2100, 3100, 3600, 3625, 3705, 3715, 3810.

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 second 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. Entrance into and satisfactory completion of the Honors Program requires that students maintain a cumulative 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 are expected to complete at least 6 hours of advanced research course work (from NSC 3863, 3864 and 4999). Three of these research-credit hours may count toward neuroscience elective course work. As part of this research course work, the candidate will be expected to write an honors thesis, present the 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. 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. As prerequisites, students are required to complete CHEM 1601 and 1601L, BSCI 1510–1511, 1510L, and either 1511L or 1512L. The minor program consists of 18 credit hours of course work distributed as follows:

NSC 2201.
3 credit hours in Statistics/Computer Science:
BSCI 3270, PSY 2100, PSY-PC 2110, CS 1101 or 1103.
6 credit hours chosen from the courses listed as
“Cellular and Molecular Neuroscience.”
6 credit hours chosen from the courses listed as
“Systems, Integrative and Cognitive Neuroscience.”
The chosen courses counting towards the 18 credit hours must come from at least 3 different departments or programs (e.g. NSC, PSY and BSCI). Research courses (NSC 3860, 3861, 3862, 3863, 3864, and 4999) do not count towards the minor.

Course descriptions can be found in the courses section of this catalog.

Philosophy

CHAIR Paul Taylor
DIRECTOR OF UNDERGRADUATE STUDIES Scott Aikin
DIRECTOR OF GRADUATE STUDIES Kelly Oliver

PROFESSORS EMERITI Robert R. Ehman, Marilyn Friedman, Larry May, John F. Post, Charles E. Scott, Donald W. Sherburne, Henry A. Teloh, Jeffrey Thumak

PROFESSORS Lenn E. Goodman, Michael P. Hodges, John Lachrs,
Kelly Oliver, Lucius T. Outlaw Jr., Robert Talisse, Paul C. Taylor
David Wood
ASSOCIATE PROFESSORS Scott Aikin, Idit Dobbs-Weinstein, Julian Wuerth
ASSISTANT PROFESSORS Matthew Congdon, Diana Heney, Karen Ng

SENIOR LECTURER, EMERITUS Russell M. McIntire
SENIOR LECTURERS Gary Jaeger

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 a significant, forming effect in Western culture.

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, 2101, 2102, 2103, or 2104 (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 1111 are ordinarily taken prior to all other philosophy courses, except 1003 and 3003 (logic courses), 3616 (philosophy of science), and 3013 (aesthetics).

Course descriptions can be found in the courses section of this catalog.
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.

Program of Concentration in Physics

The departmental major provides a thorough grounding in the core areas of physics. It is suitable either as 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 31–32 credit hours of course work, distributed as below. Students considering majoring in physics are strongly encouraged to consult with the director of undergraduate studies before registering for classes.

1. Core courses covering the major subdisciplines of physics — Students must complete four of the following (12 credit hours): Modern Physics and the Quantum World (2255); Classical Mechanics (2275); Electricity, Magnetism, and Electrodynamics I (2290); Statistical Physics (3200); Quantum Mechanics I (3651).

2. Laboratory work — Students may not use AP credit to satisfy any portion of the laboratory sequence requirement (3–4 credit hours):

   a) Laboratory Principles I (1912L), Laboratory Principles II (2255L), and Introduction to Experimental Research (2935L); or

   b) 1501L or 1601L, 1502L or 1602L, 2255L, and 2953L if the student has entered the major by taking the introductory physics course sequence 1501 or 1601, 1501L or 1601L, 1502 or 1602, and 1502L or 1602L.

   Students considering majoring in physics who begin in 1501 or 1601 and 1501L or 1601L in the fall semester are encouraged to take the combination 1502 + 1912L or 1602 + 1912L in the spring semester.

3. Electives (9 credit hours) — Pedagogical course work in physics and/or astronomy; research hours (3850, 3851, 4998) do not count toward this requirement. The course electives may be taken from any 2000-level or higher PHYS or ASTR courses not used to satisfy any other requirement of the major. Other courses may count as
electives, such as courses offered by the engineering school (or other departments and schools) that are particularly relevant, such as a course in environmental studies, health physics, optics, or materials science. Such exceptions must be approved by the director of undergraduate studies.

4. **Capstone (7 credit hours)** — Computational Physics (3790), 3 credit hours of research (3850, 3851, or 4998) taken across one or more semesters, and the Seminar in Presenting Physics Research (3600). Physics-related research done in other departments and programs, supervised by Vanderbilt faculty and pre-approved by the director of undergraduate studies, is also permitted in satisfaction of the research requirement.

**Immersion Experience:** A student majoring in physics may choose to complete their Immersion Experience through an enhanced research program within the disciplines of either physics or astronomy. To complete the Immersion Experience in physics or in astronomy, physics majors must complete at least 5 credit hours of research and earn 1 credit hour from PHYS 3600 (Seminar in Presenting Physics Research) and 3 credit hours from PHYS 3790 (Computational Physics). At least 2 of these credit hours in research must be earned in either 3851 (Undergraduate Immersion Research) or 4998 (Honors Research). The other three (3) credit hours may be from any combination of 3850, 3851, and 4998. Credit hours in research may be from PHYS, from ASTR, or from a combination of PHYS and ASTR courses.

**Computer Science course work:** All 2000-level and higher PHYS courses assume students have working skills in programming. These skills may be learned outside of a regular course, but should be equivalent to that taught in CS 1101 Programming and Problem Solving. Students who do not already have these skills are strongly advised to take this class in the first semester, prior to beginning the three-semester laboratory sequence in the second semester. In addition, the following Computer Science and/or Scientific Computing courses are strongly recommended for all physics majors: Program Design and Data Structures (CS 2201) or Program Design and Data Structures for Scientific Computing (CS 2204); Algorithms (CS 3250) or Scientific Computing Toolbox (SC 3250); and High Performance Computing (SC 3260). Physics majors pursuing a second major or minor in computer science should take CS 2201; physics majors pursuing a minor in scientific computing should take CS 2204.

**Mathematics course work:** All physics majors are expected to have high-level skills in mathematics in order to be successful in PHYS classes and to prepare for graduate work. MATH courses are not formally required for the major in physics; however, most physics courses identify MATH prerequisite or co-requisite courses in order to indicate the mathematical skill-level assumed for that class. Multivariable calculus is a co-requisite for 2255 and a prerequisite for all other 2000-level or higher PHYS courses. Physics majors are expected to develop a working knowledge of single-variable calculus, multivariable calculus, and ordinary differential equations. The following courses are those strongly recommended for physics majors:
1. Accelerated Calculus I (1300) and Accelerated Calculus II (1301);
2. Multivariable Calculus (2300) or Multivariable Calculus and Linear Algebra (2500 and 2501); and
3. Methods of Ordinary Differential Equations (2420) or Ordinary Differential Equations (2610).

In addition, for physics majors considering post-graduate work in physics or in a related field, the following PHYS and MATH courses are strongly recommended as electives:
1. Electricity, Magnetism, and Electrodynamics II (PHYS 2291), Quantum Mechanics II (PHYS 3652), Mathematical Methods of Physics (PHYS 4005); and
2. Methods of Linear Algebra (MATH 2410) or Linear Algebra (MATH 2600); Introduction to Probability and Mathematical Statistics (MATH 2820); Statistics Laboratory (MATH 2820L); Complex Variables (MATH 3110); Introduction to Partial Differential Equations (MATH 3120); Fourier Analysis (MATH 3130); and Advanced Engineering Mathematics (MATH 3600).

**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 this catalog.
Honors Program

The Honors Program in the Department of Physics and Astronomy is designed to allow a student to engage in advanced research under the guidance of a faculty member, usually in an area related to an ongoing research program in the department. A student majoring in physics interested in Honors (Honors in Physics or Honors in Astronomy) will work with a faculty mentor to develop an appropriate research project that will be conducted under the guidance of that faculty member. The Honors project must have a substantial grounding in physics or astronomy, but may be conducted under the direct supervision of any faculty member in any department at Vanderbilt. To be admitted to the Honors Program, a student must submit a two-page research proposal describing the plans for their Honors project, which must be approved by the director of the departmental Honors Program. In addition, a student must have completed 2953L, either 2255 or 3651, and meet the minimum GPA requirements for honors programs of the College of Arts and Science.

To graduate with honors, a student must

• Have at least a 3.300 cumulative GPA and a 3.300 GPA in courses that count toward the major.
• Earn a minimum of 6 credit hours in research classes (3850, 3851, 4998), leading to an honors thesis, with at least 2 of these credit hours earned in 4998. A student who earns credit for 3852 may satisfy this portion of the requirement with 3 credit hours of research earned at Vanderbilt, including at least 2 of these credit hours in 4998.
• Write a senior thesis of high merit, as evaluated by the student’s Honors Examination Committee; the thesis may be submitted either in the fall or spring semester of the senior year.
• Demonstrate high attainment on an oral honors examination in which they present and defend their work to the student’s Honors Examination Committee; the oral examination may take place either in the fall or spring semester of the senior year.

Departmental Minors

The physics and astronomy minors are suitable for students who wish to supplement a related discipline or simply have a general interest in the field. Research is not a requirement for either minor.

Minor in Physics

The minor requires a minimum of 19 credit hours of course work, distributed as follows:

Any first-semester physics class
(1501, 1601, 1911, 2051) 3–4
Any first-semester physics laboratory
(1501L, 1601L, 1912L, 2052) 1
Any second-semester physics class
(1502, 1602, 1912, 2053) 3–4
Any second-semester physics laboratory
(1502L, 1602L, 2255L, 2054) 1
PHYS 2255 or 3651 3
6 credit hours of electives. 6

These may be selected from any 2000-level or higher-level PHYS courses not used to satisfy the above requirements or from 3 credit hour non-PHYS courses, the latter if approved by the director of undergraduate studies, and may include up to 3 credit hours of research (3850, 3851, 4998).

Total credit hours: 17–19
Minor in Astronomy
The minor requires a minimum of 16 credit hours of course work, distributed as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 1010 and either 1010L or 1020L; or 1210</td>
<td>4</td>
</tr>
<tr>
<td>ASTR 2110</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 3000</td>
<td>3</td>
</tr>
</tbody>
</table>

Two other astronomy courses, one of which may be a 3 credit hour one-semester research project (3850, 3851, 4998). Note that only physics majors pursuing honors in astronomy are eligible to enroll in 4998.

Total credit hours: 16

Physics

Course descriptions can be found in the courses section of this catalog.

Introductory Courses
1001, 1010, 1010L, 1111, 1501, 1501L, 1502, 1502L, 1601, 1601L, 1602, 1602L, 1911, 1911L, 1912, 1912L, 2255L

Introductory, calculus-based physics is offered at several different levels, each with the appropriate laboratory. Only one of 1501/1501L–1502/1502L, 1601–1602/1601L–1602L, or 1911–1911L–1912/1912L may be taken for credit. 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 1911–1911L–1912/1912L are 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, 2255, 2275, 2290, 2660, 2953L, 3122, 3200, 3600

The intermediate-level courses cover the major subdisciplines of classical and modern physics.

Advanced Courses
2291, 3640, 3651, 3652, 3660, 3790, 3850, 3851, 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
3125, 3645

Physics Education Courses
3820

Astronomy

Course descriptions can be found in the courses section of this catalog.
Introductory Courses
1001, 1010, 1010L, 1020L, 1111, 1210

Intermediate Courses
2110, 2130, 2150, 3000

Advanced Courses
3600, 3700, 3800, 3850, 3851, 3900, 4998

Political Science

CHAIR Alan E. Wiseman
VICE CHAIR Jonathan Hiskey
DIRECTOR OF UNDERGRADUATE STUDIES Carrie A. Russell
DIRECTOR OF GRADUATE STUDIES Jonathan T. Hiskey
PROFESSORS EMERITI Erwin C. Hargrove, Bruce I. Oppenheimer, Richard A. Pride, James Lee Ray, Mitchell A. Seligson, Benjamin Walter
VISITING DISTINGUISHED PROFESSOR Jon Meacham
PROFESSORS Brooke A. Ackerman, Larry M. Bartels, W. James Booth, Joshua D. Clinton, Daniel Cornfield, John G. Geer, Tracey George, Sarah Igo, Cindy D. Kam, David E. Lewis, Matthias Polborn, Edward Rubin, Thomas Schwartz, John Sides, Robert Talisse, Alan E. Wiseman, Elizabeth J. Zeichmeister

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.

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:

<table>
<thead>
<tr>
<th>Major Concentration</th>
<th>Hours</th>
</tr>
</thead>
</table>

190
Political Science Core 1100, 1101, 1102, 1103 or 1150  6

American Government and Politics (2240, 2245, 3241, 2243, 2251, 2255, 2256, 2259, 2262, 2265, 2266, 2267, 2270, 3244, 3247, 3249, 3250, 3252, 3253, 3254, 3260, 3893)  3

Comparative Politics (2210, 2213, 2215, 2219, 2223, 2230, 2236, 2237, 2270, 3211, 3217, 3228, 3235, 3272W, 3894, 4238)  3

International Relations (2221, 2222, 2223, 2225, 2226, 2236, 2263, 2270, 2273, 2274, 3211, 3228, 3229, 3272W, 3275, 3895, 4277)  3

Political Theory (2202, 2203, 2205, 2207, 2207W, 2208, 2209, 2263, 3253, 4257, 3258, 3264W, 3271, 3896)  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 3841, 3842, 3851, 3852, 3880, 3882, 3883, 4998, 4999 combined)  12

Minimum 30 credit hours total

In order to graduate with a political science major, students must take a brief exam within the major concentration 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 concentrations of American Government, Comparative Politics, International Relations, or Political Theory by taking the introductory, 1000-level course in that concentration, and at least three 2000-level courses in that concentration. It is recommended that one of those 2000-level courses in the student’s selected concentration be a seminar.

Students desiring an emphasis on African American politics within their 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 245 (Afro-American Political Thought), 254 (Politics in the Black Community), and 406 (African Political Systems).

Graduate Courses. Qualified undergraduates may enroll in graduate courses with the consent of their adviser, the course instructor, and the Graduate School. To enroll in graduate courses, undergraduate applicants need to comply with rules provided under the heading Undergraduate Enrollment in Graduate Courses in this catalog on p. 64.

Honors Program
To enter the Honors 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 semesters 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 minor concentrations, 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:

<table>
<thead>
<tr>
<th>Minor Concentration</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>American Politics</strong></td>
<td></td>
</tr>
<tr>
<td>1100 or 1150</td>
<td>3</td>
</tr>
<tr>
<td>Any five of the following:</td>
<td></td>
</tr>
<tr>
<td>2222, 2240, 2251, 2243, 2245, 2255, 2256, 2259, 2262, 2265, 2266, 2267, 2270, 3241, 3244, 3247, 3249, 3250, 3252, 3253, 3254, 3260, 3268, 3893, 3897</td>
<td>15</td>
</tr>
<tr>
<td><strong>Political Theory</strong></td>
<td></td>
</tr>
<tr>
<td>1103</td>
<td>3</td>
</tr>
<tr>
<td>Any five of the following:</td>
<td></td>
</tr>
<tr>
<td>2202, 2203, 2205, 2207, 2207W, 2208, 2209, 2262, 2263, 3253, 3258, 3264W, 3271, 3896, 4257</td>
<td>15</td>
</tr>
<tr>
<td><strong>World Politics</strong></td>
<td></td>
</tr>
<tr>
<td>A student may stress comparative politics or international relations or may mix the two in this minor.</td>
<td></td>
</tr>
<tr>
<td>1101 or 1102</td>
<td>3</td>
</tr>
<tr>
<td>Any five of the following:</td>
<td></td>
</tr>
<tr>
<td>2210, 2213, 2215, 2216, 2219, 2220, 2222, 2223, 2225, 2226, 2230, 2236, 2237, 2270, 2273, 2274, 3211, 3217, 3228, 3229, 3235, 3272W, 3275, 3894, 3895, 4238, 4277</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 can be found in the courses section of this catalog.

Psychology

CHAIR René Marois
DIRECTOR OF UNDERGRADUATE STUDIES Adriane E. Seiffert
DIRECTOR OF GRADUATE STUDIES Geoffrey Woodman
DIRECTOR OF CLINICAL TRAINING Bunmi O. Olatunji
PROFESSORS EMERITI Thomas Burish, William F. Caul, Keith N. Clayton, Ford F. Ebner, Jeffery J. Franks, Martin Katahn, Joseph S. Lappin,
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 are the study of processes such as learning, remembering, perceiving 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, 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, 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 considered a fundamental aspect of education in psychological science.

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*
2 or all 3 of PSY 3980, 3981, and 4998
PSY 4999
3 Psychology Electives

Students who only take two semesters of PSY 3980, 3981, and 4998 will need to take an additional elective course to fulfill their 42 credit hours.

Total credit hours: 42

Honors Program. The Honors Program 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 three or four semesters of honors research and participation in the Honors Seminars, which are PSY 3980, 3981, 4998, and 4999. (Students must have at least 9 credit hours total, with mandatory enrollment in PSY 4999). Students may enroll in the three-semester options of the Honors Program—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 take the three-semester option will need to take an additional PSY elective course to fulfill their 42 credit hours.

Students who are majoring in psychology should apply to the Honors Program at the end of their sophomore year. Applicants are required to 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 intend to apply the three-semester option should identify a faculty mentor and obtain permission for the option at the end of their sophomore year, but are not required to apply to the program until the end of the first term of their junior year. 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 6 courses are required)
The following courses provide grounding in core content areas of psychological science.

- PSY 3100, 3110, 3120, 3750; 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 beginning of the Spring semester 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 assess 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:

- PSY 1200 3
- Either PSY 2100 or PSY-PC 2110 (Peabody) 3
- PSY 2150 3
- 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 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 can be found in the courses section of this catalog.

Public Policy Studies

DIRECTOR Christopher Carpenter (Economics)
ASSOCIATE DIRECTOR Katherine Carroll (Political Science)
ADVISORY BOARD Kathryn Anderson (Economics), Jay Clayton (English), David Lewis (Political Science)
VISITING PROFESSOR Richard Riebeling
ADJUNCT PROFESSOR Bill Purcell
ASSOCIATE PROFESSOR Zdravka Tzankova (Sociology)
ASSISTANT PROFESSORS Lauren Gaydosh (Medicine, Health, and Society), Gilbert Gonzales (Vanderbilt), Patrick Greiner (Sociology), Analisa Packham (Economics)

Program of Concentration in Public Policy Studies

The public policy studies major has two components: the core curriculum and areas of concentration, and an optional honors program for those who qualify. Students are also required to complete several prerequisites to prepare them for the major. Students may not double count any single course for both a required part of the core and for an elective.

The proposed core is interdisciplinary and includes rigorous course work drawn from political science, economics, sociology, anthropology, and history. The core provides all PPS students training in the politics, economics, methods, social contexts, history, and ethics of public policy.

In addition to developing skills in the core curriculum, PPS students seek more intensive training within areas of concentration. The boundaries of these areas are not mutually exclusive, and together they span a wide range of policy concerns and disciplinary perspectives. Among the five elective courses, students must take three courses in a single area of concentration. It is also recommended that students choose electives from at least two disciplines. Students pursuing the “economic policy” concentration must take at least two upper-level electives in economics from the list (numbered above 3000).

Prerequisites

PPS majors must have earned credit for MATH 1201 or 1301, or higher; basic statistics (ECON 1500 or 1510 or both MATH 2820L and either 2810 or 2820); and introductory courses in political science and economics (PSCI 1100, ECON 1010, and ECON 1020).

Core Curriculum (5 courses, 15 credit hours)

PSCI 2256 or PPS 2100 3 credit hours
ECON 3010, 3012, 3020, or 3022 3 credit hours
ECON 3032, 3035, 3050; SOC 3002; or HOD 2500 3 credit hours
PPS 2200 and 2250 6 credit hours

If a student cannot take both 2200 and 2250, they may, with prior approval from the director or associate director of Public Policy Studies, substitute one course from ANTH 3122, 3133, 4152; HIST 2722; PSCI 3253; SOC 3315, 3604, 3605, 3613, 3614.
Electives and Areas of Concentration
(5 courses, 15 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.

General Electives

The following courses may count as PPS general electives, but they do not count toward the three electives (9 credit hours) that must be taken within a single area of concentration:
PSCI 2240, 2245, 2253, 3241, 3244.

Areas of Concentration

Advanced Quantitative Methods for Public Policy
- PPS 3200 or 3250
- ANTH 3261
- ECON 4050
- HOD 3200
- PSCI 2300

Economic Policy
- ECON 2150, 3150, 3200, 3230, 3250, 3700, 4110, 4210, 4510/4510W, 4530/4530W
- HIST 1640, 1660
- HODE 3225
- PSCI 2223, 3252

Social Policy
- ECON 3100, 3110, 3350
- HIST 1440, 1665, 2690, 2740, 2810, 3040, 3045W
- MHS 2110, 3020, 3220, 3030, 3320
- SOC 3223, 3304, 3611, 3616, 3621, 3622, 3701, 3711
- UNIV 3320, 3325

Environmental, Resource, and Energy Policy
- ANTH 2109, 2150, 3134
- ECON 2170
- SOC 3311, 3312, 3314, 3315, 3316, 3317, 3318

International and Foreign Policy
- AMER 3200
- ASIA 2560
- ECON 2220, 3600, 3610, 3650, 4520
- GSS (formerly WGS) 3201, 3281
- HIST 1690, 1691, 1730, 1740, 2457, 2535, 2700, 2710, 2721, 2722, 2735, 2740
- JS 2540
- MHS 2410, 2420, 3110
- PSCI 2220, 2222, 2225, 2236, 2251, 3229, 3272W, 3275

Science, Technology, and Innovation Policy
- CMST 2950
- CSET 3090, 3100
- ECON 3270
- HIST 2780, 3050, 3070W
- MHS 3120
- PHIL 1008, 3608
- SOC 3206

Honors Track (2 additional courses, 6 additional hours)

Students who have a GPA of 3.30 or higher for all previous courses taken for credit and a GPA of 3.50 for all courses counting toward the PPS major may apply for the honors track in PPS. Students normally apply for the honors track during the second semester of their junior year. By the end of the junior year, students interested in pursuing honors should have completed all of the required core courses in the PPS major. The PPS program director may make exceptions.

Those accepted into the honors track enroll in PPS 4980 and 4999 (3 credit hours each) during the fall or spring semesters of their senior year. In addition to the honors seminar, each honors student has a faculty adviser to provide guidance on the research project and to chair the thesis committee. Successful completion of the honors program entails both the production of an original written thesis and an oral exam on the thesis project. The thesis committee evaluates both the written thesis and oral exam.

Course descriptions can be found in the courses section of this catalog.
Religious Studies

CHAIR Laurel Schneider
DIRECTOR OF UNDERGRADUATE STUDIES IN RELIGIOUS STUDIES Issam Eido
DIRECTOR OF UNDERGRADUATE STUDIES IN ISLAMIC STUDIES Issam Eido
DIRECTOR OF UNDERGRADUATE STUDIES IN ARABIC Issam Eido
DIRECTOR OF GRADUATE STUDIES James Byrd (Divinity)
CHAIR, GRADUATE DEPARTMENT OF RELIGION James Byrd (Divinity)
PROFESSORS EMERITI Lewis V. Baldwin, Volney P. Gay, Charles H. Hambrick, Daniel M. Patte
PROFESSORS Clifford Anderson, David Price, Laurel Schneider,
Tony K. Stewart
ASSOCIATE PROFESSOR Richard McGregor
ASSISTANT PROFESSORS Adeana McNicholl, Anand Taneja,
Alexis Wells-Oghoghomeh
SENIOR LECTURERS Annalisa Azzoni, Issam Eido, Bushra Hamad

THE Department of Religious Studies approaches religion as a fundamentally human experience. The academic study of religion begins descriptively by exploring religious commitments, identities, practices, worldviews, and institutions. Our courses investigate religious traditions through varied theoretical and methodological approaches that generate a complex understanding of religious perspectives from an array of disciplines such as anthropology, sociology, history, theology, literature, and art.

Students majoring in religious studies gain a deep knowledge of a single tradition, region, or theme and a broad understanding of religions around the world. Successful students develop a highly portable analytical skill set that equips them to pursue graduate degrees in religion or cognate disciplines, as well as professional degrees and careers in fields such as law, diplomacy, medicine, and business. It also provides an excellent second major for a variety of disciplines that address the human condition including neuroscience; sociology; history; medicine, health, and society; and others. Majors will gain the ability to reason intelligently about one of the most difficult and sensitive topics in any society. By virtue of the variety of religious cultures studied, the training will deepen students’ mutual understanding and sensitivity to prepare them to become truly responsible global citizens.

The department offers a major (31 credit hours), an Honors Program, a minor (18 credit hours) in religious studies, a minor (20 credit hours) in Islamic studies, and a minor in Arabic language (18 credit hours). A student may pursue both the minor in Islamic studies and the minor in Arabic language. In such a case, ARA 1102 may be the only Arabic course that counts toward the minor in Islamic studies.

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 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.

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; ASIA 3633
   - **Christian Traditions:** RLST 1309, 1330W, 1820, 2250W, 2310, 3119, 3304W, 3306, 3312, 3313, 3316, 3350; CLAS 3350, 3360, 3370, 3380; 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 1190, 2140, 2190
   - **Jewish Traditions:** RLST 1208, 2210, 2210W, 3270, 3350; JS 1002*, 1002W, 1200, 2300, 2330, 2620; PHIL 2102 (*Formerly RLST 1200. Can be taken in lieu of RLST 1200 credit.)

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
   - **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, 4836, 4837; JS 2330; ANTH 3141; ASTR 2130

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.

a. **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.

b. **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)
   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. 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.

   a. **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.
   b. **Majors Colloquium – Co-requisite with RLST 4999.**

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.**

   a. **Encountering religious diversity.** 3 credit hours. RLST 1010 Encountering Religious Diversity. 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 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.

   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 (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:

- ARA 1102 Elementary Arabic, and
- RLST 1500 Introduction to Islam or HIST 1190 A History of Islam, and
- RLST 4554 The Qur’an and Its Interpreters.

Both RLST 1500 and HIST 1190 may count toward the minor. Up to 8 hours of Arabic language courses may count toward the minor; however, ARA 1101 does not count toward the minor.

---

**Minor in Arabic Language**

**18 credit hours.** Students complete a required minimum of 18 credit hours from the list below, following one of two tracks. Track A “Foundations and Literature”: 9 credit hours from category I, Grammar and Constructions and 9 credit hours from category II, Literature and Culture. Track B “Full Proficiency”: 12 credit hours from category I, Grammar and Constructions, and 6 credit hours from category II, Literature and Culture. No credit hours will be counted for Arabic 1101 or Arabic 1102.
CATEGORY I, Grammar and Constructions: ARA 2201, Intermediate Arabic I; 2202, Intermediate Arabic II; ARA 3101, Advanced Arabic I; 3102, Advanced Arabic II.

CATEGORY II, Literature and Culture: ARA 3201, Media Arabic; ARA 3301, Arabic of the Qur'an and Other Classical Texts; RLST 4592, Reading Seminar in Arabic Literature; RLST 4593, Reading Seminar in Islamic Tradition.

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 can be found in the courses section of this catalog.

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), Guilherme Gualda (Earth and Environmental Sciences), Kelly Holley-Bockelmann (Astronomy), Shane Hutson (Physics), Gordon D. Logan (Psychology), Terry P. Lybrand (Chemistry and Pharmacology), Bradley Malin (Biomedical Informatics), Clare M. McCabe (Chemical and Biomolecular Engineering), Jens Meiler (Chemistry), Michael I. Miga (Biomedical Engineering), Mark Neamtu (Mathematics), Caglar Oskay (Civil and Environmental Engineering), Thomas J. Palmeri (Psychology and Neuroscience), Antonis Rokas (Biological Sciences and Biomedical Informatics), Jeffrey D. Schall (Psychology and Neuroscience), Larry Schumaker (Mathematics), Paul Sheldon (Physics), Frank Tong (Psychology), Kalman Varga (Physics), David A. Weintraub (Astronomy), Robert Weller (Electrical Engineering)

ASSOCIATE PROFESSORS Andreas A. Berlind (Astronomy), Robert E. Bodenheimer (Computer Science), Will Doyle (Higher Education and Public Policy), Bennett Landman (Electrical Engineering), Haoxiang Luo (Mechanical Engineering), Sean Polyn (Psychology and Neuroscience), Jennifer Trueblood (Psychology), Steven Tschantz (Mathematics), Greg Walker (Mechanical Engineering), Steve Wernke (Anthropology)

ASSOCIATE PROFESSOR OF THE PRACTICE Gerald H. Roth (Computer Science)

ASSISTANT PROFESSORS Hiba Baroud (Civil and Environmental Engineering), Matthew Berger (Computer Science), Nicole Creanza (Biological Sciences), William Holmes (Physics and Astronomy), Carlos Lopez (Cancer Biology), Ipek Oguz (Computer Science and Biomedical Engineering), Mikail Rubinov (Biomedical Engineering)

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.

Sociology

CHAIR Larry W. Isaac
DIRECTOR OF UNDERGRADUATE STUDIES Shaul Kelner
DIRECTOR OF GRADUATE STUDIES Lijun Song
PROFESSORS EMERITI Karen E. Campbell, Jack P. Gibbs, Walter R. Gove, Gary F. Jensen, Ronnie Steinberg
ASSOCIATE PROFESSORS Laura M. Carpenter, Shaul Kelner, Richard Lloyd, Evelyn Patterson, Mariano Sana, Lijun Song, Zdravka Tzankova
ASSISTANT PROFESSORS Rachel Donnelly, Christy Erving, Alexandre Frenette, Patrick Greiner, Bianca Manago, Joshua Murray, LaTonya Trotter
SENIOR LECTURERS Joe Bandy, Amy Cooter, Roosevelt Noble, Laurie Woods

SOCILOGY, the study of social consensus, conflict, and change, offers students a rich and systematic understanding of society and the meaning of social interaction. The department’s courses cover a wide range of sociological themes including arts, culture, and religion; cities, states, and political economy; deviant behavior and crime; gender and sexuality; health and the life course; race, ethnicity, and immigration; social movements, politics, and power; environment and population; 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, research, education, the clergy, nursing, social work, or civil service. 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.

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 3

2) Theory: Sociology 3001 3
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.

   - **Arts and Culture, Institutions and Organizations**
     Sociology 3201, 3202, 3203, 3204, 3205, 3206, 3213, 3221, 3222, 3223, 3224, 3225, 3231, 3232, 3233, 3615
   - **Health, Environment, Population, and Migration**
     Sociology 3301, 3302, 3303, 3304, 3306, 3311, 3312, 3313, 3314, 3315, 3316, 3317, 3318, 3319, 3321, 3322; Environmental and Sustainability Studies 4101, 4101W; 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, 3616, 3701, 3702, 3703, 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 1030, 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.

**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 statistics 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

203
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 6 credit hours
SOC 1020 or 1020W or 1030, SOC 3001

2) Foundation Courses in Environmental Sciences at least 6 credit hours
Two courses from EES 1510, 1030, 1070, 1080, 1140, 1111,** 2150, 2510,* 3310,* 3220,* 3310,* 4680,* 4750,* 4820; at least one of which must address climate-related issues (EES 1080, 1140, 2110,* 2150, 2510,* 3310*, 4650,* 4680,* 4820,* or another EES course as approved by the director of undergraduate studies of Environmental Sociology).

*Requires prerequisites. **1111s require 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, 3317, 3318, 3319, 3321, 3604, 3605, 3881,* 4961;* ENVS 4101, ENVS 4101W

*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.
3) 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 Program in their senior year may also take more than 6 credit hours of 4981, up to a maximum of 12 credit hours.
4) 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. To earn honors in environmental sociology, students must successfully complete and defend an honors thesis before graduation.

Comprehensive Exam
In order to graduate with an environmental 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 majors are retaining core aspects of the environmental sociology curriculum.

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 course work inside the department, distributed as follows:

1. Sociology 1010, 1010W, or 1020, 1020W
2. Sociology 3001
3. Four courses, including at least one from three of the four core areas listed in above major

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 can be found in the courses section of this catalog.
Spanish and Portuguese

CHAIR Andrés Zamora

DIRECTOR OF UNDERGRADUATE STUDIES María Paz Pintané
DIRECTOR OF GRADUATE STUDIES Benigno Trigo
PROFESSORS EMERITI Susan Berk-Seligson, Victoria A. Burrus, Cathy L. Jrade, C. Enrique Pupo-Walker
PROFESSORS Earl E. Fitz, Edward H. Friedman, Ruth Hill, William Luis, Philip D. Rasico, Benigno Trigo, Andrés Zamora
ASSOCIATE PROFESSORS José Cárdenas Bunsen, Christina Karageorgou-Bastea, Emanuelle Oliveira-Monte
ASSISTANT PROFESSORS Luiz F. López González, N. Michelle Murray
MELLON ASSISTANT PROFESSOR Anna Castillo
PRINCIPAL SENIOR LECTURER : María Paz Pintané
SENIOR LECTURERS Frances Alpren, José Luis Aznar, Lorraine Catanzaro, Rachel R. Chiguluri, Sarah Delassus, Heraldo Falconi, Victoria Gardner, Chalene Helmhut, Clint Hendrix, Stacey Johnson, Benjamin Legg, Alicia Lorenzo-García, Patrick Murphy, Amarilis Ortiz, Carolina Palacios, Cynthia M. Wasick
PRINCIPAL SENIOR LECTURER, RETIRED Elena Ola zagasti Segovia
SENIOR LECTURER, RETIRED Racquel Rincon

THE Department of Spanish and Portuguese offers a wide range of courses in the language, culture, and literature of Spain and Spanish America and is well known for its program in Portuguese and Brazilian studies. Intensive Elementary Catalan is also offered.

The department offers programs of concentration in both Spanish and Spanish and Portuguese. Majors take courses in language, literature, linguistics, and culture. An interdisciplinary major is available in Spanish and European Studies. Qualified Spanish majors may elect to take graduate courses in their senior year or participate in honors work. Minors in Spanish and in Portuguese are also offered.

The department serves majors from the Center for Latin American Studies and the Max Kade Center for European and German Studies. On the graduate level, the department offers a doctoral program in Spanish and a combination doctoral degree in Spanish and Portuguese.

Many students participate in Vanderbilt programs in Seville, Barcelona, Madrid, and Palma de Mallorca in Spain; Argentina, Chile, and Brazil in South America; and Cuba and the Dominican Republic in the Caribbean. Maymesters in Spain and Peru are also offered. Activities organized by the department include lectures, films, symposia, and Brazil Week. The department has a chapter of the national honor society Sigma Delta Pi for students of Spanish. Students are encouraged to apply for living space in the Spanish Hall of McTyeire International House.

Program of Concentration in Spanish

The major requires 30 credit hours in Spanish courses numbered 3301W and above. The distribution requirements are as follows:

1. **Core requirements:** 3301W, 3302, and 3303. A more advanced composition course may be substituted for 3301W. A more advanced conversation course may be substituted for 3302.

2. **Literature:** 9 credit hours from courses numbered 3835 or 3893 or 4400–4980

3. **Linguistics:** 3 credit hours from courses numbered 3892 or 4300–4360

4. **Electives:** 9 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) as one elective.

All courses that count toward the major must be taken in Spanish and taken for a letter grade. Up to 3 credit hours from AP/IB may count as 3302. The core courses 3301W and 3303 must be taken on the Vanderbilt campus. (This requirement does not apply to students who transfer to Vanderbilt from other U.S. institutions and have completed equivalent courses at their previous institution.) Students must take Spanish 3301W, 3302, and 3303 in order to participate in most study abroad programs. Students may count toward the major up to 12 credit hours of pre-approved course work from Vanderbilt study abroad programs in Spain or Latin America. Of the total number of credit hours taken abroad, no more than 6 credit hours may count toward the same distribution requirement area. A Maymester abroad course taught by a professor with an appointment in the Department of Spanish and Portuguese does not count against the 12 credit hour limit. Students may count toward elective credit up to 3 credit hours of supervised Independent Study, pre-approved by the director of undergraduate studies, in Vanderbilt study abroad programs in
Spain or Latin America; such independent study counts toward the maximum limit of 12 credit hours. Students may transfer up to 9 credit hours of pre-approved course work from non-Vanderbilt study abroad programs.

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 is not 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.

The remaining 6 credit hours of the honors program consist of a senior honors thesis, which is completed during the senior year as independent study (Spanish 4998–4999) 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 requires a minimum of 18 credit hours. The specific requirements are as follows:

1. 3301W (A more advanced composition course may be substituted) 3
2. 3302 (A more advanced conversation course may be substituted) 3
3. 3303 3
4. 3 credit hours of advanced Spanish literature chosen from courses numbered from 3835 or 3893 or 4400–4980 3
5. 6 credit hours of electives chosen from courses numbered 3320–3835, 3891–4980 6

Total credit hours: 18

All courses that count toward the minor must be taken in Spanish and taken for a letter grade. Up to 3 credit hours from AP/IB may count as 3302. The core courses 3301W and 3303 must be taken on the Vanderbilt campus. (This requirement does not apply to students who transfer to Vanderbilt from other U.S. institutions and have completed equivalent courses at their previous institution.) Students must take Spanish 3301W, 3302, and 3303 in order to participate in most study abroad programs. Students may count toward the minor up to 6 credit hours of pre-approved course work from Vanderbilt study abroad programs in Spain or Latin America. A Maymester abroad course taught by a professor with an appointment in the Department of Spanish and Portuguese does not count against this limit. Students may transfer up to 3 credit hours of pre-approved course work from non-Vanderbilt study abroad programs.

Minor in Portuguese

The minor in Portuguese consists of a minimum of 15 credit hours. The specific requirements are as follows:

1. Portuguese 2203 (Intermediate Portuguese; a more advanced language course may, subject to approval by the department, be substituted) 3
2. One of the following two courses: Portuguese 3301 (Portuguese Composition and Conversation) or Portuguese 3302 (Brazilian Pop Culture) 3
3. Portuguese 3303 (Introduction to Luso-Brazilian
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; Portuguese 2203, 3301 (or 3302), and 3303.
2. At least two Spanish courses numbered between 3320–3330, 3355–3385, 4400–4980 or 3835, 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 33 credit hours of course work. A semester of study abroad in Spain is recommended. Course work for the major is distributed as follows:

Spanish (21 credit hours)

Spanish language and literature core courses (9 credit hours):
- 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 and/or Spanish literature (12 credit hours): 3320, 3325, 3355, 3360, 3365, 4400, 4405, 4410, 4415, 4440, 4445, 4455 4470, 4620, 4640, 4670, 4690, or, subject to a variance, any other courses dealing with Spain or Iberian issues.

Students may substitute 3 credit hours of a language course in either Portuguese (1103 or higher) or Catalan (1103 or higher) as an elective.

European Studies (12 credit hours)

European Studies core courses (3 credit hours): EUS 2201 or 2203
European Studies courses or alternative topical courses as approved by major adviser (6 credit hours)
Senior Tutorial (3 credit hours): EUS 4960 or equivalent course in Spanish

Teacher Licensure

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 can be found in the courses section of this catalog.

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 can be found in the courses section of this catalog.

Spanish

Entering students should consult their advisers or the director of undergraduate studies at 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 can be found in the courses section of this catalog.

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.

Theatre

CHAIR Phillip N. Franck
DIRECTOR OF UNDERGRADUATE STUDIES E. Christin Essin
PROFESSORS EMERITI Robert A. Baldwin, Jon W. Hallquist,
    Terryl W. Hallquist, Cecil D. Jones Jr.
Professor: Phillip N. Franck
ASSOCIATE PROFESSORS E. Christin Essin,
    M. Leah Lowe
ASSISTANT PROFESSOR Elizabeth Cizmar, Kristyl Tift
PRINCIPAL SENIOR LECTURERS Alexandra Sargent Capps,

WRITER IN RESIDENCE Krista Knight

VANDERBILT’S Department of Theatre offers a vital center of innovative scholarship, teaching, creative expression, and exploration. The study of theatre introduces students to a major form of literature and performing arts, thereby developing a familiarity with one of the greatest cultural heritages and an understanding of human behavior and civilization as it is reflected through the ages. Theatre uniquely shapes perceptions about life into an active experience. Because this process encourages critical thought and discussion, the department provides a singular and important aspect of a liberal arts education through its production season and course work. Viewed as a practical extension of the department’s curriculum, plays are produced in Neely Auditorium, a laboratory where students learn to form creative expressions as well as to evaluate and to critique them.

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, 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 Tim Miller, Sojourn Theatre, Lisa D’Amour, Karl Malden, Olympia Dukakis, Fiona Shaw, the Living Theatre, and Actors from the London Stage. The Department of Theatre also offers a monthlong 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.

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 2651; Design/Technology: 1711 is required; choose three from 3721, 3761, 3741, or 3781.

Course descriptions can be found in the courses section of this catalog.
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.

The university reserves the right to change the arrangement or content of courses, to change the texts and other materials used, or to cancel any course on the basis of insufficient enrollment or for any other reason.

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 iSeminar. 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. 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 1108. Making of the African Diaspora. 1790 to the mid-twentieth century. Slave politics and abolition, the meaning of freedom after emancipation, and black workers' struggle for democracy and citizenship. Resistance to empire and colonialism. Migration, race and color ideology, religion, and culture. [3] (P)

AADS 1111. First-Year Writing Seminar. 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. 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. 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. 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. Not open to students who have earned credit for AADS 1111 Section 05 without permission. Total credit for this course and AADS 1111 Section 05 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (INT)

AADS 2306. Race, Mixed Race, and "Passing.". 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. 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 3006. James Baldwin: Five Ways of Looking at His Life. The author through literature, art, film, politics, and place. Five places critical in his artistic evolution: Harlem and Greenwich Village, New York; Paris and St. Paul-de-Vence, France; and Turkey. Film recreations of his life and writings. [3] (INT)


AADS 3204W. African American Children's Literature. From the seventeenth century to the present. Oral and written; fiction and non-fiction. Major works, writers, and genres. [3] (HCA)


AADS 3258. Black Issues in Education. 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. 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. 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. 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. 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 4126. The Black Classics. Key texts and writers of the African Diaspora, from medieval Africa to the present. Fiction and non-fiction across the disciplines of anthropology, education, history, law, literature, politics, religion, and sociology. [3] (HCA)


AADS 4228W. Black Girlhood: History, Performance and Counter-Narratives. Historical and current social, political, and cultural constructions of black girlhood in the United States. Performances in which black girls engage to deconstruct and interrupt these constructions via scholarly works, poetry, film, photography, and novels. [3] (SBS)

AADS 4256. Haiti: Freedom and Democracy. 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 4588. The Black Studies Movement. (Offered as 4580 prior to Fall 2020) Black Studies and student movements of the 1960s and early 1970s. Intellectual traditions, precedents, and political ideologies of movements. Issues that sparked the call for Black Studies at different college campuses and public school systems. Not open to students who have completed 4580. [3] (SBS)

AADS 4851. Special Topics in Humanities. Topics Vary. Literary, philosophical, and cultural texts. May be repeated for credit if there is no duplication in topic. [3] (HCA)

AADS 4852. Special Topics in Social Sciences. Topics Vary. Diverse range of social and political questions, issues, and problems. May be repeated for credit if there is no duplication in topic. [3] (SBS)

AADS 4979. Senior Thesis in African American and Diaspora Studies. 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. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE Credit)

AMER 1002. Introduction to American Studies. 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. 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. 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 1200. Introduction to Southern Studies. An interdisciplinary approach to southern American culture, character, and life approached from the interrelated perspectives of history and culture (literature, music, religion, images, rituals, material culture). [3] (US)


AMER 2075. Conspiracy Culture in America. Conspiracy theories in American culture and history. Topics include witch trials, anti-Semitism, anti-Catholicism, the red scare, UFOs, and the Kennedy assassination. Relation of conspiracy theories to broader cultures of knowledge. [3] (US)


AMER 2204. The U.S. Stage. 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)
AMER 2500. American Cultures: Past, Present, Future. American cultural history from earliest contact between North American indigenous peoples and Europeans to the present. Popular norms and beliefs as well as literature, art, and philosophy. Ideas of exceptionalism, democracy, and the marketplace; struggles over inclusion and citizenship; and the U.S. role in globalization. [3] (US)

AMER 3100. Rhetoric of Social Movements. 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)

AMER 3200. Global Perspectives on the U.S.. Contemporary and historical views of the U.S. political and cultural presence in the world; comparative nationalisms; emphasis on points of view outside the U.S. [3] (US)

AMER 3333. Going Viral? Borders, Belonging, and Citizenship in the Contemporary World. Today's most intractable problems traverse national boundaries. Yet crises like COVID-19, global warming, and poverty also energize attempts to police borders, curtail migration, and tighten citizenship requirements. In this interdisciplinary course with guest appearances by activists, artists, and authors, we explore pressures on contemporary ideas about membership, boundaries, and belonging. [3] (HCA)


AMER 3851. Independent Readings and Research. 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 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 AMER 3851 and 3852] (No AXLE credit)

AMER 3852. Independent Readings and Research. 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 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 AMER 3851 and 3852] (No AXLE credit)

AMER 3880. Internship Training. 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. 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. 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. Research Methods Workshop. 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. 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. 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. Acquisition, reading, and analysis of primary source research material. Open only to senior honors students. [3] (No AXLE credit)

AMER 4999. Senior Honors Thesis. Writing an honors thesis under the supervision of the thesis adviser. [3] (No AXLE credit)

Anthropology

ANTH 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

ANTH 1101. Introduction to Cultural Anthropology. 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. 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 1130W. America through the Lens of Disney. Concepts of gender, family, race, and class through a combination of texts and animated films produced by the Walt Disney Company. Impact on contemporary American cultural values. No credit for students who have earned credit for 1111 section 07. [3] (P)


ANTH 1601. Introduction to Language and Culture. The interrelationship between language and culture. Language and thought, language ideologies, discourse, and linguistic and social identities. Culture and language change. [3] (SBS)

ANTH 2101. Theories of Culture. 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. Repeat credit for students who have earned credit for 3900. [3] (SBS)

ANTH 2102. Problems in Anthropological Theory. Seminar in anthropological theory: cultural evolution, cultural history, ethnic relations, cultural ecology, archaeological method and theory, social structure, political organizations, and religious institutions. Repeat credit for students who have earned credit for 3901. [3] (SBS)


ANTH 2106. Culture and Power in Latin America. 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. Native societies of Amazonia, the Orinoco basin, and other forest, savanna, and coastal regions of South America. Ecology, cosmology, social organization, and political relations in historical and contemporary populations. Government policies, human rights, environmentalism, sustainable development, and indigenous activism and advocacy. [3] (SBS)


ANTH 2110. Gender and Cultural Politics. 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. Serves as repeat credit for ANTH 3145. [3] (P)


ANTH 2130. Global Infrastructure and Everyday Life. Relations between infrastructure and society around the world, past and present. Analysis of large technical systems as sites of cultural meaning, political struggle, and everyday social interaction. Water, energy, communication, and transportation networks in Africa, Asia, and the Americas, with an emphasis on Latin America. Offered on a graded basis only. [3] (INT)


ANTH 2160W. Creating Community. 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. Serves as repeat credit for either 2160 or 3160 Anthropologies and Archaeologies of Community. [3] (SBS)

ANTH 2211. Archaeology. 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 2214. Art and Architecture in the Ancient Americas. Visual arts and built environments in Mesoamerican and South American civilizations before European contact. Sacred, cultural, and historical influences on building traditions and iconography. [3] (INT)

ANTH 2220. 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 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 2220. [3] (SBS)


ANTH 2223. Native North Americans. Indian societies of North America; their archaeological origins, development, and changing adaptation to white society. [3] (US)


ANTH 2227. Food in the Ancient World. Development of agriculture from around 8,000 BCE to the contact between Old and New Worlds in 1492. Role of foodways in human societies and impact on historical and environmental change. Integration of foodways with social and cultural systems such as gender, identity, ideology, and trade. Elements of historical cuisines, including cooking techniques, meat, and alcohol. Excursions to local sites of agricultural, archaeological, and food-related relevance. [3] (SBS)

ANTH 2229. Religious Sites Across the Ancient World. Architecture and sacred spaces from the Paleolithic period to the medieval world in ancient Europe, Asia, Africa, the Americas, and Oceania. The role of religious sites in pre-modern societies. Diversity and commonalities in religious sites worldwide. Relationship to the natural environment. Cultural heritage and the politics of ancient religious sites in the present. [3] (SBS)

ANTH 2230. South American Archaeology. From 12,000 years ago to the present. Archaeology, ethnohistory, and ethnography. [3] (SBS)


ANTH 2242. The Archaeology of Ancient Maya Civilization. Case study in cultural evolution. Archaeological evidence and social theory on the enigmatic origins, complex nature, and sudden collapse of the ancient Maya civilization. Repeat credit for students who have earned credit for 2242W. [3] (INT)

ANTH 2242W. The Archaeology of Ancient Maya Civilization. Case study in cultural evolution. Archaeological evidence of and social theory on the enigmatic origins, complex nature, and sudden collapse of the ancient Maya civilization. Repeat credit for students who have earned credit for 2242. [3] (INT)

ANTH 2275. Untimely People and Matters. Time's effects on people and societies. Culturally constituted temporality; notions of embodiment and alterity. Study of social change; process of innovation through invention and adaptation. Othering non-Western societies as traditional and unchanging. [3] (HCA)

ANTH 2275W. Untimely People and Matters. Time's effects on people and societies. Culturally constituted temporality; notions of embodiment and alterity. Study of social change; process of innovation through invention and adaptation. Othering non-Western societies as traditional and unchanging. [3] (HCA)


ANTH 2601. Introduction to Linguistics. 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. 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 ethno-archaeological investigation. [3] (SBS)


ANTH 3120. Sociocultural Field Methods. 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. 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 3125. Public Scholarship Practicum in Community Research. Theory and methods for publicizing research to policy makers, organizations, and the public. Uses of media. Communicating research in civil rights; environmentalism; and advocacy on gender, sexuality, health, and religion. Translating original scholarship into pieces for newspapers, blogs, websites, video resources, and public presentations. Prior research experience is expected. Consent of instructor is required. [3] (No AXLE credit)


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. Serves as repeat credit for ANTH 2110. [3] (P)

ANTH 3150. 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 3150W. [3] (SBS)
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 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. Serves as repeat credit for students who earned credit for ANTH 3890-01 in Fall 2014. [3] (SBS)


ANTH 3240. Ancient Mesoamerican Civilizations. Development of pre-Hispanic civilization in Mesoamerica from the beginnings of village life to the rise of the great states and empires: Olmec, Maya, Toltec, and Aztec civilizations. [3] (INT)

ANTH 3241. The Aztecs. 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 3243. 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 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. 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 feastings in Inca politics, and plane 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 3260. Crafting Pottery in the Ancient World. Pottery as craft or locally-grounded knowledge of making. Phenomenological issues of perception, objectification, and embodiment. Practice-based versus formal textbook learning. Hands-on experience making and studying ceramic vessels. Qualitative and quantitative analysis of ceramic forms, fabrics, and decorations. Repeat credit for students who have earned credit for 3260W. [3] (HCA)

ANTH 3260W. Crafting Pottery in the Ancient World. Pottery as craft or locally-grounded knowledge of making. Phenomenological issues of perception, objectification, and embodiment. Practice-based versus formal textbook learning. Hands-on experience making and studying ceramic vessels. Qualitative and quantitative analysis of ceramic forms, fabrics, and decorations. Repeat credit for students who have earned credit for 3260. [3] (HCA)

ANTH 3261. Introduction to Geographic Information Systems and Remote Sensing. 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. Ethical perspectives on contemporary problems of archaeological and anthropological research, interaction, and interpretation of past and present non-Western societies. [3] (P)

ANTH 3333W. Topics. Topics vary by section and instructor. [3]


ANTH 3346. Human Adaptation and Disease. Evolutionary perspectives on biological and cultural adaptations to physical and pathogen environments. Human variation, human evolutionary ecology, epidemiology, and evolution of disease. Specific focus on epidemiological transitions. Offered on a graded basis only. Serves as repeat credit for ANTH 3890-02 in Fall 2016. [3] (MNS)

ANTH 3347. Bioethics in Anthropology. Humans as study subjects in research. Human complexities and experimentation; eugenics; and ethical, legal, and social issues of research. [3] (SBS)


ANTH 3620. Maya Language and Literature. 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. 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 3850. Independent Research. Readings on selected topics (of the student's choice) and the preparation of reports. [1-3] (No AXLE credit)

ANTH 3851. Independent Research. Readings on selected topics (of the student's choice) and the preparation of reports. [1-3] (No AXLE credit)

ANTH 3865. Field Research. 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 3867. Digital Archaeology: Analysis and Curation of Material Culture. Laboratory analysis of archaeological artifacts using digital methods. Three dimensional modeling of artifacts, digital photography, artifact technical

ANTH 3880. Internship Training. 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. 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. 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 4153. Economic Anthropology. Modern and postmodern cultural organization of Western and non-Western economies. Crosscultural comparison of concepts of self-interest and rationality. Relation of the growth of post-industrial (service and information) economies to economic strategies of ethnic groups. Survey of indigenous alternatives to development. Theoretical issues grounded in case studies from our own and other cultures. [3] (SBS)


ANTH 4155. Realities and Worldviews: Why Culture Matters. 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. 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. Prerequisite or corequisite: BSCI 1100, BSCI 1105, or BSCI 1510. [3] (MNS)

ANTH 4998. Honors Research. 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. 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. 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. 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. Practice and development of 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. No credit for students who have earned credit for a more advanced Arabic language course. Prerequisite: 1102. [3] (INT)

ARA 2202. Intermediate Arabic. Continuation of 2201. Practice and development of 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. No credit for students who have earned credit for a more advanced Arabic language course. Prerequisite: 2201. [3] (INT)

ARA 3101. Advanced Arabic. 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)

ARA 3102. Advanced Arabic. 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)

ARA 3201. Media Arabic. 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)


Aramaic and Syriac


Art Studio

ARTS 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE Credit)

ARTS 1099. Maymester Contemporary Art Blitz. 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 1102. Drawing and Composition I. 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 1103. Drawing From Life. Methods used to depict the form and structure of naturalistic subjects, including the human figure. Gesture, sighting & measuring, contour drawing, and value. Metaphorical and narrative use of life forms and the human figure in art. [3] (HCA)

ARTS 1111. First-Year Writing Seminar. 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 1502. Installation Art. Historical survey from 1900 to present; studio practice; formal and conceptual issues. [3] (HCA)


ARTS 1900. Social Collective Art Practice. History and practice of making art within the social collective experience. Small group projects based on everyday living in The Commons. Not open to students who have earned credit for ARTS 1111-01. Total credit for this course and ARTS 1111-01 will not exceed 3 hours. Credit hours reduced from second course taken (or test or transfer credit) as appropriate. [3] (HCA)

ARTS 2100. Drawing and Composition II. Prerequisite: 1102. [3] (HCA)

ARTS 2101. Life Drawing I. Methods used to depict form and structures of the human figure. Gesture, sighting and measuring, contour drawing, and value. Planar and anatomical analysis. Metaphorical and narrative use of the human figure in art. Prerequisite: 1102. [3] (HCA)


ARTS 2103. Experimental Drawing. Non-traditional approaches to drawing materials and methods. Drawings as installations, animations, and murals. Prerequisite: 1102. [3] (HCA)

ARTS 2104. Drawing from Life II. Methods used to depict form and structure of naturalistic subjects, including the human figure. Gesture, sighting and measuring, contour drawing, and value. Metaphorical and narrative use of life forms and the human figure in art. Prerequisite: 1103. [3] (HCA)


ARTS 2201. Photography III: Image and Memory in Archive and Context. Public and personal photographic and cinematic archives. Translation of archival objects and their material properties into exhibition objects through class discussions and site explorations. Creative writing and community engagement component. Prerequisite: 1200, 1201, 1202, or 1101. [3] (HCA)

ARTS 2300. Painting II. Prerequisite: 1300. [3] (HCA)

ARTS 2400. Ceramics II. 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. 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. Prerequisite: 1500, 1501, or 1502. [3] (HCA)


ARTS 2600. Printmaking II. Advanced study in traditional and experimental printmaking processes. Prerequisite: 1600 or 1601. [3] (HCA)


ARTS 2702. Portable Media II. Advanced exploration in use of portable digital media devices. Variety of methods for conceptualizing and making projects; enhanced art making skills. Prerequisite: 1700, 1701, or 1702. [3] (HCA)

ARTS 3100. Drawing and Composition III. Prerequisite: 1102 and 2100. [3] (HCA)

ARTS 3101. Life Drawing II. Prerequisite: 2101. [3] (HCA)

ARTS 3102. Drawing: Color Media II. Prerequisite: 2102. [3] (HCA)

ARTS 3300. Painting III. Prerequisite: 2300. [3] (HCA)

ARTS 3333. Engine for Art, Democracy, and Justice. Description pending. [3] (HCA)

ARTS 3600. Printmaking III. Advanced study in traditional and experimental printmaking processes. Prerequisite: 2600. [3] (HCA)

ARTS 3851. Independent Research. 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. 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. 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. 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. 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. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

ASIA 1111. First-Year Writing Seminar. 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 1680. Inside China. 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 1682. Chinese Culture through Tai Chi & Qi Gong. Chinese culture through physical and spiritual practice of Tai Chi (Yang Style short form) and (Ba Duan Jin) Qi Gong. Concepts of traditional Chinese culture, such as the "unity of man and nature," and the complementary forces of yin and yang. [1] (No AXLE credit)


ASIA 1881W. The Body in Modern Japanese Culture. 1890s to present. Cultural and social meanings of the body in Japanese history. Fiction and film. Gender, sexuality, illness, the senses, war, and violence. [3] (INT)

ASIA 2100W. Fashioning the Self: Coming of Age and Asian Modernities. 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 2210. Hollywood Hanoi. Cultural narratives of the Vietnam War, including novels and films. War and representation. International, minority, and antirwar perspectives on the violence and aftermath. Muhammad Ali, Werner Herzog, Jean Genet, Graham Greene, and Dinh Linh. All texts in English translation. Not open to students who have earned credit for ASIA 1111 Section 04 without permission. Total credit for this course and ASIA 1111 Section 04 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (INT)


ASIA 2302. Popular Culture of South Asia. Film, sport, music, clothing, and other contemporary popular culture artifacts. [3] (INT)

ASIA 2303. Classical South Asia in the Modern World. Transmission, reception, and interpretation of classical South Asian cultural artifacts, such as yoga, meditation, kama sutra, ayurveda, and religious stories. Critical reflections on authenticity, adaptation, medium, and audience. [3] (HCA)

ASIA 2412. Global Korean Cinema. From the colonial period to the Korean Wave in the new millennium. Film criticism, transnational and national contexts of film production, aesthetics of auteurs and genres, and local and global receptions of Korean cinema. [3] (INT)


ASIA 2414. Food and Family in Korean Pop Culture. Food as embodiment of individual, family, and collective identities in Korea and the Korean diaspora. Class, gender, ethnicity, and body politics through literature, film, TV dramas, webtoons, and pop music. Repeat credit for students who have earned credit for ASIA 3892-01 in Fall 2018. Not open to students who have earned credit for ASIA 3892-01 in Fall 2018 without permission. [3] (INT)


ASIA 2412. Global Korean Cinema. From the colonial period to the Korean Wave in the new millennium. Film criticism, transnational and national contexts of film production, aesthetics of auteurs and genres, and local and global receptions of Korean cinema. [3] (INT)


ASIA 2414. Food and Family in Korean Pop Culture. Food as embodiment of individual, family, and collective identities in Korea and the Korean diaspora. Class, gender, ethnicity, and body politics through literature, film, TV dramas, webtoons, and pop music. Repeat credit for students who have earned credit for ASIA 3892-01 in Fall 2018. Not open to students who have earned credit for ASIA 3892-01 in Fall 2018 without permission. [3] (INT)


ASIA 2511. Popular Culture in Modern Japan. 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. 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 2513W. Media Monsters in Contemporary Japan. The supernatural and the monstrous as represented in the context of mass media and consumerism in contemporary Japan. Live-action J-horror films, popular fiction, Manga, animated films, and television series. [3] (HCA)

ASIA 2560. Current Japan-U.S. Relations. 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 2605. Romancing the Nation in Modern Chinese Literature. From the fourteenth century to the present. Fiction, drama, and poetry. Family relations and nation-state in romantic writings. Knowledge of Chinese is not required. [3] (HCA)


ASIA 2607. Self and Society in Pre-modern Chinese Literature. From the seventeenth-century BCE to the seventeenth-century CE. Poetry, prose, fiction, and drama. Self, society, religion, gender, and print culture. Offered on a graded basis only. Serves as repeat credit for ASIA 3891 section 01 in Fall 2015. Knowledge of Chinese is not required. [3] (HCA)


ASIA 2609W. Writing and Gender in Traditional China. Pre-modern China: 1st century CE to 20th century CE. Women writers, women in family and society, gender relations, cross-dressing, and foot-binding. Poetry, prose, drama, fiction, and visual materials. Offered on a graded basis only. [3] (HCA)


ASIA 3633. Self-Cultivation in Ancient China. 300 BCE to 500 CE. 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. 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. 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. 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. 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. 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. 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. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

ASTR 1010. Introductory Astronomy: Stars and Galaxies. 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. Not open to students who have earned credit for

ASTR 1210 without permission. Total credit for this course and ASTR 1210 will not exceed 4 credit hours. Credit reduced from second course taken (or test or transfer credit) as appropriate. [3] (MNS)

ASTR 1010L. Introductory Nighttime Astronomy Laboratory. 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.
Serves as repeat credit for ASTR 1020L. Not open to students who have earned credit for ASTR 1210 without permission. Total credit for this course and ASTR 1210 will not exceed 4 credit hours. Credit reduced from second course taken (or test or transfer credit) as appropriate. [1] (No AXLE credit)

ASTR 1020L. Introductory Daytime Astronomy Laboratory. 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. Serves as repeat credit for ASTR 1010L. Not open to students who have earned credit for ASTR 1210 without permission. Total credit for this course and ASTR 1210 will not exceed 4 credit hours. Credit reduced from second course taken (or test or transfer credit) as appropriate. [1] (No AXLE credit)

ASTR 1111. First-Year Writing Seminar. 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. Telescopic and naked eye observations. Light, optics, telescopes, and CCD cameras. Motions of the sky. Kepler's laws. Phases and topography 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. Not open to students who have earned credit for ASTR 1010, 1010L, or 1020L, without permission. Total credit for this course and ASTR 1010, 1010L, or 1020L, will not exceed 4 hours. Credit reduced from second course taken (or test or transfer credit) as appropriate. [4] (MNS)


ASTR 2130. The Trial of Galileo and its Background. 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 3600. Stellar Astrophysics. 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; and either PHYS 1502, 1602, or 1902; and one of CS 1101, 1103, or 1104. [3] (MNS)

ASTR 3700. Galactic Astrophysics. 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 2400, 2420, or 2610; and either PHYS 2255 or 3651; 3200; and either CS 1101, 1103, or 1104. [3] (MNS)

ASTR 3800. Structure Formation in the Universe. 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 1911; and one of PHYS 1502, 1602, or 1902; and one of MATH 2400, 2420, or 2610; and one of CS 1101, 1103, or 1104. [3] (MNS)
ASTR 3850. Undergraduate Research. Research and scholarly investigation or directed readings in astronomy under close supervision of sponsoring faculty member. Enrollment by arrangement with sponsoring faculty member and approval of director of undergraduate studies. May be repeated for credit, for a total of no more than 10 total credit hours and for no more than 5 credit hours per semester. [1-5] (No AXLE credit)

ASTR 3890. Selected Topics. [1-3] (No AXLE Credit)

ASTR 3900. Gravitational Astrophysics: General Relativity and Cosmology. Introduction to Einstein's theory describing gravity as curvature of four-dimensional spacetime. Special relativity, differential geometry, tensor analysis, spacetime curvature, the Einstein Field Equations, the Schwarzschild Metric for stars and black holes, production and detection of Gravitational Waves, and the Friedmann-Robertson-Walker metric for cosmology. Prerequisite: PHYS 2275 and 2290. [3] (MNS)

ASTR 4998. Honors Research and Senior Thesis. Independent experimental or theoretical investigations of basic problems in astronomy and astrophysics under faculty supervision, culminating in a written thesis submitted to and an oral defense presented to a departmental faculty examination committee. Required for departmental honors in Astronomy. Enrollment by arrangement with sponsoring faculty member and approval of director of undergraduate studies. May be repeated for a total of 10 credits, but students may earn only up to 6 credits per semester of enrollment. Prerequisite: major in Physics, junior or senior standing. [1-6] (No AXLE credit)

Biochemistry & Chemical Biology

BCB 2101. Chemical Biology Focus. Roles of proteins, lipids, nucleic acids, and carbohydrates in human disease. Experimental techniques. Prerequisite: CHEM 2221 and BSCI 1510. [1] (No AXLE credit)

BCB 3101. Special Topics in Chemical Biology. May be repeated for credit more than once if there is no duplication in topic. Prerequisite: CHEM 3710. [3] (MNS)

BCB 3201. Independent Laboratory Research. Student research under the supervision of faculty associated with the Biochemistry and Chemical Biology major. Enrollment through course coordinator (after arrangement with faculty) before the end of the previous semester. Prerequisite: BSCI 1510 and CHEM 1602, consent of Biochemistry and Chemical Biology Director of Undergraduate Studies, 3.0 cumulative grade point average. 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)

BCB 3880. Internship Training. Under faculty supervision, students from any discipline can gain scientific research experience in a broad range of public or private institutions or government laboratories. Credit hours are based upon actual work performed at the internship site. A minimum of 1 credit hour in background readings and research must be completed in BCB 3881 concurrently with, and regardless of, the number of hours earned in BCB 3880. A substantial research paper must be submitted at the end of the semester during which the internship is completed. These credit hours may NOT count toward the minimum credit hours required for the biochemistry & chemical biology major. Normally a 3.0 grade point average, 6 hours of prior coursework in BCB major, and prior approval of a specific plan of work by the director of undergraduate studies in Biochemistry & Chemical Biology are required. Offered on a Pass/ Fail basis only and must be taken concurrently with 3881. Corequisite: 3881. Variable credit. [1-9] (No AXLE credit)

BCB 3881. Internship Readings and Research. Under faculty supervision, students from any discipline can gain scientific research experience in a broad range of public or private institutions or government laboratories. Credit hours are based upon readings or research supervised by BCB faculty to lend some intellectual foundation to the internship experience. A minimum of 1 credit hour in background readings and research must be completed in BCB 3881 concurrently with, and regardless of, the number of credit hours earned in BCB 3880. A substantial research paper must be submitted at the end of the semester during which the internship is completed. These credit hours may not count toward the minimum credit hours required for the Biochemistry & Chemical Biology major. Normally a 3.0 grade point average, 6 hours of prior coursework in BCB, and prior approval of a specific plan of work by the director of undergraduate studies in Biochemistry & Chemical Biology are required. Offered on a graded basis only and must be taken concurrently with 3880. Corequisite: 3880. Variable credit. [1-6] (No AXLE credit)
BCB 4320. Advanced Chemical Biology. (Also listed as CPBP 8320 Foundations in Chemical Biology) Overviews and in-depth case studies on the breadth of chemical biology. Importance of chemical biology in advancing biological sciences. Offered on a graded basis only. Prerequisite: CHEM 3710 [3] (MNS)

BCB 4965. Advanced Integrated Laboratory. Chemical and biomolecular analysis, separation, and spectroscopy. Chemical synthesis. Experimental design, computational methods. Offered on a graded basis only. Limited to BCB senior majors. Prerequisite or Co-requisite: BSCI 2520 and CHEM 3710. [3] (MNS)

BCB 4966. Advanced Integrated Laboratory. Continuation of 4965. Directed research. Offered on a graded basis only. Limited to senior BCB majors. Prerequisite: 4965. [3] (MNS)

BCB 4999. Honors Research. Original supervised research. Consent of DUS required. Only open to BCB majors. May be repeated for credit. Prerequisite: 3201. [3-6] (No AXLE credit)

Biological Sciences

BSCI 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

BSCI 1100. Biology Today. 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. Not open to students who have earned credit for BSCI 1510 or 1511 without permission. Total credit for this course and BSCI 1510 or 1511 will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Corequisite: 1100L. [3] (MNS)

BSCI 1100L. Biology Today Laboratory. Laboratory investigations of the genetics, physiology, and ecology of plants and animals. One three-hour laboratory per week to accompany 1100. Not open to students who have earned credit for BSCI 1510L, 1511L, or 1512L without permission. Total credit for this course and BSCI 1510L or 1511L will not exceed 1 credit hours; total credit for this course and BSCI 1512L will not exceed 2 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Satisfies the AXLE lab course requirement when completed with 1100. [1] (No AXLE credit)

BSCI 1103. Green Earth: The Biodiversity and Evolution of Plants. Evolution of biodiversity from the Cambrian period through today. Theories and challenges of its conservation. Case studies drawn from Hawaii, Madagascar and Australia. Not intended for students planning to major in biological sciences. Not open to students who have earned credit for 1510 or 1511 without permission. Total credit for this course and 1510 or 1511 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (MNS)

BSCI 1103L. Green Earth Laboratory: The Biodiversity and Evolution of Land Plants. Not open to students who have earned credit for 1510L, 1511L, or 1512L without permission. Total credit for this course and 1510L or 1511L will not exceed 1 credit hour; total credit for this course and 1512L will not exceed 2 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Corequisite: 1103. Satisfies the AXLE lab course requirement when completed with 1103. [1]

BSCI 1105. Human Biology. Recent advances in genetics, reproduction, and biotechnology. Social, legal, and ethical implications. Three lectures and one laboratory period per week. Not intended for students planning to major in Biological Sciences. Not open to students who have earned credit for BSCI 1510, 1510L, 1511, 1511L, or 1512L without permission. Total credit for this course and BSCI 1510, 1510L, 1511, 1511L, or 1512L will not exceed 4 credit hours; total credit for this course and BSCI 1511L will not exceed 5 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [4] (MNS)

BSCI 1111. First-Year Writing Seminar. 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. 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. Not open to students who have earned credit for BSCI 1100, 1103, or 1105 without permission. Total credit for this course and BSCI 1100 or 1103 will not exceed 3 credit hours; total credit for this course and BSCI 1105 will not exceed 4 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite or corequisite: CHEM 1601. [3] (MNS)

BSCI 1510L. Biological Sciences Laboratory. Laboratory to accompany 1510. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1510. Not open to students who have earned credit for BSCI 1100L, 1103L, or 1105 without permission. Total credit for this course and BSCI 1100L or 1103L will not exceed 1 credit hour; total credit for this course and BSCI 1105 will not exceed 4 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite or corequisite: 1510. [1] (No AXLE credit)

BSCI 1511. Introduction to Biological Sciences. Continuation of 1510. Cell communication. Physiology, organ function and development. Mendelian and population genetics. Evolution, ecology, and speciation. Populations, ecosystems, and conservation biology. Not open to students who have earned credit for BSCI 1100, 1103, or 1105 without permission. Total credit for this course and BSCI 1100 or 1103 will not exceed 3 credit hours; total credit for this course and BSCI 1105 will not exceed 4 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1510. [3] (MNS)

BSCI 1511L. Biological Sciences Laboratory. Laboratory to accompany 1511. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1511. Not open to students who have earned credit for BSCI 1100L, 1105, or 1512L without permission. Total credit for this course and BSCI 1100L or 1105 will not exceed 1 hour; total credit for this course and BSCI 1105 will not exceed 4 hours; total credit for this course and BSCI 1512L will not exceed 2 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite or corequisite: 1511. [1] (No AXLE credit)

BSCI 1512L. Biological Sciences Laboratory. 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. Not open to students who have earned credit for BSCI 1100L, 1105, or 1511L without permission. Total credit for this course and BSCI 1100L or 1105 will not exceed 2 hours; total credit for this course and BSCI 1105 will not exceed 5 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite or corequisite: 1511. [2] (No AXLE credit)

BSCI 2056. Non-Equivalent Credit (BSCI Introductory Lab). This course has no Vanderbilt equivalent. Credit is eligible to count toward the Introductory Lab requirement of the BSCI major or minor.

BSCI 2060. Non-Equivalent Credit (BSCI/EEOB Intermediate Lab). This course has no Vanderbilt equivalent. Credit is eligible to count toward the Intermediate Lab requirement of the BSCI/EEOB major or minor.

BSCI 2201. Introduction to Cell Biology. 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. 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. Evolutionary theory, with emphasis on evolutionary mechanisms. Microevolutionary processes of adaptation and speciation and macro-evolutionary patterns. Evidence from genetics, ecology, molecular biology, and paleontology in the historical context of the neo-Darwinian synthesis. No credit for graduate students in Biological Sciences. Prerequisite: 1511. [3] (MNS)


BSCI 2210L. Genetics Laboratory. One three-hour laboratory and discussion period per week. Satisfies the AXLE lab course requirement when completed with 2210. Prerequisite or corequisite: 2210. [1] (No AXLE credit)
BSCI 2218. Introduction to Plant Biology. 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. 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. Population biology, evolutionary ecology, community structure, with emphasis on species interactions, including competition, predation, and symbiosis. Prerequisite: 1511. [3] (MNS)

BSCI 2238L. Ecology Lab. 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: 2238. [1] (No AXLE credit)


BSCI 3226. Immunology. The molecular and cellular basis of immunity. Emphasis on molecular structure, the genetic origin of diversity in B-cell and T-cell receptors, antigen presentation, and the cellular interactions leading to the immune response. Tolerance, tumor and transplantation immunity, autoimmune and immunodeficiency diseases, and allergy. Prerequisite: 2201 or 2210. [3] (MNS)


BSCI 3232. Biodiversity, Climate Change and Our Health. Impacts of climate change on biological and ecological systems from the Paleozoic era to today. Inter-play of earth's systems, climate, and biological innovations. Effects on our natural resources, and consequences for our health. Prerequisite: 1511. [3] (MNS)

BSCI 3233. Conservation Biology. Ecological, evolutionary, social, and economic aspects of biodiversity loss and ecosystem disruption due to human activities. Climate change, habitat fragmentation, species overexploitation, and invasive species. Sustainable development, habitat restoration, and species reintroduction. Prerequisite: 1511. [3] (MNS)


BSCI 3247. Molecular Evolution. 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 3254. Neurobiology of Behavior. Nerve cell interactions in neuronal networks of the central nervous system of animals and their impact for regulating behavior. Sensory systems, sensory-motor integration, central processing of information, neuronal-hormonal interactions; and brain anatomy and organization in invertebrates and vertebrates. Prerequisite: BSCI 1511 or NSC 2201. [3] (MNS)


BSCI 3258. Vertebrate Physiology. Fundamental mechanisms of the major vertebrate physiological systems with an emphasis on humans. Special physiological adaptations of vertebrates to their environment (respiration of aquatic animals, birds, and deep diving mammals; salt balance in fresh and saltwater environments; altitude adaptation). Prerequisite: 2201 or 2520. [3] (MNS)

BSCI 3260. Vertebrate Biology. Comprehensive overview of the vertebrates. Morphology, physiology and behaviors; adaptations to specific environments, and the ecology, distribution and conservation of select groups. Key transformations leading to vertebrate diversity. Evolutionary history and relationships. No credit for students who earned credit for BSCI 3890 section 1 offered spring 2016 or spring 2017. Prerequisite: BSCI 1511. [3] (MNS)

BSCI 3270. Statistical Methods in Biology. An introduction to statistical methods used in the analysis of biological experiments, including the application of computer software packages. Emphasis on testing of hypotheses and experimental design. Topics include descriptive statistics, analysis of variance, regression, correlation, contingency analysis, and the testing of methods for sampling natural populations. Prerequisite: 1511. [3] (MNS)

BSCI 3272. Genome Science. 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. 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. 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. 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. 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. 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 3961 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)

BSCI 3965. Undergraduate Seminar. Discussions and papers based on readings in research journals. Topics vary. Prerequisite: fulfillment of the intermediate course requirements for the major. May be repeated for credit more than once if there is no duplication in topic, but only two hours may count toward the major. Students may enroll in more than one section of this course each semester. [2] (No AXLE credit)


BSCI 4999. Honors Research. Open only to majors in the Honors Program. May be repeated for credit more than once, but students may earn only up to 6 credits per semester of enrollment. [4-6] (No AXLE credit)

Catalan

CTLN 1103. Intensive Elementary Catalan. Romance tongue of northeastern Spain, Andorra, and southwestern France. Emphasis on oral communication, grammar, reading, and culture. Prior study of another Romance language through the intermediate level is expected. No credit for students who have earned credit for a higher level Catalan language course. [3] (INT)

Chemistry

CHEM 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE Credit)

CHEM 1010. Introductory Chemistry. 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. Not open to students who have earned credit for CHEM 1601, 2211, or 2221 without permission. Total credit for this course and 1601, 2211, or 2221 will not exceed 3 credit hours. Credit reduced from second course taken (or test or transfer credit) as appropriate. [3] (MNS)

CHEM 1010L. Introductory Chemistry Laboratory. Laboratory to accompany 1010. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1010. Not open to students who have earned credit for CHEM 1601L or 2221L without permission. Total credit for this course and 1601L or 2221L will not exceed 1 credit hour. Credit reduced from second course taken (or test or transfer credit) as appropriate. Corequisite: 1010. [1] (No AXLE credit)

CHEM 1020. Introductory Chemistry. 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. Not open to students who have earned credit for CHEM 1602, 2212, or 2222 without permission. Total credit for this course and 1602, 2212, or 2222 will not exceed 3 credit hours. Credit reduced from second course taken (or test or transfer credit) as appropriate. [3] (MNS)

CHEM 1020L. Introductory Chemistry Laboratory. Laboratory to accompany 1020. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1020. Not open to students who have earned
credit for CHEM 1602L or 2222L without permission. Total credit for this course and 1602L or 2222L will not exceed 1 credit hour. Credit reduced from second course taken (or test or transfer credit) as appropriate. Corequisite: 1020. [1] (No AXLE credit)

CHEM 1111. First-Year Writing Seminar. 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 1601. General Chemistry. General principles of chemistry for science and engineering students. Composition and structure of matter, chemical reactions, bonding, solution chemistry, and kinetics. Thermodynamics, equilibrium, acids and bases, electrochemistry, and coordination compounds. Three lectures per week and a recitation period. Not open to students who have earned credit for CHEM 1010 without permission. Serves as repeat credit for 1010. Corequisite: 1601L. [3] (MNS)

CHEM 1601L. General Chemistry Laboratory. Laboratory to accompany 1601. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1601. Not open to students who have earned credit for CHEM 1010L without permission. Serves as repeat credit for CHEM 1010L. Prerequisite or corequisite: 1601. [1] (No AXLE credit)

CHEM 1602. General Chemistry. Continuation of 1601. General principles of chemistry for science and engineering students. Composition and structure of matter, chemical reactions, bonding, solution chemistry, and kinetics. Thermodynamics, equilibrium, acids and bases, electrochemistry, and coordination compounds. Three lectures per week and a recitation period. Not open to students who have earned credit for CHEM 1020 without permission. Serves as repeat credit for 1020. Prerequisite: 1601. Corequisite: 1602L. [3] (MNS)

CHEM 1602L. General Chemistry Laboratory. Laboratory to accompany 1602. One three-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 1602. Not open to students who have earned credit for CHEM 1020L without permission. Serves as repeat credit for CHEM 1020L. Prerequisite: 1601L. Corequisite: 1602. [1] (No AXLE credit)

CHEM 2100. Introduction to Analytical Chemistry. Fundamental quantitative analytical chemistry with emphasis on principles of analysis, separations, equilibria, stoichiometry and spectrophotometry. Corequisite: 2100L. [3] (MNS)

CHEM 2100L. Analytical Chemistry Laboratory. Laboratory to accompany Chemistry 2100. One four-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 2100. Prerequisite or corequisite: 2100. [1] (No AXLE credit)

CHEM 2211. Organic Chemistry for Advanced Placement Students. Fundamental types of organic compounds; their nomenclature, classification, preparations, reactions, and general application. Three hours of lecture and one hour of recitation each week. Not open to students who have earned credit for CHEM 2221. Total credit for this course and CHEM 2221 will not exceed 3 credit hours. Prerequisite: enrollment limited to first-year students with advanced placement chemistry scores of 5, or the approval of the director of undergraduate studies. Corequisite: 2221L. [3] (MNS)

CHEM 2212. Organic Chemistry for Advanced Placement Students. Continuation of 2211. Fundamental types of organic compounds; their nomenclature, classification, preparations, reactions, and general application. Three hours of lecture and one hour of recitation each week. Not open to students who have earned credit for CHEM 2222. Total credit for this course and CHEM 2222 will not exceed 3 hours. Prerequisite: enrollment limited to first-year students with advanced placement chemistry scores of 5, or 2211, or the approval of the director of undergraduate studies. Corequisite: 2222L. [3] (MNS)

CHEM 2221L. Organic Chemistry Laboratory. Laboratory to accompany 2211 or 2221. One four-hour laboratory per week. Satisfies the AXLE lab course requirement when completed with 2211 or 2221. Prerequisite or corequisite: 2211 or 2221. [1] (No AXLE credit)


CHEM 2222L. Organic Chemistry Laboratory. 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 2610. Introduction to Nanochemistry. Synthesis, characterization, and assembly of nanoscale materials. No credit for graduate students in chemistry. Prerequisite: 1602. [3] (MNS)

CHEM 3010. Inorganic Chemistry. 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 3120. Instrumental Analytical Chemistry. Chemical and physical principles of modern analytical chemistry instrumentation. Prerequisite: 2100 and either 2212 or 2222. [3] (MNS)

CHEM 3135W. Forensic Analytical Chemistry. 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. 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. 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. 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. 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. 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. Essential metabolites including vitamins, steroids, peptides, and nucleotides. Consideration of phosphate esters and the synthesis of oligodeoxynucleotides. Three lectures per week. Prerequisite: 2212 or 2222. [3] (MNS)
CHEM 3715. Chemistry of the Coral Reef. Application of quantitative analytical chemistry techniques and spectroscopic methods to characterize molecules with potential materials chemistry or medicinal chemistry applications. In-depth chemistry research experience; mandatory participation in all scheduled field research and laboratory sessions. Prerequisite: 2100, 2100L, 2222, 2222L [3] (MNS)

CHEM 3841. Readings for Honors. Open only to students in the departmental honors program. General reading supervised by research adviser. [2] (No AXLE credit)

CHEM 3842. Readings for Honors. 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. 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 3902. Pedagogy for Chemical Education. [Previously listed as CHEM 2620] Pedagogical techniques for the chemistry classroom. Knowledge application in discussion sections and development of teaching materials. Consent of Instructor required for registration. Offered on a graded basis only. May be repeated once for credit. Prerequisite: 2212 or 2222. [1] (No AXLE Credit)

CHEM 3980. Honors Research. 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. [2-4]

CHEM 4050. Introduction to Organometallic Chemistry. A general description of the preparation, reaction chemistry, molecular structure, bonding, and spectroscopic identification of organometallic compounds of the transition metals. Prerequisite: 3010 or 3020. [3] (MNS)

CHEM 4210. Organic Chemistry Structure and Mechanism. Stereochemistry and conformational analysis; mechanisms of organic reactions; linear free-energy relationships; reactive intermediates. Three lectures and one recitation hour per week. Serves as repeat credit for CHEM 5210. Not open to students who have earned credit for 5209 without permission. Total credit for this course and CHEM 5209 will not exceed 4 hours. Credit reduced from most recent course taken (or from test or transfer credit) as appropriate. Prerequisite: either 2212 or 2222 and either 3300 or 3311. [4] (MNS)


CHEM 4720. Drug Design and Development. 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 therapeutic classes. Prerequisite: 3710 or BSCI 2520. [3] (MNS)

CHEM 4965. Advanced Integrated Laboratory. 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. Continuation of 4965. Offered on a graded basis only. Limited to senior majors. Prerequisite: 4965. [3] (No AXLE credit)

CHEM 4980. Honors Research. 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. [2-4] (No AXLE credit)

CHEM 4999. Honors Research. 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. 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. 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. 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. 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. Oral and written language training. 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: 1102. [5] (INT)

CHIN 2202. Intermediate Chinese II. Continuation of 2201. Language training in oral and written Chinese. 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: 2201. [5] (INT)

CHIN 2211. Chinese for Heritage Learners I. 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. 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. 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. 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. 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. 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. 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. 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 4402. Business Chinese II. Continuation of 4401. Language skills for listening, speaking, reading, and writing in business environments. Modern China from economic and business perspectives. Prerequisite: 4401. [3] (INT)

CHIN 4403. Readings in Modern Chinese Media. Books, newspapers, Internet, and television documents and productions pertaining to political, social, and economic issues in China, including foreign trade-related issues. Prerequisite: 3302 or 3302W. [3] (INT)

CHIN 4404. Readings in Modern Chinese Media. Continuation of 4403. Books, newspapers, and Internet sources pertaining to political, social, and cultural issues. Prerequisite: 3302 or 3302W. [3] (INT)


Cinema and Media Arts

CMA 1001. Commons iSeminar. 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. 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. 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] (HCA)

CMA 1600. Introduction to Film and Media Studies. Stylistic tendencies and narrative strategies, genres, and theoretical approaches. Live-action cinema, animation, experimental cinema, television, and computer-generated moving images. [3] (HCA)

CMA 2250. 16mm Filmmaking. Camera operation, lighting, non-sync sound design, and film pre-production for 16 mm and celluloid film. Offered on a graded basis only. Prerequisite 1500. [3] (No AXLE credit)

CMA 2260. Digital Production Workshop. Digital cinematography, sound design, and editing. Individual and group projects. Offered on a graded basis only. Prerequisite 1500. [3] (No AXLE credit)

CMA 2300. Film and Media Theory. 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] (P)


CMA 2600W. Advanced Screenwriting. Story structure, character development, and dialogue. Prerequisite: 2500W. [3] (HCA)


CMA 3771. Global Korean Cinema. From the colonial period to the Korean Wave in the new millennium. Film criticism, transnational and national contexts of film production, aesthetics of auteurs and genres, and local and global receptions of Korean cinema. [3] (INT)

CMA 3772. French and Francophone Cinema. 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)

CMA 3850. Independent Study. 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. 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. 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. 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 CMA 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. 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. Topics vary. May be repeated more than once if there is no duplication of topic. [3] (HCA)

CMA 3893. Special Topics in National Cinema and Movements. Major directors, genres, styles of film-making in a specific national context. May be repeated for credit more than once if there is no duplication in topic. [3] (HCA)

CMA 4961. Senior Seminar on Criticism, Theory, and History. 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. 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. Acquisition, reading, and analysis of primary source research material. Open only to senior honor students. [3] (No AXLE credit)

CMA 4999. Senior Honors Thesis. Writing a thesis under the supervision of the thesis advisor. Open only to senior honor students. Prerequisite: 4998. [3] (No AXLE credit)

Classical Hebrew

CHEB 1101. Beginning Classical Hebrew I. Alphabet, basic grammar, and vocabulary. Short readings from the Bible. No credit for students who have earned credit for a more advanced Classical Hebrew language course. Offered on a graded basis only. [3] (No AXLE credit)

CHEB 1102. Beginning Classical Hebrew II. Transition to extensive reading of the Bible. No credit for students who have earned credit for a more advanced Classical Hebrew language course. Offered on a graded basis only. Prerequisite: 1101. [3] (INT)

CHEB 2200. Intermediate Classical Hebrew. Review of grammar and expanding vocabulary. Selected readings in prose and poetry from the Bible. No credit for students who have earned credit for a more advanced Classical Hebrew language course. Prerequisite: 1102. [3] (INT)


CHEB 3020. Classical Hebrew Poetry. History and genres of ancient verse. Selected readings from the Bible, including Job and Psalms. Prerequisite: 2200. [3] (HCA)


Classics

CLAS 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)


CLAS 1111. First-Year Writing Seminar. 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. 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. 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. 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 1200W. Classics and Contemporary Culture. Reception and appropriation of Greco-Roman culture by the Western world and its relationship to contemporary critical issues. Sociopolitical concerns, including racism, colonialism, and political extremism. Offered on a graded basis only. [3] (P)

CLAS 2100. History of the Ancient Near East. 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. 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. The Greek World from Alexander the Great to the Roman Empire. The eastern Mediterranean from the rise of Macedon and Alexander the Great to the High Roman Empire. Social, cultural, political, and religious changes. Issues of imperialism and colonialism, and questions of identity in a geographically expansive Greek world. [3] (INT)


CLAS 2160. History of the Roman Empire. 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. 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 2210. Late Classical Greek and Hellenistic Art and Architecture. 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. [3] (HCA)

CLAS 2250. Roman Art and Architecture. 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. 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. 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 3030. Death, Disease, and Health in the Ancient World. From the Bronze Age to early Christianity and Late Antiquity. Biological history of the Greeks, Romans, and other Mediterranean peoples. Changing concepts of death and afterlife; interpretations of disease; medical thought and practice. Healing, epidemics, natural catastrophe, and dietary variation. Evidence from classical literature, archaeology, bones and teeth. [3] (SBS)


CLAS 3110. Warfare in the Ancient Mediterranean. 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. 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. Serves as repeat credit for HIST 2238. [3] (SBS)

CLAS 3190. Augustan Rome. Social, administrative, religious, and military reforms. Common themes in art, architecture, and literature; changes in national identity in the transition from Republic to Empire. Serves as repeat credit for students who have earned credit for 3190W. Prerequisite: 1150, 2150, or 2160. [3] (HCA)

CLAS 3190W. Augustan Rome. 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. 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. [3] (SBS)


CLAS 3220. The Trojan War in History, Art, and Literature. 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. 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 3240. Greek Culture in the Roman World. Literature, culture, and politics from the 1st to 4th centuries AD. Developments in rhetoric, elite and popular entertainment, scholarship, and medicine. Relationship of literature to imperial rule. Administration through the prisms of cultural identity, cosmopolitanism, citizenship, religion, and the development of ruling classes. [3] (INT)

CLAS 3300. Akkadian. 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. 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. 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. The Amarna period from the sixteenth through the twelfth centuries B.C.E., as illumined 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 Thutmose III, Suppiluliumas, Ramses II, and the spiritually influential Akehnaten. [3] (INT)


CLAS 3370. History of Syriac Christianity. Christians who spoke the Aramaic dialect during Late Antiquity to modern times from the Near East to the Persian Gulf, India, and China. Culture and literature under the Byzantine Empire and the Islamic States in the Middle East. History and theology of religious communities. Historiographical debates about Syriac origins and development. [3] (INT)


CLAS 3850. Independent Study. 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 3880. Internship Training. Under faculty supervision, students can gain experience in a range of Classics-related programs at public or private institutions including museums and/or federal agencies. Skills can be developed in the areas of public speaking and engagement, digital humanities and cultural heritage management. Credit hours earned are based upon actual work performed at the internship site. A minimum of 3 credit hours in background readings and research must be completed in CLAS 3881 concurrently with, and regardless of, the number of hours earned in 3880. A substantial research paper or report must be submitted at the end of the semester during which the internship is completed. These credit hours may NOT count in the minimum required for the CLAS major or minor. Normally, a 3.0 grade point average, 6 hours of prior work and and prior approval of a specific plan of work by the director of undergraduate studies in Classical and Mediterranean Studies are required. Offered on a Pass/Fail basis only and must be taken concurrently with CLAS 3881. Corequisite: 3881. Variable credit. [1-9] (No AXLE credit)

CLAS 3881. Internship Readings and Research. Under faculty supervision, students can gain experience in a range of Classics-related programs, at public or private institutions including museums and/or federal agencies. Skills can be developed in the areas of public speaking and engagement, digital humanities, and cultural heritage management. Credit hours earned are based upon readings or research supervised by CLAS faculty to lend some intellectual foundation to the internship experience. A minimum of 1 credit hour in background readings and research must be completed in 3881 concurrently with, and regardless of, the number of hours earned in 3880. A substantial research paper or report must be submitted at the end of the semester during which the internship training is completed. These credit hours may count in the minimum required for the CLAS major or minor. Normally, a 3.0 grade point average, 6 hours of prior work and prior approval of a specific plan of work by the director of undergraduate studies in Classical and Mediterranean Studies are required. Offered on a graded basis only and must be taken concurrently with 3880. Co-requisite: 3880. Variable credit: [1-6] (No AXLE credit)

CLAS 4998. Senior Honors Thesis. Open only to seniors in the departmental honors program. [3] (No AXLE credit)

CLAS 4999. Senior Honors Thesis. Open only to seniors in the departmental honors program. [3] (No AXLE credit)

Communication Studies

CMST 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

CMST 1002. Introduction to Communication Studies. Theoretical foundations and practice of human communication. Argument and advocacy; public address; and critical analysis of media and culture. [3] (HCA)

CMST 1002W. Introduction to Communication Studies. Theoretical foundations and practice of human communication. Argument and advocacy; public address; and critical analysis of media and culture. Serves as repeat credit for students who have completed 1002. [3] (HCA)

CMST 1111. First-Year Writing Seminar. 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. 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 2075. Non-Equivalent Credit (CMST Category 1: Foundations). This course has no Vanderbilt equivalent. Credit is eligible to count toward the CMST major in the Foundations category.


CMST 2110. Persuasion. 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. Business Communication. Theory and practice of communication in relation to businesses and organizations with application to leadership, values and ethics, strategic communication theory, and organizational conflict. Prerequisite: 1500. [3] (HCA)

CMST 2400. History of World Cinema. 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. Prerequisite: CMA 1600. [3] (HCA)


CMST 2900. Values in Modern Communication. 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. 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. 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. 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. 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. [3] (US)

CMST 3100. Rhetoric of Social Movements. 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 3110. Women, Rhetoric, and Social Change. Historical influences on women's social activism and engagement with public culture; rhetorical issues facing women advocates. Rhetorical strategies used by them in the U.S. and around the globe. [3] (US)


CMST 3620. Rhetoric, Culture, and Critique. 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. 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. Film as rhetorical response to historical and cultural change. Filmic treatment of historical trauma; related genres, such as horror and melodrama. [3] (HCA)


CMST 3730W. Communication, Culture, and Consciousness. Relationship between the primary means of communication in a culture and its influence on knowledge and subjectivity. Orality and literacy. Print, electronic, and digital communication. Repeat credit for students who have earned credit for 3730. [3] (P)


CMST 3750. Rhetoric of the Body. Cultural construction of the body from a rhetorical perspective. Case studies include the history of disability, theories of pollution and pain, and bodily ethics. Serves as repeat credit for CMST 3890, Section 01 in Fall 2017. [3] (P)


CMST 3840. Directed Readings. 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. 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. 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. 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. 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)

Communication of Science and Technology
CSET 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)


CSET 2130. The Trial of Galileo and its Background. 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)


CSET 2420W. Art and Science: A Shared Past. Art and science as ways of knowing the world. Renaissance to the present with focus on histories of observation and experiment. Alchemy, anatomy, museums, photography, and taxidermy. Organization of knowledge, labor, and creativity. [3] (P)


CSET 3100. Science Policy Bootcamp, from Concept to Conclusion. Interdisciplinary service learning. Trends that shape science and innovation policy. Active policy-making. Prerequisite: Major or minor in Communication of Science and Technology or Public Policy Studies. Open to other students with permission of instructor. [3] (SBS)

CSET 3200W. Technical Writing. Introduction to technical and professional composition for careers in science, business, and industry. Prerequisite: major or minor in Communication of Science and Technology. Open to other students with permission of instructor. [3] (SBS)

CSET 3215W. The Art of Blogging. Conventions of the rapidly evolving literary form of blogging. Creation and maintenance of a personal blog. Critique of online journalism across many genres, including activism, politics, science, and arts and culture. Interaction with professional bloggers. Serves as repeat credit for students who have completed ENGL 3215/3215W. [3] (HCA)

CSET 3240W. Pop Science: The Art and Impact of Popular Science Writing. Mechanics and influence of popular science writing in the 21st century. Students will critique bestselling books and award-winning journalism; develop and publish their own blogs with a focus on science, technology, and the environment; and interact with top science
writers, editors, and podcasters. Not open to students who have earned credit for 3890 section 01 offered fall 2019. [3] (SBS)

CSET 3257. Virtual Reality Design. Interdisciplinary, project-based introduction to Virtual Reality (VR). Creation of immersive environments. Student projects guided by faculty mentors to create real-world, consequential VR simulations relevant to, and innovative in, their respective fields. Note: This class is not open to students with a Computer Science major or minor. CS students should enroll in CS 3257. Serves as repeat credit for students who have completed UNIV 3279. [3] (MNS)

CSET 3320W. Environmental Journalism: Investigating Climate Change. Science, solutions, stakeholders, players, politics, history, and local impacts of climate change. Students pursue their own local reporting, investigating the effects of climate change and the emerging green economy in Nashville. Not open to students who have earned credit for 3890 section 01 offered spring 2020 or ENGL 3896 section 01 offered spring 2020 or ENGL 3896 section 01 offered spring 2019. [3] (SBS)

CSET 3840. Directed Study. 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. 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 3880. Internship Training. Under faculty supervision, students from any discipline can gain experience in a broad range of public and private agencies, institutions, and programs in projects related to the effective communication of scientific or technical knowledge or information. Corequisite: 3881. [1-9] (No AXLE credit)

CSET 3881. Internship Readings & Research. Under faculty supervision, students from any discipline can gain experience with agencies, institutions, and programs in projects related to the effective communication of scientific or technical knowledge or information. [1-6] (No AXLE credit)

CSET 3890. Special Topics. Topics as announced. May be repeated for credit more than once if there is no duplication in topic, but students may earn only 3 credits per semester of enrollment. [1-3] (No AXLE credit)

CSET 4998. Honors Thesis. 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)

Digital Humanities

DHUM 1100. Introduction to Digital Humanities. Hands-on experience with essential technologies including digital archives, geospatial humanities, and data and text analysis. History, sub-fields, and major debates; quantitative and qualitative research; intersections of race, gender, and technology; and software studies. Offered on a graded basis only. [3] (HCA)

DHUM 1200. Digital Public Humanities. Digital technologies engaging the public in the preservation, sharing, and appreciation of cultural heritage, both historical and contemporary. Collections and exhibits, geospatial humanities, 3D environments, storytelling, crowdsourcing, social media, and smartphone applications. Democratic openness, histories of cultural appropriation, and marginalization. Offered on a graded basis only. [3] (HCA)

DHUM 1400. Introduction to Video Games. Scholarly study and technical production of immersive digital experiences. Economic and cultural landscape of video games. No prior experience needed; open to students of all backgrounds and majors. [3] (HCA)
Earth and Environmental Sciences

EES 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)


EES 1030L. Oceanography Laboratory. 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. How magmas form and volcanoes erupt; eruption processes and their hazards to society. Volcanic influence on human history and the evolution of the Earth. Not open to students who have earned credit for EES 1111-03 without permission. Total credit for this course and EES 1111-03 will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (MNS)

EES 1080. Earth and Atmosphere. 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 1080L. Earth and Atmosphere Laboratory. Laboratory to accompany 1080. Corequisite: 1080. Three hours of laboratory per week. Satisfies the AXLE lab course requirement when completed with 1080. [1] (No AXLE credit)

EES 1111. First-Year Writing Seminar. 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 1140. Iceland's Geology. 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 1510L. Dynamic Earth Laboratory. 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. 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. Not open to students who have earned credit for EES 3310 without permission. Serves as repeat credit for 3310. Prerequisite: 1510 or 1080. [3] (MNS)


EES 2150. Science, Risk, and Policy. 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. Effects of feedbacks between the geologic cycles on the lithosphere, hydrosphere, biosphere, and atmosphere at diverse intervals in the Earth's history. Present and future implications. Interpretations of evidence recorded in Earth materials. Three hours of lecture and one laboratory per week. Repeat credit for students who have completed 1020. Prerequisite: 1510 and 1510L, or 1030 and 1030L. [4] (MNS)
EES 2550. Earth Materials. 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 per week. Prerequisite: 1030 and 1030L, or 1510 and 1510L. [4] (MNS)

EES 2580. Earth System Dynamics. Transport and motion in Earth's systems. Conservation of mass, energy, and momentum over space and time. Earth's processes that lead to and regulate the transport of these quantities. Quantifying Earth's dynamical behavior and describing it with models. Prerequisite: 1030/1030L, 1080, or 1510/1510L. [3] (MNS)

EES 3220. Life Through Time. Ecology, classification, and evolution of important groups of fossils, emphasizing invertebrates. 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 2510, 2550, 2580, BSCI 1100, or BSCI 1511. [4] (MNS)


EES 3310. Global Climate Change. Scientific principles and policy applications. Earth's past; evidence of human impact; future climate change; and economic, social, and ecological consequences. Economic, technological, and public policy responses. Serves as repeat credit for EES 2110. Prerequisite: one of 1030, 1080, 1510, BSCI 1510, CHEM 1601, ECON 1401 or PHYS 1501, 1601, 1901. [4] (MNS)

EES 3330. Sedimentology. 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. Prerequisite 2510, 2550, or 2580. [4] (MNS)

EES 3333. Climate and Society: Drowning Cities. Description pending. [3]

EES 3340. Structural Geology and Rock Mechanics. Principles of rock deformation from microscopic to mountain range scales. Stress and strain; mechanisms of deformation; geometries of faulting and folding. Interpreting geologic maps and constructing cross sections. Applications to tectonics, natural resources, and earthquakes. Prerequisite: 2510, 2550, or 2580. [4] (MNS)

EES 3480. Mass Extinctions. Synthesizing causes, consequences, and dynamics of past mass extinction events. Using fossil records to interpret current and future trends in biodiversity loss. No credit for students who have earned credit for 3891-02 offered spring 2017 or spring 2018. [3] (MNS)

EES 3841. Directed Study. 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 no 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. 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 no 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. 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. 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. 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 3880. Internship Training in EES. Under faculty supervision, students from any discipline can gain experience
in a broad range of public and private organizations focused on work in Earth and Environmental Sciences. Credit
hours earned are based upon actual work performed at the internship site. A minimum of 3 credit hours in
background readings and research must be completed in 3881 concurrently with and regardless of the number of
hours earned in 3880. A thorough/substantial research paper or report must be submitted at the end of the semester
during which the internship is completed. These credit hours may NOT count for the EES major or minor. Normally,
a 2.7 grade point average, 6 hours of prior work in EES, and prior approval of a specific plan of work by the director
of undergraduate studies in EES are required. Offered on a Pass/Fail basis only and must be taken concurrently with
3881. Co-requisite: 3881. [1-9] (No AXLE credit)

EES 3881. Internship Readings and Research in EES. Under faculty supervision, students from any discipline can
experience in a broad range of public and private organizations focused on work in Earth and Environmental
Sciences. Credit hours earned are based upon readings or research supervised by EES faculty to lend some
intellectual foundation to the internship experience. A minimum of 3 credit hours in background readings and
research must be completed in 3881 concurrently with and regardless of the number of hours earned in 3880. A
thorough/substantial research paper or report must be submitted at the end of the semester during which the
internship training is completed. These credit hours may not count for the EES major or minor. Normally, a 2.7
grade point average, 6 hours of prior work in EES, and prior approval of a specific plan of work by the director
of undergraduate studies in EES are required. [3-6]

EES 4233. Conservation Biology. Ecological, evolutionary, social, and economic aspects of biodiversity loss and
ecosystem disruption due to human activities. Climate change, habitat fragmentation, species overexploitation, and
invasive species. Sustainable development, habitat restoration, and species reintroduction. Prerequisite: 1511. [3]
(MNS)

EES 4238. Ecology. Population biology, evolutionary ecology, community structure, with emphasis on species
interactions, including competition, predation, and symbiosis. Prerequisite: BSCI 1511. [3] (MNS)

EES 4420. Geomorphology. 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: 1030 or 1510. [3] (MNS)

EES 4440. Glacial Geology. Metamorphism of snow and ice; mass balance at snow and ice surfaces; and rheology
of ice. Destruction and creation of landscapes by glacial movement and debris. Response of ice bodies to changes in
climate; physical, chemical, and biological evidence of climate change; and methods of paleoclimate reconstruction.
Glacial impacts on societies through sea-level, hazards, coastlines, and water supplies. Prerequisite: 1030 or 1080 or
1510. [3] (MNS)

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. Application of chemistry to study the distribution and cycling of elements in the crust of the earth. Includes chemical bonding and crystallization, phase rules and phase diagrams, chemical equilibria, theories on the origin of elements, earth, ocean, atmosphere, and crust. Prerequisite: 2550 and CHEM 1602. [3] (MNS)


EES 4680. Paleoclimates. 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. Sustainability: An Environmental Science Perspective. Principles, problems, and solutions of environmental sustainability, with a focus on the links among the environment, society, and economy. Prerequisite: junior standing. [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. Paleocological Methods. 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. Prerequisite: 1030 or 1510. [3] (MNS)


EES 4891. Special Topics. 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: 1030 or 1510. [3] (No AXLE credit)

EES 4951. Career Pathways in the Earth and Environmental Sciences. Interactions with professionals to learn about their personal journeys and current opportunities. Goals, knowledge, and skills to create materials and professional plans. Open only to junior EES majors and minors. [1] (No AXLE credit)

EES 4961. Senior Seminar. 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 4996. Senior Honors Seminar I. Research methods and scientific writing and communication, including work towards senior honors project, thesis, and oral presentation. Open only to senior departmental honors candidates. Does not count toward minimum requirements for major. Corequisite: 4998 [1] (No Axle Credit)

EES 4997. Senior Honors Seminar II. Research methods and scientific writing and communication, including work towards senior honors project, thesis, and oral presentation. Open only to senior departmental honors candidates. Does not count toward minimum requirements for major. Prerequisite: 4996, Corequisite: 4999 [1] (No AXLE Credit)

EES 4998. Senior Honors Research. 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. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)


ECON 1111. First-Year Writing Seminar. 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. The use of quantitative data in understanding economic phenomena. Probability, sampling, inference, and regression analysis. Not open to students who have earned credit for 1510. Total credit for this course and 1510 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: Math 1100, 1200, or 1300. [3] (SBS)

ECON 1510. Intensive Economic Statistics. Quantitative techniques in economic analysis. Probability sampling, inference, and multiple regression. Not open to students who have earned credit for 1500. Total credit for this course and 1500 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: MATH 1100, 1200 or 1300. [3] (SBS)

ECON 2100. Labor Economics. 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. 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 2170. Environmental Economics. 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. Intercollegiate 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. 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. 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. 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 3010. Intermediate Microeconomic Theory. Development of the techniques of analysis for problems of resource allocation. Theories of choice and production for individual economic agents in competitive and monopolistic environments. Behavior of markets. Determination of prices, wages, interest, rent, and profit. Income distribution. Not open to students who have earned credit for 3012. Total credit for this course and 3012 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1010, 1020, and either MATH 1100, 1200, or 1300. [3] (SBS)

ECON 3012. Microeconomics. Consumer choice and firm behavior from the fundamentals of preference and production theory. Calculus-based optimization. Price-determination, analysis of market equilibrium, perfect competition and the effect of market power in monopolies and oligopolies. Efficiency, welfare, and market failures. Not open to students who have earned credit for 3010. Total credit for this course and 3010 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1010, 1020, and either MATH 1201 or 1301. [3] (SBS)

ECON 3020. Intermediate Macroeconomic Theory. National income accounting and analysis. Classical, Keynesian, and contemporary models determining national income, employment, liquidity, price level, and economic growth. Not open to students who have earned credit for 3022. Total credit for this course and 3022 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1010, 1020, and either MATH 1100, 1200, or 1300. [3] (SBS)

ECON 3022. Macroeconomics. Contemporary models of national income, employment, interest rates, price level, and economic growth. Decisions underlying consumption and investment behavior, as well as the effect of government policies. Not open to students who have earned credit for 3020. Total credit for this course and 3020 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1010, 1020, and either MATH 1201 or 1301. [3] (SBS)

ECON 3032. Applied Econometrics. Quantitative economic analysis with emphasis on multivariate regression. Measurement, specification, estimation, inference, prediction, and interpretation of econometric models. Experience with data and computer applications. Not open to students who have earned credit for 3035 or 3050. Total credit for this course and 3035 will not exceed 3 credit hours. Total credit for this course and 3050 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1020; either 1500, 1510, or both MATH 2820L and either MATH 2810 or 2820; and either Math 1201 or 1301. [3] (SBS)

ECON 3035. Econometric Methods. Properties and problems in estimating economic relationships with multiple regression. Statistical and econometric theory to address empirical questions. Hands-on experience with economic data analysis with programming in statistical software. Not open to students who have earned credit for 3032 or 3050. Total credit for this course and 3032 will not exceed 3 credit hours. Total credit for this course and 3050 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1020, either 1500, 1510, or both MATH 2820L and either MATH 2810 or 2820; and either Math 1201 or 1301. [3] (SBS)
ECON 3050. Introduction to Econometrics. Quantitative methods of economic analysis. Measurement, specification, estimation, and interpretation of economic models. Econometric computation using microcomputers. Not open to students who have earned credit for 3032 or 3035. Total credit for this course and 3032 will not exceed 3 credit hours. Total credit for this course and 3035 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Not offered after AY 2019-20. Prerequisite: 3010 or 3012 and either 1500 or 1510; or MATH 2820L with either MATH 2810 or MATH 2820. [3] (SBS)


ECON 3110. Poverty and Discrimination. Theories and empirical evidence concerning inequality, poverty, and discrimination, and their relationship to economic growth. Evaluation of anti-poverty and anti-discrimination policies. Prerequisite: 3010 or 3012; and one of 1500, 1510, 3032, 3035, 3050. [3] (SBS)


ECON 3160. Economic History of Europe. 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 or 3012. [3] (SBS)


ECON 3230. Urban Economics. 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 or 3012. [3] (SBS)

ECON 3250. Industrial Organization. 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 or 3012. [3] (SBS)

ECON 3270. Economics of Information and Communications Technology. The Internet, cloud computing, social networks, e-commerce, and Internet telephony as influencers of commerce and consumer welfare. Streaming content, big data, informatics, and open source software in economic perspective. Property rights, competition, and regulation in cyberspace. Prerequisite: 3010 or 3012. [3] (SBS)

ECON 3300. Financial Instruments and Markets. Theoretical and empirical approaches to the analysis of monetary and other financial instruments. Portfolio analysis, interest rate risk, and financial futures and options markets. Prerequisite: Either 3010 or 3012; and either 3020 or 3022. [3] (SBS)

ECON 3330. Economics of Risk. Decision making under risk and uncertainty. Expected utility, risk aversion, and the value of information. Investments, insurance, and lotteries. Moral hazard and adverse selection. Prospect theory. Serves as repeat credit for ECON 3893-01 in Fall 2016. Prerequisite: 3010 (or 3012) with either 1500 or 1510; or Math 2820L with either Math 2810 or Math 2820. [3] (SBS)


ECON 3600. International Trade. International trade in goods and services. Patterns of trade; gains and losses from trade, tariffs, and other commercial policies; economic integration; and international factor movements. Offered on a graded basis only. Prerequisite: 3010 or 3012. [3] (SBS)

ECON 3610. International Finance. 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 or 3022. [3] (SBS)
ECON 3650. Development Economics. 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 or 3012, and either 1500, 1510, 3032, 3035, or 3050. [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 or 3012. [1] (No AXLE credit)


ECON 3750. Econometrics for Big Data. Econometric methods for analyzing large datasets. Model selection, regularization, classification, resampling, tree-based methods, and support vector machines. Forecasting stock prices, prediction of housing prices, and determination of wages. Prerequisite: 3010 or 3012; either 3032, 3035, 3050; or MATH 2820L with MATH 2810 or 2820. [3] (SBS)

ECON 3851. Independent Study in Economics. 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 or 3012. [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. 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 or 3012. [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. 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 or 3012. [3] (No AXLE credit)

ECON 3894. Selected Macroeconomic 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. Prerequisite: 3020 or 3022. [3] (No AXLE credit)

ECON 4050. Topics in Econometrics. Emphasis on applications. May include generalized method of moments, empirical likelihood, resampling methods, and nonparametric techniques. Prerequisite: 3032, 3035, or 3050. [3] (SBS)

ECON 4110. Macroeconomic Models for Policy Analysis. Mathematical models of overlapping generations, rational expectations, and open economies with price rigidities applied to social security, government debt, exchange rates, monetary policy, and time inconsistent optimal policy. Prerequisite: 3020 or 3022. [3] (SBS)

ECON 4210. Law and Economics. 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 or 3012 and either 1500, 1510, 3032, 3035, or 3050. [3] (SBS)

ECON 4220. Social Choice Theory. Strategic and non-strategic social choice theory. Preference aggregation, formal models of voting, and matching. Prerequisite: 3010 or 3012 or PHIL 3003 or any Mathematics course numbered 2500 or above. [3] (SBS)

ECON 4260. Game Theory with Economic Applications. 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 or 3012. [3] (SBS)
ECON 4280. Experimental Economics. Design, methodology, and interpretation of economic experiments. Laboratory experiments with applications in labor markets, discrimination, and voluntary contributions. Offered on a graded basis only. Not open to students who have earned credit for 3893 section 01 offered fall 2019. Prerequisite: 3010 or 3012; and 1500 or 1510, or MATH 2810L with MATH 2810 or MATH 2820. [3] (SBS)

ECON 4510. Seminar in Macroeconomic Policy. 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 or 3012; and 3020 or 3022. [3] (SBS)

ECON 4510W. Seminar in Macroeconomic Policy. 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 or 3012; and 3020 or 3022. [3] (SBS)

ECON 4520W. Seminar on Globalization. Causes of global economic integration. Winners and losers. World Trade Organization, international environmental treaties, labor and capital markets. U.S. leadership. Offered on a graded basis only. Prerequisite: 3010 or 3012; and either 1500, 1510, 3032, 3035, or 3050. [3] (SBS)

ECON 4530. Seminar in Microeconomic Policy. 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 or 3102. [3] (SBS)

ECON 4530W. Seminar in Microeconomic Policy. Intensive study of three or four current problems in microeconomic policy. Repeat credit for students who have completed 4530. Limited to majors in economics and public policy. Prerequisite: 3010 or 3012. [3] (SBS)

ECON 4540W. Economics of Conflict. 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. Prerequisite: 3010 or 3012. [3] (SBS)

ECON 4550. Seminar in Sports Economics. Issues and debates. Offered on a graded basis only. Prerequisite: 2180, and 3010 or 3012. [3] (SBS)

ECON 4981. Honors Seminar. Discussion of selected topics and senior thesis research. Open only to seniors in the departmental honors program. Prerequisite: 3010 or 3012. [1] (No AXLE credit)

ECON 4982. Honors Seminar. Discussion of selected topics and senior thesis research. Open only to seniors in the departmental honors program. Prerequisite: 3010 or 3012. [1] (No AXLE credit)

ECON 4998. Senior Thesis. Limited to and required of all candidates for departmental honors. Prerequisite: 3010 or 3012. [1-3] (No AXLE credit)

ECON 4999. Senior Thesis. Limited to and required of all candidates for departmental honors. Prerequisite: 3010 or 3012. [1-3] (No AXLE credit)

English

ENGL 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

ENGL 1100. Composition. For students who need to improve their writing. Emphasis on writing skills, with some analysis of modern nonfiction writing. [3] (No AXLE credit)

ENGL 1101. Creative Writing Tutorial: Fiction. Individual instruction in writing fiction. Offered on a pass/fail basis only. Not open to students who have completed 3851 section 07. [1] (No AXLE credit)

ENGL 1102. Creative Writing Tutorial: Poetry. Individual instruction in writing poetry. Offered on a pass/fail basis only. Not open to students who have completed 3851 section 07. [1] (No AXLE credit)
ENGL 1111. First-Year Writing Seminar. 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. Close study of short stories and novels and written explication of these forms. [3] (HCA)

ENGL 1220W. Drama: Forms and Techniques. 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. 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 1250W. Introduction to Poetry. Close study and criticism of poems. The nature of poetry, and the process of literary explication. [3] (HCA)

ENGL 1260W. Introduction to Literary and Cultural Analysis. 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. Selected critical approaches to literature. [3] (HCA)

ENGL 1280. Beginning Fiction Workshop. Introduction to the art of writing prose fiction. [3] (HCA)

ENGL 1290. Beginning Poetry Workshop. Introduction to the art of writing poetry. [3] (HCA)

ENGL 1300W. Intermediate Composition. A writing course including the analysis of essays from a variety of disciplines. [3] (HCA)

ENGL 2200. Foundations of Literary Study. Fundamentals of literary study: close reading; analytic writing; historical context; abstract reasoning in theory; creative expression. [3] (HCA)

ENGL 2310. Representative British Writers. 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. 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. 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. 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 2316. [3] (US)

ENGL 2318. World Literature, Classical. 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. 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 2318. [3] (HCA)
ENGL 2319. World Literature, Modern. 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. 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 2319. [3] (HCA)

ENGL 2320. Southern Literature. The works of Southern writers from Captain Smith to the present. Topics such as the Plantation Myth, slavery and civil war, Agrarianism, and "post-southernism." Authors may include Poe, Twain, Cable, Faulkner, Welty, Percy, Wright. [3] (HCA)

ENGL 2330. Introduction to Environmental Humanities. Interdisciplinary study of human beings' relationship to the environment. Literary, artistic, historical, and philosophical perspectives. Cultural understandings of the environment. [3] (HCA)

ENGL 2330W. Introduction to Environmental Humanities. Interdisciplinary study of human beings' relationship to the environment. Literary, artistic, historical, and philosophical perspectives. Cultural understandings of the environment. [3] (HCA)

ENGL 2740. Topics in Literature and Philosophy. Literary, philosophical, and cultural texts on varied philosophical topics. May be repeated for credit if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3] (HCA)

ENGL 3210. Intermediate Nonfiction Writing. Instruction in the forms and techniques of nonfiction writing. Admission by consent of instructor. May be repeated once for credit. [3] (HCA)

ENGL 3215. The Art of Blogging. Conventions of the rapidly evolving literary form of blogging. Creation and maintenance of a personal blog. Critique of online journalism across many genres, including activism, politics, science, and arts and culture. Interaction with professional bloggers. [3] (HCA)

ENGL 3215W. The Art of Blogging. Conventions of the rapidly evolving literary form of blogging. Creation and maintenance of a personal blog. Critique of online journalism across many genres, including activism, politics, science, and arts and culture. Interaction with professional bloggers. Serves as repeat credit for students who have completed 3215. [3] (HCA)

ENGL 3220. Advanced Nonfiction Writing. 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. 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. 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 3240W. Pop Science: The Art and Impact of Popular Science Writing. Mechanics and influence of popular science writing in the 21st century. Students will critique bestselling books and award-winning journalism; develop and publish their own blogs with a focus on science, technology, and the environment; and interact with top science writers, editors, and podcasters. Not open to students who have earned credit for CSET 3890 section 01 offered fall Fall 2019. [3] (SBS)

ENGL 3250. Intermediate Poetry Workshop. 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. 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 3280. Literature and the Craft of Writing. The forms and techniques of creative writing. Contemporary practices in fiction and poetry in historical context. [3] (HCA)


ENGL 3312. The Medieval World. English literature and culture in relation to Europe, the Middle East, and Asia. Cross-cultural exchange, national and religious identity, and race. Not open to students who have completed ENGL 3316. [3] (P)


ENGL 3316. Medieval Literature. 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 3333. Special Offerings Online. Topics vary by section and instructor. May be repeated for credit; students may register for more than one section of this course in the same semester. [3]

ENGL 3335. English Renaissance Poetry. Development of the English poetic tradition from 1500-1700. Repeat credit for students who have earned credit for 3335W. [3] (HCA)

ENGL 3335W. English Renaissance Poetry. Development of the English poetic tradition from 1500-1700. Repeat credit for students who have earned credit for 3335. [3] (HCA)

ENGL 3340. Shakespeare: Representative Selections. 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. 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. 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. The early English poems; Paradise Lost, Paradise Regained, and Samson Agonistes; the major prose. [3] (HCA)

ENGL 3360. Restoration and the Eighteenth Century. 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. 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. 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 3610. The Romantic Period. Prose and poetry of the Wordsworths, the Shelleys, Byron, Keats, and others. [3] (HCA)

ENGL 3611. The Romantic Period. Continuation of 3610. Prose and poetry of the Wordsworths, the Shelleys, Byron, Keats, and others. [3] (HCA)

ENGL 3614. The Victorian Period. Works of Tennyson, Browning, Arnold, Hardy, and others. [3] (HCA)

ENGL 3618. The Nineteenth-Century English Novel. 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. 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. 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. 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. 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. 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. Poets studied vary at discretion of instructor. Offered on a graded basis only. [3] (HCA)
ENGL 3650. Ethnic American Literature. 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. 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. 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. 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. 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. 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. 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 3664. Jewish American Literature. Nineteenth century to the present. Issues of race, gender, ethnicity,
immigration, and diaspora. Offered on a graded basis only. [3] (HCA)

ENGL 3670. Colonial and Post-Colonial Literature. 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. 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. 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. 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 SubSaharan and Mahgrib
literatures. Such authors as Achebe, Ngugi, Gordimer, Awoonor, and El Saadaw. [3] (INT)

ENGL 3680. Twentieth-Century Drama. 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. 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. 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. 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. 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. The emergence of modern consciousness in the nineteenth and twentieth centuries. [3] (HCA)

ENGL 3720. Literature, Science, and Technology. 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. 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 3720. [3] (P)

ENGL 3726. New Media. History, theory, and design of digital media. Literature, video, film, online games, and other interactive narratives. Not open to students who have completed 1111 section 60. [3] (HCA)

ENGL 3726W. New Media. History, theory, and design of digital media. Literature, video, film, online games, and other interactive narratives. Serves as repeat credit for 3726. Not open to students who have earned credit for 1111 section 60. [3] (HCA)

ENGL 3728. Science Fiction. 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. 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 3728. [3] (P)

ENGL 3730. Literature and the Environment. 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. 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. 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 3734. [3] (HCA)

ENGL 3736. Words and Music. 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. 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. 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 3744. Advanced Poetry. Formal analysis and close reading of major poems in the extended canon of British and American poetry. Related examples of historical, theoretical, and applied criticism. [3] (HCA)

ENGL 3746. Workshop in English and History. (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. 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. 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. 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. 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. Advanced instruction in creative writing in emerging modes and hybrid genres. [3] (HCA)

ENGL 3892. Problems in Literature. 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. 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. 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. [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. 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 3896] (No AXLE credit)

ENGL 3896W. Special Topics in Investigative Writing in America. 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] (No AXLE credit)

ENGL 3897. Special Topics in Critical Theory. Diverse range of literary, philosophical, cultural, and political texts. May be repeated for credit if there is no duplication in topic. Students may enroll in more than one section of this course per semester. [3] (HCA)

ENGL 3898. Special Topics in English and American Literature. 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 3898W. Special Topics in English and American Literature. 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. 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. Topic chosen by the instructor. Prerequisite: 2200. [3] (No AXLE credit)

ENGL 4998. Honors Colloquium. 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. Prerequisite: 4998. [3] (No AXLE credit)

Environmental and Sustainability Studies

ENVS 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)


ENVS 4101W. Society and the Environment Capstone. The relationship between society and the environment. Sustainability, adaptation, climate science, and policy. Open only to junior and senior ENVS minors. Repeat credit for students who have completed ENVS 4101. [3] (SBS)

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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

EUS 2201. European Society and Culture. An interdisciplinary survey of European society, culture, and politics since 1900. [3] (INT)

EUS 2203. The Idea of Europe. 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 2213. Introduction to European Intellectual Traditions: Ancient and Medieval. Philosophical, religious, and literary foundations. Texts by Homer, Virgil, Augustine, and Dante together with background from the Bible. [3] (HCA)


EUS 2220. Religion and Politics in Modern Europe, 1648-Present. Toleration in the Enlightenment; the French Revolution; antisemitism; genocide; secularism and political Islam. [3] (INT)

EUS 2222. Right-wing Populist Parties: Populism in Europe and Beyond. Theoretical and historical concepts of populism. Case studies of populist parties in France, Italy, the Netherlands, Austria, Germany, Poland, and Hungary. [3] (INT)

EUS 2240. Topics in European Studies. 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. 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. 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. 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. 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 4998. Senior Honors Research. Open only to seniors who have been admitted to the European Studies departmental honors program. [3] (No AXLE credit)
Financial Economics


FNEC 3851. Independent Study in Financial Economics. 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)

FNEC 3852. Independent Study in Financial Economics. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

FREN 1101. Introduction to French in the World. 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. Continuation of 1101. 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. 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. 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 Language and Cultures. French and Francophone cultures through readings, film, and discussion. Designed for students who have completed elementary-level French. No credit for students who have earned credit for a more advanced French language course. Prerequisite: 1102 or 1103. [3] (INT)

FREN 2501W. French Composition and Grammar. Prerequisite: 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 3001. Texts and Contexts: Middle Ages to the Enlightenment. Literary works from 500 to 1800 in historical context. Analysis and discussion of a variety of texts (novels, plays, poems and non-fiction) as well as social and cultural history. Not open to students who have earned credit for 3101. Prerequisite: 2501W. [3] (INT)

FREN 3002. Texts and Contexts: Revolution to the Present. Literary works from 1800 to the present in historical context. Analysis of a variety of texts (novels, plays, poems and non-fiction) as well as social and cultural history. Not open to students who have earned credit for 3102. Prerequisite: 2501W. [3] (INT)


FREN 3185W. The Refugee Experience in France and Italy. French and Italian culture, migration, global studies, refugees. Legal issues, current events, and cultural representation of vulnerable migrants. Taught in English. [3] (P)

FREN 3222. The Early Modern Novel. 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 3332. Popular Music and Social Change in France and the Francophone World. Culture and history. Popular musical production in France, Canada, Haiti, the Caribbean, the Maghreb, and Africa. Granular analyses of musical and lyrical content; how popular music both spearheaded and reflected social issues and change, especially beginning in the 1960s. Prerequisite 2501W. [3] (INT)
FREN 3620. **Age of Louis XIV. Literature and society in the reign of Louis XIV.** Authors include Mme de Lafayette, La Fontaine, Molière, Pascal, Racine, and Mme de Sévigné. Prerequisite: 2501W. [3] (HCA)

FREN 3621. **Enlightenment and Revolution.** Major writers of the eighteenth century, including Montesquieu, Voltaire, Rousseau, Diderot; literature of the Revolution. [3] (HCA)

FREN 3634. **Parisian Geographies: Paris in 19th and 20th century Art and Literature.** The changing physical landscape and cultural significance of Paris in literature, painting, photography, and film of the 19th and 20th centuries. No credit for students who have earned credit for 3891 offered Fall 2018. Prerequisite 2501W. [3] (HCA)


FREN 3850. **Independent Study.** 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.** 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.** 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.** 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.** The postcolonial Francophone novel of Subsaharan 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".** 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.** Critical readings of representative works organized thematically with emphasis on their contextual and intertextual relationships. Prerequisite: 2501W. [3] (P)

FREN 4232. **Literature and Law.** 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] (HCA)

FREN 4234. **Dangerous Bodies: Women in 19th Century Art and Literature.** Nineteenth century novels and poetry with an emphasis on representations of the female body. Painting and photography. No credit for students who have earned credit for 3891 offered Fall 2017. Prerequisite: French 2501W. [3] (HCA)

FREN 4320. **French Women and Feminisms.** Feminist themes in twentieth-century French literature and criticism. Authors include Beauvoir, Duras, Sarraute, Irigaray, Cixous. Prerequisite: 2501W. [3] (P)

FREN 4430. **Minority Issues & Immigration in France.** Conflict between Jews and Arab-Muslims in France through analyses of historical accounts, news reports, and literary and cultural manifestations. From the origins of Zionism


FREN 4998. Senior Honors Thesis. [3] (No AXLE credit)

FREN 4999. Senior Honors Thesis. [3] (No AXLE credit)

Gender and Sexuality Studies (formerly Women’s and Gender Studies)

GSS (WGS) 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

GSS (WGS) 1111. First-Year Writing Seminar. 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)

GSS (WGS) 1150. Sex and Gender in Everyday Life. 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)

GSS (WGS) 1150W. Sex and Gender in Everyday Life. 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)

GSS (WGS) 1160. Sex and Society. 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)

GSS (WGS) 1160W. Sex and Society. 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. Repeat credit for students who have completed 1160. [3] (P)

GSS (WGS) 1272. Feminism and Film. Images of gender and race; techniques, sound, lighting, cinematography in relation to gender. Prerequisite: 1150 or 1150W or 1160. [3] (US)

GSS (WGS) 2225. Women in Popular Culture. 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 or 1160. [3] (HCA)


GSS (WGS) 2235. Women in Israel. Status and experiences of Jewish and non-Jewish women living in Israel. Religion and the law; Jewish and non-Jewish minorities; women and the military; women's health; violence against women; the Palestinian/Israeli conflict. [3] (INT)

GSS (WGS) 2240. Introduction to Women's Health. 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 or 1160. [3] (P)

GSS (WGS) 2242. Women Who Kill. Examination of classical and contemporary representations of women who kill. [3] (P)
GSS (WGS) 2243. Sociologies of Men and Masculinity. Traditional and emerging perspectives on masculinity and male gender-roles. Emphasis on relationship between social forces and males' everyday experiences across the life-span. Prerequisite: 1150 or 1150W or 1160. [3] (P)


GSS (WGS) 2248. Humor and Cultural Critique in Fannie Flagg's Novels. 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 or 1160. [3] (P)

GSS (WGS) 2249. Women and Humor in the Age of Television. 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, 1150W, or 1160. [3] (HCA)

GSS (WGS) 2252. Sex and Scandals in Literature. 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)

GSS (WGS) 2254. Feminist Fictions. 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)

GSS (WGS) 2256. Literary Lesbians. From the nineteenth century to the present. How girls' and women's intimacies are monitored and policed in literature and culture. Impact of race, class, religion, and disability on expression and reception of relationships. [3] (HCA)

GSS (WGS) 2259. Reading and Writing Lives. 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 or 1160. [3] (HCA)

GSS (WGS) 2259W. Reading and Writing Lives. 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 2259. Prerequisite: 1150 or 1150W or 1160. [3] (HCA)

GSS (WGS) 2262. Gender and Ethics. 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. [3] (P)

GSS (WGS) 2267. Seminar on Gender and Violence. 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 or 1160. [3] (P)

GSS (WGS) 2268. Gender, Race, Justice, and the Environment. Gender and racial aspects of environmental degradation. Risk, activism, health and illness, policy and politics. Prerequisite: 1150 or 1150W or 1160. [3] (SBS)

GSS (WGS) 2270. Ecofeminism: Theory, Politics, and Action. 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] (SBS)


GSS (WGS) 2612. Lesbian, Gay, Bisexual, and Transgender Studies. Introductory study of sexual identity, queer theory, relationships, politics. Prerequisite: 1150 or 1150W or 1160. [3] (HCA)

GSS (WGS) 2614. Cowboys, Gangsters, and Drag Kings: Introduction to Critical Masculinity Studies. Critical examination of representations of masculinity in patriarchal societies. Constructed nature of masculinity in relation to race, sexuality, class, national, and religious identifications. Historical, sociological, literary, cinematic, and visual art analyses. Prerequisite: 1150 or 1150W or 1160. [3] (HCA)

GSS (WGS) 2615. Transgender Lives in Literature and Film. Global study of transgender representation in film and literature. Cultural theory approach, utilizing work from the fields of transgender, queer, feminist, and disability studies. Prerequisite: 1150 or 1150W or 1160. [3] (HCA)

GSS (WGS) 3030. Feminist Disability Studies. Disability through a feminist lens. Changes in the meaning of disability over time and across cultures. Intersectional focus on gender, race, ethnicity, class, age, sexuality, and nationality. Embodiment, eugenics, performance, social movements, and violence. [3] (P)

GSS (WGS) 3201. Women and Gender in Transnational Context. 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 or 1160. [3] (P)

GSS (WGS) 3246W. Women's Rights, Women's Wrongs. 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 or 1160. [3] (US)

GSS (WGS) 3250. Contemporary Women's Movements. 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 or 1160. [3] (P)

GSS (WGS) 3250W. Contemporary Women's Movements. Recent feminist history. The origins and parameters of women's movements from the 1960's to the present. Prerequisite: 1150 or 1150W or 1160. [3] (P)

GSS (WGS) 3265. Human Rights in Activism. Role of human rights in struggles against injustice. Identification of key problems of injustice addressed by a human rights framework. Problems with human rights as a tool for activism. Discussion in contemporary politics. Intellectual and legal traditions that have developed around human rights. No credit for students who have earned credit for PSCI 3896 section 01 offered fall 2016. Offered on a graded basis only. [3] (P)

GSS (WGS) 3271. Feminist Legal Theory. 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: 11150 or 1150W or 1160. [3] (P)

GSS (WGS) 3273. Seminar on Psychoanalysis and Feminism. Historical and contemporary perspectives on the long and ambivalent relationship between psychoanalysis and feminism. Trauma, hysteria, narcissism, gender, and the family. Prerequisite: 1150 or 1150W or 1160. [3] (P)

GSS (WGS) 3281. Globalization and Policy-Making. Western historical conceptualizations of the state. Sociopolitical contexts. Prerequisite: 1150 or 1150W or 1160. [3] (INT)


GSS (WGS) 3850. Independent Study. 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 GSS (WGS) 3850] (No AXLE credit)

GSS (WGS) 3880. Internship Training. 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)

GSS (WGS) 3882. Internship Readings. 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)

GSS (WGS) 3883. Internship Research. 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)

GSS (WGS) 3891. Special Topics: Topics in Gender, Culture, and Representation. Topics vary. Prerequisite: 1150 or 1150W or 1160. 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)

GSS (WGS) 3892. Special Topics: Topics in Gender, Society, and Political Economy. Topics vary. Prerequisite: 1150 or 1150W or 1160. 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)

GSS (WGS) 3893. Selected Topics. Topics vary. Prerequisite: 1150 or 1150W or 1160. 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)

GSS (WGS) 4960. Senior Seminar. Advanced reading and research. Prerequisite: 1150 or 1150W or 1160. [3] (No AXLE credit)

GSS (WGS) 4970. Sexing the Archive: Research Methods in Women's and Gender Studies. Conducting research through a feminist and queer lens. Archival research; examining oral histories using specialized Vanderbilt resources, as well as other local and online archives. Offered on a graded basis only. Prerequisite: 1150, 1150W, or 1160. [3] (HCA)

GSS (WGS) 4998. Honors Research. 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 GSS (WGS) 4998] (No AXLE credit)

GSS (WGS) 4999. Honors Thesis. 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 GSS (WGS) 4999] (No AXLE credit)

German

GER 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

GER 1101. Elementary German I. 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. Continuation of 1101. No credit for students who have earned credit for a more advanced German language course. Prerequisite: 1101. [3] (INT)

GER 1105. Beginning German for Singers and Collaborative Pianists. Basic German language skills engaging the art song (Lieder) repertoire. Structures of German through close readings, translations, and analyses of the Lieder texts within their socio-cultural context. [3] (INT)

GER 1111. First-Year Writing Seminar. 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 1442. War on Screen. 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. Taught in English. [3] (HCA)

GER 1482. Borders and Crossings: German Literature and Culture from Romanticism to the Present. 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 transgression. Taught in English. [3] (HCA)

GER 2201. Intermediate German I. 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. 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 2217. Advanced Grammar. 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 2432. Soccer: Media, Art, and Society. Relationship of soccer to political power, globalization, mass media, gender, migration, national identity, and transnational commerce. History of the game and its tactics. Representations of soccer in various artistic media such as literature, film, poetry, and video art. Taught in English. Not open to students who have earned credit for GER 1111.09. [3] (INT)

GER 2440. History of German Thought. From the Enlightenment to the present. German philosophy and critical theory in their social and political context. History of German intellectual movements. German thought as part of German culture. Taught in English. [3] (HCA)

GER 2441. Great German Works in English. 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. Taught in English. [3] (INT)

GER 2443. A History of German Film. A curated presentation of the history of German cinema with special emphasis on its sociocultural contexts and artistic achievements. 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. The German fairy tale tradition and its role in American culture. Taught in English. [3] (INT)

GER 2551. Topics: Pre-18th Century Culture and Literature (ENGL). German-speaking cultures and their literatures from 8th to the early 18th century. Taught in English. May be repeated for credit if there is no duplication in topic. [3] (INT)

GER 2552. Topics: 18th and 19th C Culture and Literature (ENGL). Literature, philosophy, art, and politics, 1750-1914, of German-speaking cultures. Taught in English. May be repeated for credit if there is no duplication in topic. [3] (INT)

GER 2553. Topics: 20th and 21st Century Culture and Literature (ENGL). Literature, history, aesthetics, and politics in German-speaking cultures from Dada to the present. Taught in English. May be repeated for credit if there is no duplication in topic. [3] (INT)

GER 2554. Topics in Visual Culture and Media (ENGL). Cinema, media arts, visual culture, and media history of German-speaking cultures from pre-digital to the digital age. Taught in English. May be repeated for credit if there is no duplication in topic. [3] (INT)

GER 2555. Topics in German Studies (ENGL). Seminal aspects of German literature, culture, and civilization through interdisciplinary focus. Taught in English. May be repeated for credit if there is no duplication in topic. [3] (INT)

GER 2556. Topics in Intellectual History (ENGL). Major trends and figures from the Enlightenment to the contemporary age. Taught in English. May be repeated for credit if there is no duplication in topic. [3] (HCA)

GER 2557. Topics in Genre (ENGL). Main genres of German literature and culture. Relationship between genres and the social, political, and cultural developments that lead to their formation and transformation. Taught in English. May be repeated for credit if there is no duplication in topic. [3] (HCA)

GER 2563. Twentieth-Century Germany. 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)


GER 2585. Critical Theory. 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)


GER 3201. Advanced German: Germany Today. German culture, politics, social issues. News media and current events. Development of advanced written and oral communication skills. Offered on a graded basis only. Prerequisite: 2202. [3] (INT)


GER 3323. From Language to Literature. 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 3333. Borders, Migration, and Citizenship in the Contemporary World. Today's most intractable problems traverse national boundaries. Yet crises like COVID-19, global warming, and poverty also energize attempts to police borders, curtail migration, and tighten citizenship requirements. In this interdisciplinary course with guest
appearances by activists, artists, and authors, we explore pressures on contemporary ideas about membership, boundaries, and belonging. [3] (HCA)

GER 3343. The Aesthetics of Violence. 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. German-Jewish Women Writers. 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 3375. Art and Rebellion: Literary Experiment in the 1960s and 1970s. German literature under the conditions of protest and rebellion. Experiments in poetry, prose, and theatre; new directions in art and media theory; historical influences. Taught in English. [3] (HCA)

GER 3378. Dreams in Literature. 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. 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 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. 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 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. 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. 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 per semester. [3; maximum of 12 credits total for all semesters of GER 3890 and 3891] (No AXLE credit)

GER 4535. German Romanticism. 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. Women in German literature from the eighteenth century to the present, focusing on questions of sexuality, political emancipation, artistic identity. No knowledge of German required. [3] (INT)

GER 4551. Topics: Pre-18th Century Culture and Literature (GER). German-speaking cultures and their literatures from 8th to the early 18th century. May be repeated for credit if there is no duplication in topic. Prerequisite: 3201 and 3202W. [3] (INT)

GER 4552. Topics: 18th and 19th C Culture and Literature (GER). Literature, philosophy, art, and politics, 1750-1914, of German-speaking cultures. May be repeated for credit if there is no duplication in topic. Prerequisite: 3201 and 3202W. [3] (INT)

GER 4553. Topics: 20th and 21st Century Culture and Literature (GER). Literature, history, aesthetics, and politics in German-speaking cultures from Dada to the present. May be repeated for credit if there is no duplication in topic. Prerequisite: 3201 and 3202W. [3] (INT)
GER 4554. Topics in Visual Culture and Media (GER). Cinema, media arts, visual culture, and media history of German-speaking cultures from pre-digital to the digital age. May be repeated for credit if there is no duplication in topic. Prerequisite: 3201 and 3202W. [3] (HCA)

GER 4555. Topics in German Studies (GER). Seminal aspects of German literature, culture, and civilization through interdisciplinary focus. May be repeated for credit if there is no duplication in topic. Prerequisite: 3201 and 3202W. [3] (INT)

GER 4556. Topics in Intellectual History (GER). Major trends and figures from the Enlightenment to the contemporary age. May be repeated for credit if there is no duplication in topic. Prerequisite: 3201 and 3202W. [3] (HCA)

GER 4557. Topics in Genre (GER). Main genres of German literature and culture. Relationship between genres and the social, political, and cultural developments that lead to their formation and transformation. May be repeated for credit if there is no duplication in topic. Prerequisite: 3201 and 3202W. [3] (HCA)

GER 4558. Business German. 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 in German-speaking countries: advertising and marketing strategies, letters, vitae, phone calls, and personal interviews. Prerequisites: 3201. [3] (INT)


GER 4564. Pleasures and Perils in Nineteenth-Century Theatre. The German drama and dramatic theory from Romanticism up to Naturalism with emphasis on selected works by Kleist, Büchner, Grillparer, and Hebbel. [3] (INT)

GER 4565. Revolutionizing Twentieth-Century Theatre. German drama and dramatic theory from Naturalism to the present. Emphasis on Brecht and post-Brechtian drama. [3] (INT)


GER 4567. The German Novel from Kafka to Grass. A study and interpretation of the main literary trends and major figures in twentieth-century narrative. [3] (INT)


GER 4574. Who Am I? German Autobiographies. 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. 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. 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. 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 1103. Intensive Elementary Greek. The equivalent of Greek 1101 and 1102. The elements of the Greek language at an accelerated pace. No credit for students who have earned credit for 1101, 1102, or a more advanced Greek language course. [5] (INT)

GRK 2201. Intermediate Greek I: Classical and Koiné Greek. 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. [3] (INT)

GRK 2202. Intermediate Greek II: Homer's Iliad. 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. Classical Athenian orators, with a focus on Lysias and Demosthenes. Historical context, rhetorical technique, and prose style. Prerequisite: 2202. [3] (INT)

GRK 3020. The Greek Historians. 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. 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. 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. 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. 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. 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)


CREO 1102. Elementary Creole II (Duke). Essential elements of Creole language and aspects of Haitian culture. Speaking, listening, reading, and writing. Exposure to Haitian culture through films, storytelling, games, music, and proverbs. Prerequisite: 1101 or a comparable level of previous Creole language experience, such as familial background in Creole. Offered on a graded basis only. [3] (INT)


CREO 2202. Intermediate Creole II (Duke). Second semester of Intermediate Creole. Offered on a graded basis only. Prerequisite: 2201 or equivalent. [3] (INT)
HEBR 1101. Elementary Hebrew. 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. 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. 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. 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. 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. 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. 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. 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)

HNUR 1101. Elementary Hindi-Urdu I. Speaking-listening skills and basic grammar. Introduction to reading and writing in Devanagari (Hindi) and Nastaliq (Urdu) scripts and to South Asian cultural materials. No credit for students who have earned credit for a more advanced Hindi-Urdu language course. [5] (No AXLE credit)

HNUR 1102. Elementary Hindi-Urdu II. Reading, writing, speaking, and listening. Cultural contexts of speaking Hindi-Urdu. No credit for students who have earned credit for a more advanced Hindi-Urdu language course. Prerequisite: 1101. [5] (INT)

HNUR 2201. Intermediate Hindi-Urdu I. Conversational skills, writing, vocabulary, and grammar. Reading texts in Devanagari (Hindi) and Nastaliq (Urdu) scripts. Discussion of cultural materials in Hindi-Urdu. No credit for students who have earned credit for a more advanced Hindi-Urdu language course. Prerequisite: 1102. [5] (INT)

HNUR 2202. Intermediate Hindi-Urdu II. Reading, writing, speaking, and listening with authentic materials. Common and specialized vocabulary. Cultural contexts of spoken Hindi-Urdu. No credit for students who have earned credit for a more advanced Hindi-Urdu language course. Prerequisite: 2201. [5] (INT)

HNUR 3301. Advanced Hindi-Urdu I. Reading, writing, speaking, and listening with authentic materials. Advanced vocabulary, literary, and cultural studies. No credit for students who have earned credit for a more advanced Hindi-Urdu language course. Prerequisite: 2201. [5] (INT)

HNUR 3302. Advanced Hindi-Urdu II. Reading, writing, speaking, and listening with authentic materials. Advanced vocabulary, literary, and cultural studies. No credit for students who have earned credit for a more advanced Hindi-Urdu language course. Prerequisite: 3301. [5] (INT)
History

HIST 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)


HIST 1060. Premodern China. 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. 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. 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. 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. 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. 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 1269. Introduction to African Studies. Interdisciplinary exploration of the African experience. Human origins, geography, race and ethnicity, and historical and contemporary issues. Shifting theoretical constructions of Africa alongside the social, cultural, political, and economic forces at play across the continent. [3] (INT)

HIST 1270. Sub-Saharan Africa: 1400-1800. Pre-colonial 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 1270W. Sub-Saharan Africa: 1400-1800. Early history; rise of major empires. Cultural history of major groups, the spread of Islam; Indian and Atlantic Ocean trade economies; the slave trade. Repeat credit for HIST 1270. [3] (INT)


HIST 1280. Africa since 1800: The Revolutionary Years. 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 1345. The World of Rome. Origin of the city to the collapse of the Western empire, particularly from Punic Wars to the Severan emperors. Political, military, social, and religious history. Ancient authors and material culture. Not open to students who have earned credit for CLAS 2150 and 2160 without permission. Total credit for this course, CLAS 2150, and 2160 will not exceed 6 hours. Credit hours reduced from third course taken (or from test or transfer credit) as appropriate. [3] (INT)


HIST 1360. Western Civilization since 1700. European history from the age of the Enlightenment to the present day. [3] (INT)


HIST 1370. Colonial Latin America. 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 1380. Modern Latin America. A survey of Latin American history from the early nineteenth century to the present. Wars for independence; rise of new nations and export-oriented economies; case studies in revolution, nationalism, and reform in the twentieth century; U.S.-Latin American relations. [3] (INT)

HIST 1383. Slave Resistance in the Americas. Resistance across North and South America. Slave flight, marronage, and full-blown rebellion. Free black towns in Florida, Mexico, Panama, and Colombia created by former slaves. Problems of evidence and voice through primary sources of free and enslaved Africans and their descendants. Sources by historians and archaeologists. Art and material culture of rebels. Offered on a graded basis only. [3] (INT)

HIST 1385W. Disease and Disorder in the Atlantic World. Spanish Atlantic from Columbus through the Haitian Revolution. Smallpox, slavery, and rebellion. [3] (INT)


HIST 1395. The Underground Railroad. Runaway slaves and their assistance from free blacks, whites, and other slaves. Impact on the course of slavery. Mechanisms of slave holders to capture and return the enslaved. Offered on a graded basis only. [3] (US)


HIST 1410. U.S. 1877-1945: Reconstruction through World War II. 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. Political, international, social, and cultural currents that have shaped contemporary America. [3] (US)

HIST 1422W. FDR, the New Deal, & War. 1930s and 1940s United States' domestic and foreign policy during the presidency of Franklin D. Roosevelt. U. S. global ascendancy and rise of the new welfare state. [3] (US)

HIST 1425W. Body, Mind, and Soul: Elvis, Dylan, Springsteen and Postwar America. Rock and roll's transformation of American culture. Focus on three pivotal artists and their role in the history of each of their breakout decades: the 1950s, 1960s, and 1970s. Readings and listenings on the African American roots of rock, the gendered dimensions of the genre, the role of dissent and accommodation in popular music. Issues of youth, alienation, religion, and individuality. [3] (US)


HIST 1440. African American History since 1877. 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. 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. 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 1510L. Scientific Revolution Digital History Lab. Optional lab accompanying HIST 1510. Digital history tools and building digital projects. Prerequisite or corequisite: 1510. [1] (No AXLE credit)

HIST 1515. Virtual Reality and the Humanities. Workshop in humanistic dimensions of interactive immersive environments including video games and simulations. History and theory of the medium as well as tools and practices in their creation. [3] (HCA)


HIST 1580. Crime and Punishment in Early Modern Europe 1400-1800. 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 1586W. Nazi Germany, the Holocaust, and Digital Humanities. Local studies of Nazi Germany and the Holocaust using the tools of digital humanities. Map-generation using Arc-GIS and data linking. [3] (INT)

HIST 1600. European Economic History, 1000-1700. From the commercial revolution of High Middle Ages to Industrial Revolution. Interconnections of economic forces with politics, society, and cultures. Rise of long distance
trade; development of business and accounting techniques; public finance; monetary trends; advent of capitalist ethic. [3] (SBS)

HIST 1640. History of American Capitalism. 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. [3] (US)


HIST 1669. Making the Case for Civil Rights. Court cases and contexts that framed the 20th century struggle for African American civil rights. Not open to students who have earned credit for 2690. [3] (HCA)

HIST 1690. Sea Power in History. U.S. Navy's role in foreign and defense policies from the American Revolution to the present. Broad principles, concepts, and elements of sea power throughout history. Technological advances, interservice relations, strategies, and governmental policies pertaining to sea power. Designed to meet the NROTC requirement. Offered on a graded basis only. [3] (US)

HIST 1691. Evolution of Warfare. 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 1693. Fundamentals of Maneuver Warfare. [Replaces HIST 1692 Amphibious Warfare] Broad aspects of warfare and their interactions with maneuver warfare doctrine. Focus on the United States Marine Corps as the premier maneuver warfare fighting institution. Historical influences on current tactical, operational, and strategic implications of maneuver warfare practices. Case studies. Enrollment preference to NROTC students. Repeat credit for students who have completed HIST 1692. [3] (No AXLE credit)

HIST 1699. Militarization in 20th Century American Society. Militarization as shaping 20th century American society. Conscription and citizenship; meanings of national identity; martial masculinities and femininities; impacts of war on racial politics; militarized welfare state; Cold War urbanisms; and militarized policing. [3] (US)

HIST 1700. Western Military History to 1815. War in culture, politics, and society; technology, the Military Revolution and state-formation. [3] (INT)


HIST 1725W. United States and the Middle East. U.S. involvement in the Middle East with emphasis on the period after 1945. Special attention on the Israeli-Palestinian conflict. Offered on a graded basis only. [3] (US)


HIST 1740. The U.S. and the Vietnam War. 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 1780W. Self and Society in the United States. Selfhood and identity development from the early Republic to the present. The role of race, class, and gender but also religion, politics, work, technology, and media in shaping selves in the United States. Readings include autobiographies, fiction, etiquette manuals, advertisements, and scientific tracts. Offered on a graded basis only. [3] (HCA)


HIST 2102. Introduction to Brazil. 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)


HIST 2107. Chinese Economic History. China's economic history from the Bronze Age to the present. Creation and development of markets. Links among political power, transportation, trade, and money. 12th century proto-Industrial Revolution, early modernization, Communism, and hybrid free market under socialism. Prerequisite: 1060 or 1070 [3] (INT)

HIST 2110. Crisis Simulation in East Asia. 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 2115. Play and Pleasure in Early Modern Japan. 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 2135. Russia: The U.S.S.R. and Afterward. 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 2139. Technology, Nature and Power in Africa. Early modern to present. How politics and technology shape everyday life in Africa and have been shaped by competing groups. Critiques the narrative that Africa lacks technological sophistication. Shifting meanings of technology; Africa's role in global history of technology; forms of technological engagement including guns, radios, roads, nuclear power, and biometrics. [3] (P)


HIST 2150. India and the Indian Ocean. 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. 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. 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. Not open to students who have earned credit for HIST 1111 Section 21 without permission. Total credit for this course and HIST 1111 Section 21 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (INT)

HIST 2170. Islam and the Crusades. 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. 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. 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 2238. Crime and Criminal Law in Western Antiquity. Ancient Athens and Rome. Social values and the quest for justice through the legal system. Definition of offenses, procedures, and penalties. Impact of social, economic, and legal status as well as gender. Serves as repeat credit for CLAS 3160. [3] (SBS)

HIST 2239. Sex and the Citizen: Women and the Law in United States. Law's relationship to gender and sexuality from the seventeenth century to the present. Legal categories of gender that have governed the household, the economy, and the political sphere. [3] (US)

HIST 2240. Sex Law. Law concerning marriage, adultery, and homosexuality. Roman, Canon, and Civil Law from Antiquity to the present. [3] (INT)

HIST 2250. Reformation Europe. 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 2255. Inventing the Modern Economy: Eighteenth-Century Europe. Economic transformation and the development of Enlightenment political economy in eighteenth-century Europe. New patterns of economic growth and foundations of modern capitalism: colonial commodities and slavery; 'Consumer Revolution'; credit and lending; and industrialization. Political, social, and economic responses by philosophers such as Mandeville, Montesquieu, the physiocrats, and Smith. [3] (INT)

HIST 2260. Revolutionary Europe, 1789-1815. 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 2270. Nineteenth-Century Europe. Major political, social, economic, and cultural developments from 1815 to 1914. [3] (INT)

HIST 2280. Europe, 1900-1945. Political, socioeconomic, cultural, and colonial history of Europe from 1914 to the fall of Hitler. [3] (INT)

HIST 2290. Europe since 1945. 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 2293. Muslims in Modern Europe. Eighteenth century to the present. Eastern and Western Europe. Legal, political, and cultural integration and discrimination; questions of secularism and religious freedom; and gender, family law, and democracy. Muslim responses to modernity and formation of global Islamic movements. [3] (HCA)


HIST 2300. Twentieth-Century Germany. 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. 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. Readings from a variety of plays by Shakespeare and his contemporaries. Significant political and cultural issues from the 1590s in early English history. [3] (HCA)
HIST 2382. The Rise of the Tudors. 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. Serves as repeat credit for HIST 2385. [3] (HCA)

HIST 2383. A Monarchy Dissolved? From Good Queen Bess to the English Civil War. 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. Serves as repeat credit for HIST 3260. [3] (HCA)

HIST 2385. The Real Tudors. 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 confessionalized international politics. Offered on a graded basis only. Serves as repeat credit for HIST 2382. [3] (HCA)


HIST 2450. Reform, Crisis, and Independence in Latin America, 1700-1820. Reorganization of the Spanish and Portuguese empires; maturation of transatlantic societies; and revolutions for independence. [3] (INT)


HIST 2470. Revolutionary Mexico. 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. 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. 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. 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 2535. Latin America and the United States. The complicated relationship between Latin America and the United States from the early nineteenth century to the present. Role of ideology, national security, economic interests, and cultural factors in shaping inter-American affairs. [3] (INT)

HIST 2540. Race and Nation in Latin America. 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. [3] (INT)

HIST 2542. Cuba and the United States. History of Cuba. European conquest, the colonial period, independence, U.S. intervention, the Cuban Revolution, Cold War to present. Special consideration given to the global impact of the Cuban Revolution. [3] (INT)

HIST 2544. Panama: Global Crossroads. Panama, its colonial history, ties to Colombia, French canal project, independence, and United States' control and intervention. Panama Canal and its worldwide significance. [3] (INT)


HIST 2580. American Indian History before 1850. 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 2590. American Indian History since 1850. American Indians in the United States and Canada. Their responses to government policies and other forces. Cultural, socioeconomic, and political change among Indian communities. [3] (US)


HIST 2610. The Founding Generation. American history from the 1760s to the 1820s. The Revolutionary War, the Constitution, formation of national government. Political conflict, national culture, commerce, diplomacy, and race and gender in an age of revolution. Primarily for Juniors and Seniors. [3] (US)

HIST 2620. The Old South. 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. 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. 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 strainings, industrialization and labor conflict, poverty and outmigration. Examination of mountain culture, tourism, and the construction of the "hillbilly" image. [3] (US)


HIST 2655. Historic Black Nashville. From settlement through the Civil War. Secondary literature and archival research to identify significant black history sites in Nashville. Not open to students who have earned credit for UNIV 2655. Offered on a graded basis only. [3] (US)


HIST 2662. Slavery in the United States. History of American slavery, from the formation of a slave power in the seventeenth century to the defeat of the slaveholders' republic in the wake of the Civil War. [3] (US)


HIST 2686. Race, Rights, and the American Dream. Primarily post 1930s to the present. Exploration of the concept of the U.S. "American Dream." Emphasis on race, gender, class, and power dynamics as related to urban space, housing, work, and identity. Inequality, rights, and social action. Offered on a graded basis only. [3] (US)

HIST 2689. "Women of Color": History, Theorizing & Organizing in the United States. Examines the historical roots of the term "Women of Color". Theories, politics, coalitions, and struggles that emerged in the United States from the late 1960s to the present. Offered on a graded basis only. [3] (US)


HIST 2700. The U.S. and the World. From the winning of independence to the Great Depression. Relationships among foreign policy, ideology, domestic politics, and social and economic change. [3] (US)

HIST 2710. The U.S. as a World Power. 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. 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. 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. 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. Debates about the U.S. role in shaping the twentieth century. War; colonialism and anti-colonialism; immigration; participation in international institutions. [3] (US)


HIST 2749. American Thought to 1865. U.S. intellectual tradition from the colonial era to the Civil War. Popular thinkers and elite intellectuals including John Winthrop, Thomas Jefferson, Frederick Douglass, and Abraham


HIST 2750W. American Intellectual History since 1865. Modern U.S. social thought. Debates over progress, science, nationalism, race, and economy. Ideas in their cultural context. Popular as well as elite thinkers. Repeat credit for students who have earned credit for HIST 2750. [3] (HCA)


HIST 2760. The Historian and the Law. Contemporary legal history and the role of law in shaping historical research. Doctrinal history, legal culture, colonial encounters, and crime and violence. Formal versus informal modes of state and community control and sanction. Serves as repeat credit for students who have earned credit for HIST 2760W. [3] (SBS)

HIST 2760W. The Historian and the Law. Contemporary legal history and the role of law in shaping historical research. Doctrinal history, legal culture, colonial encounters, and crime and violence. Formal versus informal modes of state and community control and sanction. Serves as repeat credit for students who have earned credit for HIST 2760. [3] (SBS)


HIST 2800. Modern Medicine. 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. 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 2835. Sexuality and Gender in the Western Tradition to 1700. 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. Modern masculinity, femininity, and gender roles; origins of identity politics and changing sexual norms; contemporary feminist issues. [3] (P)


HIST 2855. Women and Gender in the U.S. to 1865. Social and cultural history of gender, race, and sexuality as represented in literary, legal and artistic texts. Exploration of Native American conquest, captivity narratives, abolitionism and sentimental fiction, nationalism and gender ideas. [3] (US)

HIST 2860. Women and Gender in the U.S. since 1865. Social and cultural history of the intertwined ideas and practices of gender, race, and sexuality. Exploration of experiences, representations, and activism in feminist and gay rights movements, interracial unions, marriage and the family, black women's activism, suffrage, and sexual revolutions. [3] (US)

HIST 3000W. The History Workshop. Introduction to the ''historian's craft.'' Reconstructing the past using primary documents such as diaries, letters, memoirs, and declassified government papers. Methods of historical research and reasoning through individual projects. Offered on a graded basis only. [3] (SBS)

HIST 3010. Pornography and Prostitution in History. 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)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
<th>Credits</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 3040</td>
<td>Health and the African American Experience</td>
<td>Disparities in the health care of African Americans, the training of black professionals, and the role of black medical institutions.</td>
<td>3</td>
<td>(US)</td>
</tr>
<tr>
<td>HIST 3045W</td>
<td>Eugenics in the U.S., 1865-present</td>
<td>Comparative perspective. Compulsory sterilization, restrictive immigration acts, &quot;fitter family&quot; contests, medical genetics, and eugenic counseling. Ideas and practices shaped by attitudes toward race, gender, class, and disability.</td>
<td>3</td>
<td>(US)</td>
</tr>
<tr>
<td>HIST 3050</td>
<td>Innovation. Origin, reception, and cultural impact of technological innovation</td>
<td>New technologies from the mid-nineteenth century through present-day Silicon Valley and their technical, social, economic, and political dimensions.</td>
<td>3</td>
<td>(P)</td>
</tr>
<tr>
<td>HIST 3070W</td>
<td>Science, Technology, and Modernity</td>
<td>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.</td>
<td>3</td>
<td>(P)</td>
</tr>
<tr>
<td>HIST 3090</td>
<td>Tokyo: History and Image</td>
<td>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.</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HIST 3100</td>
<td>Pirates of the Caribbean</td>
<td>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.</td>
<td>3</td>
<td>(INT)</td>
</tr>
<tr>
<td>HIST 3112</td>
<td>China and the World</td>
<td>China's role in global currents since the seventeenth century. China as engine of early-modern global trade. The Chinese diaspora's transnational impact. Cosmopolitan semi-colonial cities (such as Shanghai) as incubators of global modernity.</td>
<td>3</td>
<td>(INT)</td>
</tr>
<tr>
<td>HIST 3112W</td>
<td>China and the World</td>
<td>China's role in global currents since the seventeenth century. China as engine of early-modern global trade. The Chinese diaspora's transnational impact. Cosmopolitan semi-colonial cities (such as Shanghai) as incubators of global modernity. China as an innovator and exporter of cultural &quot;goods&quot; in the twentieth century, from revolution to modes of health and healing.</td>
<td>3</td>
<td>(INT)</td>
</tr>
<tr>
<td>HIST 3120</td>
<td>Weimar Germany: Modernism and Modernity, 1918-1933</td>
<td>Culture and politics. Mass politics, mass media, economic crisis, and social tensions. Architecture, film, theater, painting, and philosophy. Serves as repeat credit for students who have earned credit for 3120W.</td>
<td>3</td>
<td>(HCA)</td>
</tr>
<tr>
<td>HIST 3120W</td>
<td>Weimar Germany: Modernism and Modernity, 1918-1933</td>
<td>Politics and culture. Mass media, economic crisis, and social tensions. Architecture, film, theater, painting, and philosophy. Serves as repeat credit for students who have earned credit for 3120W.</td>
<td>3</td>
<td>(HCA)</td>
</tr>
<tr>
<td>HIST 3140</td>
<td>History of New Orleans</td>
<td>The city since its founding. Interactions between urban society and natural environment; historical and cultural significance of New Orleans in light of post-Katrina disaster and reconstruction.</td>
<td>3</td>
<td>(US)</td>
</tr>
<tr>
<td>HIST 3150</td>
<td>Cities of Europe and the Middle East</td>
<td>Cities of &quot;East&quot; and &quot;West&quot; in the modern period; distinguishing characteristics and shared patterns of urban modernity across different geographies. Conceptions of the European, Middle Eastern, and Islamic metropolis.</td>
<td>3</td>
<td>(INT)</td>
</tr>
<tr>
<td>HIST 3170</td>
<td>The Federalist Papers</td>
<td>Classic works on American 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.</td>
<td>3</td>
<td>(US)</td>
</tr>
<tr>
<td>HIST 3180</td>
<td>Making of Modern Paris</td>
<td>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.</td>
<td>3</td>
<td>(INT)</td>
</tr>
</tbody>
</table>


HIST 3209. Sex, Marriage, and the Body in Islamic Law. Islamic laws related to gender from the seventh century to the present. Qur'an and the Hadith on veiling, marriage, adultery, and men's and women's dress. Differences between Sunni and Shi'ite inheritance codes. Medieval jurists' understanding of reproduction and pregnancy. Modern developments, ranging from the movement for equal voting rights to new technologies such as ultrasounds. Offered on a graded basis only. [3] (P)

HIST 3210. Muslims, Christians, and Jews in Medieval Spain. 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. Not open to students who have earned credit for JS 1111 Section 01 without permission. Total credit for this course and JS 1111 Section 01 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (INT)

HIST 3220W. Images of India. 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, modernity, gender, and religion in South Asia. [3] (INT)

HIST 3230. The Art of Empire. 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.. Youth, rock 'n roll, sexual attitudes, black power, counterculture, and conservative reaction. Cultural revolution or myth. [3] (INT)


HIST 3270. Religion and the Occult in Early Modern Europe. 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. [3] (HCA)

HIST 3275. Religion and Popular Culture in Nineteenth-Century Europe. 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. (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. 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. 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 3881, and 3 hours in 3882. (2) Part-time: 6-9 hours total, including 3-6 hours in 3880 and 3 hours in either 3881 or 3882. 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 3881 and/or 3882. These hours may not be included in the minimum hours required for the history major. Corequisite: 3881 and/or 3882. [3-9] (No AXLE credit)

HIST 3882. Internship Readings. 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 3881, and 3 hours in 3882. (2) Part-time: 6-9 hours total, including 3-6 hours in 3880 and 3 hours in either 3881 or 3882. 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 interpretive 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. 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. 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 3890. Junior Honors Seminar in History. 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. 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. 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. 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. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

HART 1100. History of Western Art: Ancient to Medieval. 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: Renais to Modern. 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. 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)

HART 1120. History of Western Architecture. 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. Not open to students who have earned credit for HART 1121 without permission. Total credit for this course and HART 1121 will not exceed 5 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (HCA)

HART 1121. History of Western Architecture I. From prehistoric Europe and Western Asia to Renaissance Italy and the Ottoman Golden Age. Form and function; historical, social, spatial contexts; architects and patrons. Not open to students who have earned credit for HART 1120 without permission. Total credit for this course and HART 1120 will not exceed 5 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (HCA)

HART 1122. History of Western Architecture II. From 1700 to the present; Piranesi, Wren, Viollet-le-Duc, Wright, and Venturi. Buildings, urban schemes, and landscapes in relation to aesthetic, cultural, social, and political contexts. Later reappraisals by historians and designers; relevance to contemporary practice and discourse. Not open to students who have earned credit for HART 1120 without permission. Total credit for this course and HART 1120 will not exceed 5 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (INT)


HART 1210W. Art and Ritual in Asia. From prehistory to the present. Social and religious functions of the arts of China, India, Japan, Korea, and Himalayas. Select examples explored in museum visits, lectures, discussions, and varied writing projects. [3] (INT)

HART 1220. History of Asian Architecture. Cultural traditions of Asia from the first millennium BCE to the nineteenth 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 1285W. Introduction to Medieval Art. From the third to fifteenth century; Late Antique period to Late Gothic period. Architecture, sculpture, painting, and the minor arts of Western Europe in historical context, including Byzantine and Islamic art. Not open to students who have earned credit for HART 2285 without permission. Total credit for this course and HART 2285 will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (INT)

HART 1300. Monuments and Masterpieces. 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 1330W. Heaven on Earth: Sacred Sites in World History. From prehistory to the 19th century. Great works of world religious architecture in their social and cultural context. Monuments, temples, tombs, shrines, and other sacred sites. Cross-cultural and trans-historical comparative perspective. How formal attributes of space and architecture shape religious experience and meaning. [3] (SBS)

HART 1400. U.S. Icons and Monuments. 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. Not open to students who have earned credit for HART 1111 Section 13 without permission. Total credit for this course and HART 1111 Section 13 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (US)

HART 1500W. Impressionism. Painting style developed by Monet, Renoir, Pissarro, Cassatt, Morisot, and others, with emphasis on changing atmospheric effects. Work of the French Impressionists from formal, social, political, and intellectual perspectives. Impact of French Impressionism across Europe and North America. [3] (HCA)

HART 1740W. Introduction to Design Studies. Strategies for understanding the reciprocal relationship between design and human experience. Historical and contemporary examples in fields including fashion, climate change, violence, activism, and public health. Social control, nationalism, history and memory, and othering practices. [3] (HCA)

HART 1750W. African American Arts. Blackness and black culture as subject and context for African American visual arts from the 20th and 21st centuries. Emphasis on arts derived from African American cultural perspectives. Not open to students who have earned credit for HART 2750 without permission. Total credit for this course and HART 2750 will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (P)


HART 2110. Arts of China. Artistic production from the Neolithic period through the Qing dynasty in relation to religious and cultural contexts. [3] (HCA)

HART 2120. Arts of Korea. History of Korean art and visual culture from ancient times to the present. Intersections of art, literature, religion, and politics, and cultural interactions with China and Japan. [3] (INT)

HART 2130. Arts of Japan. Artistic production from the Neolithic through Meiji periods in relation to religious and cultural contexts. [3] (HCA)


HART 2170. Religion and politics in South and Southeast Asian Art. 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 reappropriation in ancient and modern times. [3] (INT)

HART 2175. Modern and Contemporary Indian Architecture. From nineteenth-century British colonial rule to the present. Built environment of Indian subcontinent in local and global contexts. Eighteenth-century Jaipur and urban
planning, the British Raj, Calcutta, Allahabad, and Edwin Lutyens' New Delhi. Le Corbusier, Louis Kahn, the Neo-Gothic of Bombay, and contemporary architecture. [3] (INT)

HART 2180. Islamic Art and Architecture. 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. Art, architecture, and culture of Egypt from the fourth millennium through the Old, Middle, and New Kingdoms. Wall painting, architecture, and material culture. [3] (HCA)

HART 2220. Greek Art and Architecture. The Bronze Age, including the Minoans and Myceneans, through the Hellenistic period. The social and cultural contexts of material and visual culture. Vase-painting, sculpture, architecture, and more utilitarian artifacts. [3] (HCA)


HART 2270. Early Christian and Byzantine Art. The development of architecture, sculpture, painting, and the minor arts from the third through eleventh centuries. [3] (HCA)


HART 2285. Medieval Art. The development of architecture, sculpture, painting, and the minor arts in Europe from the eleventh through the fifteenth centuries. Not open to students who have earned credit for HART 1285W without permission. Total credit for this course and HART 1285W will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (HCA)

HART 2288. Art of the Book. 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, and concerns of patrons and artists. 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. 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. Not open to students who have earned credit for HART 3320 or 3320W without permission. Total credit for this course and HART 3320 or 3320W will not exceed 4 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (HCA)

HART 2320W. The Italian Renaissance Workshop. Development of artists' shops, 14th into 16th century. Organization and production. Painting and sculpture techniques. Role of artists in society. Fra Angelico, Andrea del Verrocchio and the young Leonardo da Vinci, and Sandro Botticelli. Firsthand study of works in the Kress Collection at Vanderbilt. Offered on a graded basis only. Not open to students who have earned credit for HART 3320W without permission. Total credit for this course and 3320W will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [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 Sienese masters; Giotto, Donatello, Botticelli, and Leonardo in Florence; and Michelangelo and Raffaello in Rome. Tempera and fresco technique; civic, ecclesiastic, and domestic buildings; and stylistic progression. [3] (INT)

HART 2330. Italian Renaissance Art after 1500. 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 2360. Northern Renaissance Art. Painting, sculpture, and graphic arts in the Low Countries, France, and Germany from the end of the fourteenth century through the Reformation. Historical, social, religious, and stylistic factors. Not open to students who have earned credit for HART 2362 or 3366 without permission. Total credit for this course and HART 2362 will not exceed 4 credit hours. Total credit for this course and HART 3366 will not exceed 5 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (HCA)

HART 2362. Fifteenth-Century Northern European Art. 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. Not open to students who have earned credit for HART 2360 without permission. Total credit for this course and 2360 will not exceed 4 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (HCA)


HART 2600. Eighteenth-Century Art. The history of European painting, sculpture, and printmaking from the Late Baroque era to the rise of Neoclassicism (1675-1775). Geographical focus on Italy and France. Artists include Maratti, Rusconi, Carriera, Tiepolo, Watteau, Chardin, Fragonard, and others. [3] (HCA)


HART 2622. Neoclassicism and Romanticism. 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 2625. French Art in the Age of Impressionism. French painting, sculpture, and drawing in its social, political, aesthetic, academic, and spiritual context from 1848 to 1886. The Social Realism of Daumier and Courbet; Manet and Aesthetic Realism; Monet, Renoir, Pissarro, Degas, Morisot, and Impressionism; and the rise of Neo- and Post-Impressionism with Seurat and van Gogh. [3] (INT)


HART 2660. American Art to 1865. 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 2665. The Vanderbilts as Patrons: Taste-Makers of Gilded-Age Art and Architecture. The Vanderbilts' roles as patrons and taste-makers in translation of European architectural and artistic styles to the United States. Famed Vanderbilt estates such as Biltmore in Asheville, NC and the Breakers in Newport, RI. [3] (HCA)

HART 2680. British Art: Tudor to Victorian. Art and visual culture in the British Isles from the reign of Henry VIII in the sixteenth century to Queen Victoria and the rise of the pre-Raphaelites in the nineteenth century. Portraiture
and landscape painting, relationship between art and empire, rise of the Royal Academy, and patterns of patronage. Holbein, Hogarth, Gainsborough, Reynolds, Lawrence, and Turner. [3] (HCA)

HART 2708. Twentieth-Century British Art. 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. Painting, sculpture, and architecture; stressing a social-historical approach to the study of style. [3] (HCA)


HART 2750. African American Art. Colonial Era to the present. Artwork and artists in their political, cultural, social, historical, and aesthetic contexts. Relationship between race and representation. Not open to students who have earned credit for HART 1750W without permission. Total credit for this course and HART 1750W will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (P)


HART 2760. Early American Modernism, 1865-1945. Painting and sculpture of the United States between the Civil War and the Second World War with emphasis on iconography, social history, class, and gender. [3] (US)

HART 2765. Art since 1945. A survey of art produced in the United States and Europe since 1945 with an emphasis upon theory and the social and intellectual factors. [3] (US)


HART 2780. History of Western Urbanism. Urban form and planning from antiquity to the present. The integration of architecture and landscape. Diachronic surveys. Case studies, including Nashville. [3] (P)


HART 2815. Digital Heritage: Methods and Practice. Case-based introduction to digital applications in history of art and archaeology. Theory, research design, current methods of photogrammetry, 2D and 3D modeling, and immersive environments. Mapping and spatial analysis. Data management and digital publishing. May be repeated for credit with permission of the faculty. [3] (HCA)

HART 2820. Architectural Heritage: Research and Documentation. Case-based. Immersive and collaborative analysis of buildings of architectural and historical importance. On-site survey, exploration, and archival investigation; consideration of design, function, renovation, and historic preservation. Offered on a graded basis only. May be repeated for credit with no duplication in content. [3] (US)

HART 3140. Healing and Art in East Asia. Influence of early healing practices on the development of the arts of East Asia. Magical healing texts, talismans, and tattoos; diagramming the body and the landscape; and the art of the Buddha of Medicine. Gardens and growing transformative herbs. Tea as medicine and art. Serves as repeat credit for HONS 1820W Section 28. [3] (HCA)

HART 3164W. Art of Buddhist Relic and Reliquary. 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 3172. Himalayan Art: Art of the Divine Abode. Art of Nepal and Tibet from its inception to the present. Religious and cultural contexts. Initial western responses; Hindu and Buddhist art and architecture in Nepal; Tibetan Buddhist Art; artistic productions in the Tibetan diaspora; and souvenir art in Nepal. [3] (INT)

HART 3173W. Art and Empire in India. Art of India between the Mughal and British empires. Rise of colonialism and nationalism; cross-cultural encounters; and emergence of new institutions and technology. Offered on a graded basis only. [3] (P)

HART 3174. The South Asian Temple. From its inception to the present. Morphological and stylistic analysis. Anthropological and ethnographical approach to temples as living communal entities. [3] (INT)

HART 3224. Greek Sculpture. Style, materials, and techniques ca. 900-31 B.C. Sculptors' craft and their reasons for the creation of both free-standing and architectural sculpture. [3] (HCA)

HART 3226. Greek Vases and Society. 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. 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. 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. 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 Constantine to Justinian. 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. 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; and original physical and cultural context. The Italian Renaissance workshop. Not open to students who have earned credit for HART 2310 without permission. Total credit for this course and 2310 will not exceed 4 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Serves as repeat credit for HART 3320W. [3] (HCA)

HART 3320W. Early Renaissance Florence. 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. Not open to students who have earned credit for HART 2310 without permission.
Total credit for this course and HART 2310 will not exceed 4 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Serves as repeat credit for HART 3320. [3] (HCA)


HART 3334W. Michelangelo's Life and Works. Sculpture, painting, architecture, and graphic works. Poetry and letters. Cultural, historical, religious, and political climate of his day. Influence upon artists. Critical reception. Repeat credit for students who have completed 3334. [3] (HCA)

HART 3364W. The Court of Burgundy. The visual arts of the Dukes of Burgundy (1363-1477) in cultural context. Portraiture, chivalry, costume, storytelling, and ceremony. Artists include Claus Sluter, Jan van Eyck, and Rogier van der Weyden. [3] (HCA)

HART 3605W. French Art in the Age of Louis XV: From Rococo to Neoclassicism. Court art and visual culture 1715 to 1775. Aesthetic development in painting, sculpture, interior design, and architecture. Watteau, Boucher, Fragonard, Falconet, Boffrand. Chinoiserie and exoticisms, porcelain industry at Sèvres, and domestication of royal spaces at Versailles. Women patrons such as Mme de Pompadour and Mme du Barry. Offered on a graded basis only. [3] (INT)


HART 3725W. The Skyscraper: Modern Urban Icon. Development of the architectural type from the late 19th to the mid-20th century, seen from stylistic, technological, urban, artistic, and economic perspectives. [3] (HCA)


HART 3735. History of Photography. Uses and meanings of photography from its invention (c. 1839) to the present. Ways of thinking about the medium and its status as a separate discipline in relation to the history of art. [3] (HCA)

HART 3740. History of Sound Art. 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, Cardiff, Paik, Rosenfeld, and Trimpin. [3] (HCA)

HART 3753W. Imaging the "Other" in Art. Representations of racial difference in North America and Europe, 19th-21st centuries. Orientalism, colonialism, primitivism, anthropology, the use of racial and ethnic stereotypes, and the politics of display. [3] (HCA)


HART 3766W. Post-1871 Berlin Monuments, Memorials, and City Planning. Berlin's city planning; monuments and memorials from the beginning of the German Empire. Political, social, and cultural history, including World War II,
the Holocaust, and the Cold War. Brandenburg Gate, Berlin Palace, Reichstag, Holocaust Memorial, Jewish Museum, and Berlin Wall. [3] (P)


HART 3810. Exhibiting Historical Art. Research and exhibition of art in the permanent collection of the Vanderbilt University Fine Arts Gallery. Research methods and principles of object organization and display, illustrated via selected objects that vary annually. May be repeated for credit once if there is no duplication in topic and not twice from the same instructor. Offered on a graded basis only. (Maximum of 6 credits total for all semesters of 3810 and 3810W). [3] (HCA)

HART 3810W. Exhibiting Historical Art. Research and exhibition of art in the permanent collection of the Vanderbilt University Fine Arts Gallery. Research methods and principles of object organization and display, illustrated via selected objects that vary annually. May be repeated for credit once if there is no duplication in topic and not twice from the same instructor. Offered on a graded basis only. (Maximum of 6 credits total for all semesters of 3810 and 3810W). [3] (HCA)

HART 3840. Directed Study. 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. 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. 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. 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. Readings and critiqued assignments under faculty supervision. Will not count as part of the minimum hours for the History of Art major or minor. Corequisite: 3880. [Variable credit: 1-3] (No AXLE credit).

HART 3890. Selected Topics. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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. 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)

INDS 3990. Interdisciplinary internship Training. Under faculty supervision students from any discipline can gain experience in a variety of public and private settings. Students must be classified as a sophomore or higher and in good academic standing at the time the credit is earned. Must be taken on a Pass/Fail basis. Prerequisite or corequisite: 3991 [1-3] (No AXLE credit)

INDS 3991. Interdisciplinary Internship Readings and Research. Under faculty supervision students from any discipline can gain experience in a variety of public and private settings. Students must be classified as a sophomore or higher and in good academic standing at the time the credit is earned. A thorough research paper or written report is required at the end of the semester. Must be taken on a graded basis only. [1-3] (No AXLE credit)

Italian

ITA 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

ITA 1101. Elementary Italian. 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. 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. 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. 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. Intermediate Italian. 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 1101, 1102, or a more advanced Italian language course. Prerequisite: 1102 or 1103. [3] (INT)


ITA 3000. Introduction to Italian Literature. Critical reading of major works of Italian literature from the beginning to the present. Prerequisite: 2501W. [3] (HCA)

ITA 3041. Italian Civilization. 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. 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. 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. 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. 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. 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 3641. Contemporary Italian Cinema. From the 1970s to the present. Postmodern forays into metafiction, parody, and political and social critique. The return to realism and New Regionalism in the twenty-first century. Knowledge of Italian is not required. [3] (HCA)

ITA 3642. Italian Visual Culture. 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. 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. Short stories, historical documents, and articles from the press. Prerequisite: 2501W. [3] (No AXLE credit)

ITA 3703. Italy: A World Cultures & Languages. Diversity in Italian culture and language from earliest records to the present. Communicative aspects of contemporary Italian; improvement of phonetic skills and understanding of social, cultural, and linguistic aspects. Oral and written sources in standard and regional Italian, with a focus on mass media. Prerequisite: 2203. [3] (P)

ITA 3704. Made-in-Italy: Italianness in Italy and Abroad. Cultural, historical, and economic analysis of Italian brands and products in Italy and the USA, and the aspects that determine their quality or representative mark. Fashion brands, design products, architectural styles, and popular music from local and global perspectives. Italian and American artistic and cinematic representations of Made-in-Italy. Taught in English. [3] (INT)


ITA 3850. Independent Study. 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. 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. 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. No credit for students who have earned credit for 1101 or a more advanced Japanese language course. Prerequisite: 1011. [3] (No AXLE credit)

JAPN 1013. Practical Japanese Conversation. Conversational skills for everyday communication in actual Japanese cultural situations. Interpersonal and presentational speaking and listening proficiency. Prerequisite: 1012 or instructor permission. [2] (No Axle Credit)

JAPN 1101. Elementary Japanese I. 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. 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: 1101. [5] (INT)

JAPN 1231. Tadoku: Extensive Reading in Japanese. Develop reading skills in Modern Japanese, using extensive reading method. Prerequisite: 1101. [1] (No AXLE credit)

JAPN 2201. Intermediate Japanese I. 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. 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. 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. 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. No credit for students who have earned credit for a more advanced Japanese language course. Prerequisite: 3301. [3] (INT)

JAPN 3302W. Advanced Japanese II. Reading and writing essays in Japanese. Sophisticated vocabulary and grammatical construction through discussion and composition. No credit for students who have earned credit for a more advanced Japanese language course. Repeat credit for students who have earned credit for 3302. Prerequisite: 3301. [3] (INT)

JAPN 3851. Independent Study. 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 JAPN 3851 and 3852] (No AXLE credit)
JAPN 3852. Independent Study. 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 JAPN 3851 and 3852] (No AXLE credit)

JAPN 3891. Special Topics in Advanced Japanese. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

JS 1002. Introduction to Jewish Studies. Introduction to Judaism and Jewish history through philosophical, political, social, psychological, and artistic perspectives. Biblical studies; and 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. 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 1040. Introduction to Modern Jewish History. 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. No credit for students who have earned credit for JS 1240. [3] (P)

JS 1111. First-Year Writing Seminar. 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)

JS 1200. Classical Judaism: Jews in Antiquity. 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 1210. The Bible as Literature/The Bible and Literature. Hebrew Bible. Introduction to methods of reading; reception from antiquity to the present; and the Bible in literature. [3] (HCA)


JS 2100. The New Testament in Its Jewish Contexts. 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. 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. 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 2255. Creative Writing from Jewish Perspectives. Creative writing course with readings as broad how-to guides. How Jewish and non-Jewish writers engage with or distance themselves from their their socio-ethnic/religious identity. Reading and writing in multiple genres including short stories, autobiography, poetry, plays, screenplays and song lyrics. Exploration of different styles and techniques of writing, such as narrative voice and dialogue. [3] (HCA)

JS 2260. Coming of Age in Jewish Literature and Film. 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. 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 2260. [3] (INT)

JS 2270. Jewish Storytelling. 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 English translation from Yiddish, Hebrew, and Russian. Repeat credit for students who have completed 2270W. [3] (HCA)

JS 2270W. Jewish Storytelling. 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 English translation from Yiddish, Hebrew, and Russian. Repeat credit for students who have completed 2270. [3] (HCA)


JS 2280W. Jewish Humor. 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. 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. Analysis of rhetoric and themes in selected writings of Sigmund Freud and his times, development of assimilation and of anti-Semitic repudiation. [3] (SBS)


JS 2340. Jewish Philosophy after Auschwitz. 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 2420W. American Jewish Songwriters. From the late 19th Century to the present. Vaudeville, Tin Pan Alley, the development of the stage musical, and the Brill Building. Folk, rock, pop, and country. Contributions of Jewish songwriters to American music. [3] (US)


JS 2500. Modern Israel. 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. 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. Muslims and Jews. Muslim-Jewish relations from the birth of Islam to the 21st century. The Quran and the Jews. Jews in the Islamic world. Jewish cultures and Islamic cultures. Jewish exodus from the Islamic world. Muslims in Israel today. ISIS and the Jews. Not open to students who have earned credit for JS 1111 section 11 without permission. Total credit hours for this course and JS 1111 section 11 will not exceed 3 credit hours. Credit hours reduced from most recent course taken (or from test or transfer credit) as appropriate. [3] (INT)


JS 2640. Jews and Greeks. 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, Aristaeus, Josephus, Philo, the rabbis, the New Testament, Ezekiel the Tragedian, Byzantium. [3] (INT)


JS 3210. Reading Across Boundaries: Jewish and Non-Jewish Texts. 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 3333. The Bible. Jewish and Islamic biblical traditions. [3] (P)

JS 3730. The Roman to Medieval Near East: Caesarea Excavations, Israel. From Herod the Great to the Mamluk conquest. Excavation of the site of Caesarea on the Mediterranean coast. Social, cultural, economic, and religious history. Maritime commerce; Roman rule; and the Christian, Jewish, and Muslim communities. Archaeological methods, geospatial analysis, and processing artifacts. Monumental architecture, urban topography, and littoral environment. Daily field and laboratory work with additional seminars and excursions. [3] (INT)

JS 3830. Contemporary Jewish Issues. Projects will vary according to the instructor. Service to community will be integral part of course. [3] (No AXLE credit)

JS 3840. Directed Readings. Advanced readings and research on a selected topic done under the supervision of a faculty mentor. [3] (No AXLE credit)

JS 3850. Independent Study. 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. 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. 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. 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. 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. 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. Advanced study in a language of the Jewish people with a particular focus on the linguistic and paleographic features that define its cultural context. Each section focuses on one of the following languages: Aramaic, Ladino, Judaico-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. Advanced reading and research in a particular area of Jewish studies. [3] (No AXLE credit)

JS 4970. Senior Project in Jewish Studies. Readings and independent research. Prerequisite: senior standing. [3] (No AXLE credit)

JS 4980. Senior Honors Research Seminar. 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. Presentation and discussion of progress being made on honors theses. Open only to senior departmental honors students. [3] (No AXLE credit)
K’iche’ - Mayan Language

KICH 1101. Elementary K’iche’. 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 1102. Elementary K’iche’ II. Intermediate level course with advanced grammar. Counterfactual constructions, deixis, verbal derivations of positional roots, sound symbolic verbs, and verbal nominalizations. Vocabulary and idioms. Various literary genres. Serves as repeat credit for ANTH 2614. Offered on a graded basis only. Prerequisite: 1101 or ANTH 2612. [3] (INT)

KICH 2201. Intermediate K’iche’ I. Vocabulary, listening, and speaking skills. Modern and colonial texts. Cultural context of linguistic practices in K’iche’ communities. Serves as repeat credit for ANTH 3614. Offered on a graded basis only. Prerequisite: 1102. [3] (INT)

KICH 2202. Intermediate K’iche’ II. Taught in K’iche’. Advanced vocabulary, grammar, syntax, reading, and writing. Colonial and modern texts. Serves as repeat credit for ANTH 3615. Offered on a graded basis only. Prerequisite: 2201 or ANTH 3614. [3] (INT)

Korean

KOR 1101. Elementary Korean I. Introduction to Korean language for students who have no previous knowledge of Korean. Basic skills in speaking, listening, reading, and writing, with a focus on oral proficiency. No credit for students who have earned credit for a more advanced Korean language course. [5] (No AXLE credit)

KOR 1102. Elementary Korean II. Basic skills in speaking, listening, reading, and writing, with a focus on oral proficiency. No credit for students who have earned credit for a more advanced Korean language course. Prerequisite: 1101 [5] (INT)

KOR 2201. Intermediate Korean I. Speaking, listening, reading, and writing, with intensive exercises for spelling, basic grammar, and vocabulary. Cultural aspects of daily life in Korea. No credit for students who have earned credit for a more advanced Korean language course. Prerequisite: 1102. [5] (INT)

KOR 2202. Intermediate Korean II. Speaking, listening, reading, and writing, with intensive exercises for spelling, basic grammar, and vocabulary. Cultural aspects of daily life in Korea. No credit for students who have earned credit for a more advanced Korean language course. Prerequisite: 2201. [5] (INT)

KOR 3301. Advanced Korean I. Emphasis on formal speaking and writing. Introduction of four-character idioms and basic Chinese characters. No credit for students who have earned credit for a more advanced Korean language course. Prerequisite: KOR 2202. [3] (INT)

KOR 3302. Advanced Korean II. Emphasis on formal speaking and writing. Introduction of four-character idioms and basic Chinese characters. No credit for students who have earned credit for a more advanced Korean language course. Prerequisite: 3301. [3] (INT)

KOR 3851. Independent Study. [1-3] (No AXLE credit)

KOR 3852. Independent Study. [1-3] (No AXLE credit)

Latin

LAT 1101. Beginning Latin I. 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. 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. 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. 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. 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 3020. Cicero and the Humanistic Tradition. 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 3030. Latin Letters. The literary letters of Seneca and Pliny, with a brief introduction to the personal correspondence of Cicero and the letters discovered at Vindolanda. Prerequisite: 2202. [3] (HCA)

LAT 3040. The Roman Historians. 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 3100. Roman Comedy. 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. 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. 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. 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. Authors who created a new type of love poetry during the rule of emperor Augustus: Tibullus, Propertius, Ovid, and Sulpicia. Construction and contestation of gender roles; political contexts; development of the elegiac couplet; modern responses. Prerequisite: 2202. [3] (HCA)

LAT 3160. Ovid. Reading and interpretation of selections from the Metamorphoses or other works of Ovid. Prerequisite: 2202. [3] (HCA)

LAT 3170. Roman Satire. 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. Selections from authors in the literary renaissance during the reign of the artistic Emperor Nero, including Seneca, Lucan, Persius, and Petronius. Stylistic innovations, literary merits, and cultural contexts. Prerequisite: 2202. [3] (HCA)
LAT 3200. Early Christian Writers. Selections from the writings of Latin Christians, from the account of Perpetua's martyrdom to the Confessions of Augustine. Prerequisite: 2202. [3] (HCA)

LAT 3850. Independent Study. Designed for majors wanting to familiarize themselves with works or 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 LAT 3850] (No AXLE credit)

LAT 3890. Special Topics in Latin Literature. 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)

Latin American Studies

LAS 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit.)

LAS 1111. First-Year Writing Seminar. 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. A multidisciplinary survey of Latin America from pre-Columbian times to the present emphasizing culture, economic and political patterns, social issues, literature, and the arts in a historical perspective. [3] (INT)

LAS 2102. Brazil: Past, Present, and Future. A multidisciplinary survey of Brazil from pre-Columbian times to the present. Culture, economic and political patterns, social issues, literature, and the arts in historical perspective. [3] (INT)


LAS 2601. Latin America, Latinos, and the United States. 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. A program of independent 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. A program of independent 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. 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 Latin America. Background reading and research will be completed in Latin American Studies 3881 concurrently with the completion of internship training. 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. Offered on a Pass/Fail basis only and must be taken concurrently 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. 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 Latin America. Background reading and research will be completed in Latin American Studies 3881 concurrently with the completion of internship training. 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. Selected special topics suitable for interdisciplinary examination from the perspective of the social sciences and humanities. 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)


LAS 4901. Research Seminar. Selected topics for the interdisciplinary study of Latin America. [3] (No AXLE credit)

 Latino and Latina Studies


LATS 3850. Independent Study. 1-3 credits per semester; maximum of 12 credits total for four semesters of LATS 3850. [1-3] (No AXLE credit)

LATS 3880. Internship Training. Under faculty supervision, students can gain experience in a variety of settings relative to the Latinx experience. A research paper must be submitted. Normally, a 2.7 GPA, 6 hours of prior work in LATS, and prior approval of a specific plan by the director of the LATS program are required. [1-9] (No AXLE credit)

LATS 3881. Internship Readings and Research. Under faculty supervision, students can gain internship experience relative to the Latinx experience. Hours earned based upon readings and research supervised by LATS faculty to lend intellectual foundation to the internship experience. A research paper must be submitted at the end of the semester during which the internship is completed. [3-6] (No AXLE credit)


Managerial Studies

MGRL 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

MGRL 1100W. Fundamentals of Management. Principles and practices of business in all areas of organization, finance, marketing, human resources, technology, and operations. Does not count as an elective in the undergraduate business minor. Serves as repeat credit for students who have earned credit for 1100. [3] (SBS)

MGRL 2200. Data Analysis and Presentation. Collection, structure, and analysis of data. Quantitative problem solving using spreadsheets. Design strategy and principles for communication of results. Prerequisite: One of BME 3200, ECON 1500, ECON 1510, MATH 1011, MATH 2810, MATH 2820, MATH 2821, PSY 2100, PSY-PC 2110, or SOC 2100. [3] (SBS)

MGRL 3105. Negotiation. Contemporary challenges in leading change in organizations and building effective management 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. 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: BUS 2600. [3] (SBS)


MGRL 3300. Entrepreneurial Challenge. Simulation 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: 2300 [3] (SBS)

MGRL 3333. Leading Business In Times of Crisis. Events that threaten an organization's survival. How organizational purpose, effective communication, and solid planning and execution informs and improves a leader's response. C-level executives who have guided their organizations through major disruptions. Leadership skills to anticipate threats, to cope with adverse events, and to adapt to changing conditions. [3] (SBS)

MGRL 3841. Directed Study. 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)

MGRL 3851. Independent Study in Managerial Studies. 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)

Mathematics

MATH 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

MATH 1005. Pre-calculus Mathematics. 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. 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. 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. 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. Not open to students who have earned credit for MATH 1200, 1201, or 1300 without permission. Total credit for this course and MATH 1200 will not exceed 4 credit hours; Total credit for this course and MATH 1300 will not exceed 5 credit hours.
hours; Total credit for this course and MATH 1201 will not exceed 6 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [4] (MNS)

MATH 1111. First-Year Writing Seminar. 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. 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. Not open to students who have earned credit for MATH 1100 or 1300 without permission. Total credit for this course and MATH 1100 will not exceed 4 credit hours; Total credit for this course and MATH 1300 will not exceed 5 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (MNS)

MATH 1201. Single-Variable Calculus II. 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 two credits for this course. Not open to students who have earned credit for MATH 1100, 1300, or 1301 without permission. Total credit for this course and MATH 1100 or 1301 will not exceed 6 credit hours; Total credit for this course and MATH 1300 will not exceed 5 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1200. [3] (MNS)

MATH 1300. Accelerated Single-Variable Calculus I. Functions, limits, differentiation of algebraic functions, integration, applications including extrema problems, areas, volumes, centroids, and work. Not open to students who have earned credit for MATH 1100, 1200, or 1201 without permission. Total credit for this course and MATH 1100, 1200, or 1201 will not exceed 5 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [4] (MNS)

MATH 1301. Accelerated Single-Variable Calculus II. Differentiation and integration of transcendental functions, applications, methods of integration, coordinate geometry, polar coordinates, infinite series. Not open to students who have earned credit for MATH 1201 without permission. Total credit for this course and MATH 1201 will not exceed 6 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1300 or 1201. [4] (MNS)

MATH 2300. Multivariable Calculus. Vectors, curves, and surfaces in space. Functions of several variables, partial derivatives, multiple integrals. Vector integral calculus, including line and surface integrals. Not open to students who have earned credit for MATH 2310, 2500, or 2501 without permission. Total credit for this course and MATH 2310 or 2501 will not exceed 4 credit hours; total credit for this course and MATH 2500 will not exceed 5 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1301 or 2200. [3] (MNS)

MATH 2310. Multivariable Calculus with Matrix Algebra. Vectors and matrix operations. Linear transformations, dimension, and rank. Solutions of systems of linear equations. Eigenvalues and eigenvectors. Lines, planes, and subspaces. Limits, continuity, and the derivative of functions of several variables and vector-valued functions. Extremum and constrained optimization. Multiple integrals and change of variables. Applications to probability and statistics. Not open to students who have earned credit for MATH 2300, 2400, 2410, 2500, 2501, or 2600 without permission. Total credit for this course and MATH 2300, 2400, 2500, or 2501 will not exceed 4 credit hours; total credit for this course and MATH 2410 or 2600 will not exceed 6 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1301. [4] (MNS)

MATH 2400. Differential Equations with Linear Algebra. Scalar differential equations, Laplace transforms, systems of differential equations. Gauss-elimination, algebra of matrices, determinants, vector spaces, linear operators, eigenvalues and eigenvectors. Intended for students in Biomedical Engineering, Electrical Engineering and Computer Engineering. Not open to students who have earned credit for MATH 2310, 2410, 2420, 2500, 2501, or 2610 without permission. Total credit for this course and MATH 2310, 2410, 2420, 2500, 2501, or 2610 will not exceed 4 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite or corequisite: 2300. [4] (No AXLE credit)
MATH 2410. Methods of Linear Algebra. Vectors and matrix operations. Linear transformations and fundamental properties of finite dimensional vector spaces. Solutions of systems of linear equations. Eigenvalues and eigenvectors. Not open to students who have earned credit for MATH 2310, 2400, 2500, 2501, or 2600 without permission. Total credit for this course and MATH 2310 will not exceed 6 credit hours; total credit for this course and MATH 2400 or 2501 will not exceed 4 credit hours; total credit for this course and MATH 2500 will not exceed 5 credit hours; total credit for this course and MATH 2600 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite or corequisite: 2300. [3] (MNS)

MATH 2420. Methods of Ordinary Differential Equations. Linear first-order differential equations, applications, higher order linear differential equations, complementary and particular solutions, applications, Laplace transform methods, series solutions, numerical techniques. Not open to students who have earned credit for MATH 2400 or 2610 without permission. Total credit for this course and MATH 2400 will not exceed 4 credit hours; total credit for this course and MATH 2610 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 2300, 2310, or 2501. [3] (MNS)

MATH 2500. Multivariable Calculus and Linear Algebra. 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. Not open to students who have earned credit for MATH 2300, 2310, 2400, 2410, or 2600 without permission. Total credit for this course and MATH 2300 or 2410 will not exceed 5 credit hours; total credit for this course and MATH 2310 or 2400 will not exceed 4 credit hours; total credit for this course and MATH 2600 will not exceed 6 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. 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. 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. Not open to students who have earned credit for MATH 2300, 2310, 2400, 2410, or 2600 without permission. Total credit for this course and MATH 2300, 2310, 2400, 2410, or 2600 will not exceed 4 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 2500 and first-year standing. [4] (MNS)

MATH 2600. Linear Algebra. Algebra of matrices, real and complex vector spaces, linear transformations, and systems of linear equations. Eigenvalues, eigenvectors, inner product spaces, and orthonormal bases. Designed primarily for mathematics majors. Not open to students who have earned credit for MATH 2310, 2410, 2500, or 2501 without permission. Total credit for this course and MATH 2410 will not exceed 3 credit hours; total credit for this course and MATH 2310 or 2500 will not exceed 6 credit hours; total credit for this course and MATH 2500 will not exceed 5 credit hours; total credit for this course and MATH 2501 will not exceed 4 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 2500 and first-year standing. [4] (MNS)

MATH 2610. Ordinary Differential Equations. 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. Not open to students who have earned credit for MATH 2400 or 2420 without permission. Total credit for this course and MATH 2400 will not exceed 4 credit hours; total credit for this course and MATH 2420 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: concurrent enrollment in 2501; or prior credit for either 2501 or both 2300 or 2310. [3] (MNS)

credit for this course and MATH 2820 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 2300, 2310, or 2501. [3] (No AXLE credit)

MATH 2820. Introduction to Probability and Mathematical Statistics. Discrete and continuous probability models, mathematical expectation, moment generating functions, and joint densities. Point estimation, confidence intervals, hypothesis testing, and applications. Students taking 2820 are encouraged to take 2820L concurrently. Not open to students who have earned credit for MATH 2810 without permission. Total credit for this course and MATH 2810 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 2300, 2310, or 2501. [3] (MNS)

MATH 2820L. Statistics Laboratory. Applications 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 3000. History of Mathematics. 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 (or 2310) with either 2410 or 2600. [3] (MNS)

MATH 3010. Intensive Problem Solving and Exposition. Intended to develop widely-applicable mathematical skills. Basic principles such as induction, the pigeonhole principle, symmetry, parity, and generating functions. Prerequisite: 2300, 2310, or 2500. [3] (MNS)

MATH 3100. Introduction to Analysis. 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 (or 2310) with either 2410 or 2600. [3] (MNS)

MATH 3110. Complex Variables. 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, 2310, or 2501. [3] (MNS)

MATH 3120. Introduction to Partial Differential Equations. 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. 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. Prerequisite: Either 2501; or both 2300 (or 2310) with either 2410 or 2600. [3] (MNS)


MATH 3210. Transformation Geometry. 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 3230. Introduction to Differential Geometry. Smooth maps, tangent space, and surfaces and hypersurfaces in n-dimensional Euclidean space. Inverse and Implicit Function theorems. Sard's theorem. Transversality. Degree of a map; intersection theory modulo 2. Orientability and oriented intersection number. Prerequisite: 2501 or both 2300 and either 2410 or 2600. [3] (MNS)

MATH 3300. Abstract Algebra. Fundamental properties of integers and polynomials. Elementary properties of groups, rings, integral domains, fields, and lattices. Prerequisite: 2410, 2600, or 2501. [3] (MNS)

MATH 3310. Introduction to Mathematical Logic. 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. 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. 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. 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. 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 and applications. Prerequisite: 2810 or 2820. Co-requisite 2410, 2501, or 2600 [3] (MNS)

MATH 3641. Mathematical Statistics. 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 2820L. Prerequisite: 3640. [3] (MNS)


Probabilistic topics: Markov chains and Poisson processes. Prerequisite: 3650 and either 2810, 2820 or 3640. [3] (MNS)


MATH 3670. Mathematical Data Science. Linear methods for regression and classification, bias-variance tradeoff, and basis expansions and regularization. Kernel methods, support vector machines, dimension reduction, and clustering algorithms. Serves as repeat credit for MATH 3890-01 in Fall 2017. Prerequisite: one of 2810, 2820, or 3641; and one of 2410, 2501, or 2600. [3] (MNS)

MATH 3700. Discrete Mathematics. 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. 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. 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 more than one section of this course each semester. Prerequisite: 2501; or both 2300 (or 2310) with either 2410 or 2600. [1-3; maximum of 12 credits total for all semesters of MATH 3890 and 3895 combined] (No AXLE credit)

MATH 4110. Partial Differential Equations. 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 4300. Modern Algebra. Group theory through Sylow theorems and fundamental theorem of finitely generated abelian groups. Prerequisite: 3300. [3] (MNS)

MATH 4301. Modern Algebra. 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. 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 (or 2310) with either 2410 or 2600. [3] (MNS)


MATH 4610. Methods of Mathematical Physics. 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. 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. Applications to networks, management, engineering, and physical sciences. Familiarity with computer programming is expected. Prerequisite: either 2410, 2600, or 2501. [3] (MNS)

MATH 4630. Nonlinear Optimization. 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 (or 2310) and either 2410 or 2600. [3] (MNS)

MATH 4650. Financial Stochastic Processes. 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 discretetime option pricing and delta hedging. Prerequisite: 3650 and either 2810, 2820, or 3640. [3] (MNS)


MATH 4700. Combinatorics. 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 background 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 4700. Prerequisite: 2410, 2600, or 2501. [3] (MNS)


MATH 4999. Senior Thesis. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

MHS 1111. First-Year Writing Seminar. 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 1500. Introduction to Microbiology. Diversity of bacteria and viruses. Genetics and metabolism of bacteria. Pathogenesis, host immune defense mechanisms, rationale for antimicrobial drugs. Bacteria, fungi, viruses, and parasites important to humans. No credit for students who have earned credit for NURS 1500. [3-4] (MNS)

MHS 1600. Introduction to Nutrition and Health for a Changing World. Nutrition science and research; basic principles of digestion and absorption; role of specific nutrients and dietary practices in health promotion and
chronic disease prevention. Nutrition throughout the lifespan. Not intended for students who have previously taken NURS 1601 or NURS 1602. [3] (MNS)


MHS 1930. Social Dimensions of Health and Illness. Multidisciplinary introduction to health conditions from perspectives of anthropology, economics, history, political science and policy studies, philosophy, religious studies, and sociology. Guest lectures by representatives of various disciplines. [3] (P)


MHS 1960. Health Humanities. Cultural, political, and material aspects of human health through novels, memoirs, articles, poems, and films. Serves as repeat credit for students who have earned credit for MHS 3890-04 offered spring 2019 and fall 2018. [3] (HCA)


MHS 2130. Social Movements and Community Action. The literature of social activism. How citizens individually and collectively accomplish and resist social change. Historical and contemporary health movements as case studies to illustrate the advantages and limitations of social change strategies. [3] (SBS)

MHS 2150. Medical Humanities. 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. [3] (HCA)


MHS 2240. Bionic Bodies, Disability Cultures. Historical and cultural evolution of prosthetics, artificial limbs, and other assistive technologies. Shifts in social views resulting from war, economics, and art and design. [3] (HCA)


MHS 2320. Medicine, Law, and Society. 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. [3] (SBS)

relationships between cultural values and health policy; and cultural explanations that shape men's health campaigns. [3] (SBS)

MHS 2333. Policing the Pandemic. Full description pending. [3]

MHS 2350. Italian Representations of Wellness and Illness. From 1300 to the present. Depictions of health and sickness in Italian literature, art, and film. Historical, cultural, and social dimensions of health in Italy and changes in the societal approach to health. Italian society's views on health, wellness, and the stigmatization of physical and mental illness. [3] (INT)


MHS 2420. Economic Demography and Global Health. 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. 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. [3] (SBS)


MHS 2940. Race, Citizenship, and Health. Social and historical impacts of immigration, settlement, nation formation, labor exploitation, imperialism, and globalization on populations categorized as victims, vectors of disease, or sanitary citizens. Health as a key site in which the meaning of race and citizenship are developed and navigated. [3] (P)

MHS 2950. Healing Animals. Animals as subjects of medical research and as patients in veterinary medicine. Health of animals as friends, food, entertainment, and vectors of disease. Celebration and concealment of the centrality of animals in modern medicine through legal, economic, social, and emotional techniques. [3] (P)

MHS 3000. Undergraduate Seminar. 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 3010. Global Health Principles and Practice. Introduction to major global health principles and practices in the developing and developed world. Perspectives of public health practitioners and critical thinking about global health challenges and solutions. [3] (P)


MHS 3030. Community Health Research. 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. Narrative analysis, and other humanistic, interpretative practices of relevance to medicine and health. [3] (HCA)

MHS 3101. Human Anatomy and Physiology I. Structure and function of the human organism. Integration of the gross anatomical structures and organ systems with microscopic structure, physiological function, and homeostatic mechanisms. Clinical relevance of selected topics. One semester of a college-level course in biology or chemistry is expected. [4] (MNS)

MHS 3102. Human Anatomy and Physiology II. Continuation of 3101. Structure and function of the human organism. Integration of the gross anatomical structures and organ systems with microscopic structure, physiological function, and homeostatic mechanisms. Clinical relevance of selected topics. [4] (MNS)


MHS 3150. Death and Dying in America. 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. 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 3250. Perspectives on Trauma. 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. [3] (SBS)


MHS 3333. Health Policy and the Trump Administration. Full description pending. [3]

MHS 3350. Medicine, Religion, and Spirituality. 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. [3] (No AXLE credit)

MHS 3450. Mental Illness Narratives. Mental illness experiences through memoir, film, and spoken word. Serves as repeat credit for MHS 3890 Section 01 in Spring 2017. [3] (P)
MHS 3830. Service Learning. Under faculty supervision, students will design a program of community service associated with a set of learning objectives. The service component (3830) 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, 3831, will consist of an independent study in the relevant discipline and must be closely linked to the issue(s) addressed in 3830. For example, a student may provide services to the elderly in nursing homes and use 3831 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. Must be taken Pass/Fail and concurrently with 3831. 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. Corequisite: 3831. [1-3] (No AXLE credit)

MHS 3831. Service Learning Research and Readings. Under faculty supervision, students will design a program of community service associated with a set of learning objectives. The service component (3830) 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 - 3831 - will consist of an independent study in the relevant discipline and must be closely linked to the issue(s) addressed in 3830. For example, a student may provide services to the elderly in nursing homes and use 3831 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: 3830. [1-3] (No AXLE credit)

MHS 3850. Independent Study. A program of reading and/or research in one area of MHS studies to be selected in consultation with an adviser. 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 preperation 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. 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 3881. Internship Readings and Research. 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. Students will write a substantial research or interpretative paper
under the supervision of a regular Vanderbilt faculty member. Corequisite: 3880. [Variable credit: 1-6] (No AXLE credit)

MHS 3890. Special Topics. 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. Cross-cultural analysis of mental illness; the emergence of cultural psychiatry; and the globalization of biopsychiatry and neuroscience. [3] (P)


MHS 4998. Honors Research. Offered on a graded basis only. Limited to seniors admitted to the departmental honors program. [3] (No AXLE credit)

MHS 4999. Honors Thesis. Offered on a graded basis only. Limited to seniors admitted to the departmental honors program. [3] (No AXLE credit)

Neuroscience

NSC 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

NSC 2060. Elective (Cellular and Molecular). This course has no Vanderbilt equivalent. Credit is eligible to count toward the Cellular and Molecular elective.

NSC 2065. Elective (Systems and Integrative). This course has no Vanderbilt equivalent. Credit is eligible to count toward the Systems and Integrative elective.

NSC 2201. Neuroscience. 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 2222. Classical Neuroscience. History of key concepts in modern neuroscience, their context and impact through the original scientific articles that introduced them, with emphasis in their application in furthering oral and writing science communication skills. [3] (MNS)

NSC 3235. Biological Basis of Mental Disorders. Cellular and molecular neuropathology of cortical dysfunction resulting from affective disorders, drug addiction, neurodegenerative disease, and stroke. Prerequisite: NSC 2201 and BSCI 1510. [3] (MNS)


NSC 3260. Psychopharmacology. Actions of therapeutic drugs for psychiatric disorders and of drugs of abuse. Molecular mechanisms of effects on perception, cognition, and emotion. Serves as repeat credit for NSC 3630 or PSY 3630. Prerequisite: NSC 2201 and CHEM 2211 or 2221. [3] (MNS)


NSC 3270. Computational Neuroscience. 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 or 1104, and either MATH 1200 or 1300. [3] (MNS)


NSC 3274. Neuroanatomy. Functional and comparative anatomy of nervous systems, emphasis on vertebrate brains. Fundamental concepts, organizational principles, structure, connectivity, and how these relate to function and behavior. Demonstrations using plates with human brain sections. Offered on a graded basis only. Prerequisite: 2201. [3] (MNS)

NSC 3630. Drugs and Behavior. Drug effects on neural circuits, human physiology, individual psychology, and society. Serves as repeat credit for students who have earned credit for NSC 3260 or PSY 3630. Prerequisite: 1200 or NSC 2201. [3] (SBS)

NSC 3851. Independent Reading in Neuroscience. 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. 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. 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. 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. 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. 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. 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. 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. 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. Seminar with advanced reading, discussion, and writing on a specific topic in neuroscience. Limited to seniors. [3] (No AXLE Credit)
NSC 4999. Honors Research. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

PHIL 1002. Introduction to Philosophy. 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. 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 1002. [3] (HCA)

PHIL 1003. General Logic. 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. 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. 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 1004. [3] (INT)


PHIL 1008. Introduction to Medical Ethics. 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. Moral issues in the practice of medicine, biomedical research, policies and regulations related to health care. Repeat credit for students who have completed 1008. [3] (P)

PHIL 1100. Introduction to Business Ethics. 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. 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. 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. 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 1200. [3] (HCA)

PHIL 1865. Civil War: Philosophical Perspectives. Problems in social and political philosophy as seen through the lens of the U.S. Civil War. Moral criteria for justifying secession and war, existential perspectives on mass death, ethical paradoxes of slaveholding in a democratic republic, meanings of race and nation, uses and abuses of history and memory. [3] (HCA)
PHIL 2100. Ancient Philosophy. 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. 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. 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 2110. Contemporary Philosophy. 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 2608. Death and Dying. Death and dying. Ethical issues. Work on concepts central to ethical reasoning about life, dying, and death, and on topics such as end-of-life decision making, euthanasia, advance directives, allocation, and equipoise. [3] (HCA)

PHIL 2660. Philosophy of Music. 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. 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 3005. Jewish Philosophy. 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. Introduction to the major figures of Islamic philosophy including Kindi, Razi, Farabi, Avicenna, and Ibn Khaldun. [3] (INT)

PHIL 3007. French Feminism. Introduction to the tradition of French feminist philosophy, including relevant works by Beauvoir, Cixous, Irigaray, Kristeva, LeDoeuff, Kofmann, and others. [3] (No AXLE credit)

PHIL 3008. American Philosophy. A study of the works of selected American philosophers from the colonial period to the present. [3] (US)

PHIL 3009. Existential Philosophy. A study of two or three existential philosophers and selected problems that arise in relation to their thought. [3] (HCA)
PHIL 3010. Phenomenology. 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. 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. 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. 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. 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. Focus on alternative conceptions of time and history in Aristotle, Augustine, Kant, Hegel, Heidegger, and Benjamin. [3] (HCA)


PHIL 3606. Moral Problems. 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. 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 3607. Philosophy of Religion. A study of various problems concerning religious experiences; ideas about religion and divinity. [3] (HCA)

PHIL 3608. Ethics and Medicine. Selected ethical issues raised by clinical practice, medical theories, and biomedical research and technology. Not open to students who have earned credit for PHIL 1111-03 without permission. Total credit for this course and PHIL 1111-03 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1005, 1008, or 1008W. [3] (P)

PHIL 3610. Ethics and Law. 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] (SBS)

PHIL 3610W. Ethics and Law. 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] (SBS)

PHIL 3611. Environmental Philosophy. 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. 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. 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 3617. Philosophy of Language. 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] (SBS)

PHIL 3618. Philosophy and Literature. 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. 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. 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. 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. 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. 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. The impact of the idea of evolution on our conception of personhood. Theistic and non-theistic approaches to philosophical anthropology, ethics and society, the theory of knowledge, the mind-body problem, and relations with the environment and other species. [3] (P)

PHIL 3661. Topics in Aesthetics. Philosophy of art and aesthetic theory. [3] (HCA)


PHIL 3851. Independent Readings. 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 3852. Independent Readings. 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. 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. 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. Honors Independent Study. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

PHYS 1010. Introductory Physics. Normally accompanied by 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. [3] (MNS)

PHYS 1010L. Introductory Physics Laboratory. 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 1020. Physics for Future Leaders. General physics relevant to public policy. Energy and its generation; the greenhouse effect; light and radiation; nuclear fission and nuclear weapons; quantum mechanics and semiconductors; science on the internet; government funding of science. [3] (MNS)

PHYS 1111. First-Year Writing Seminar. 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)

PHYS 1501. Introductory Physics for the Life Sciences I. 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. Serves as repeat credit for
PHYS 1601. Not open to students who have earned credit for 1901 without permission. Credit for this course and
1901 will not exceed 5 credit hours. [3] (MNS)

PHYS 1501L. Laboratory for Introductory Physics for the Life Sciences I. Laboratory to accompany Physics 1501.
Normally accompanied by 1501. Satisfies the AXLE lab course requirement when completed with 1501 (strongly
preferred) or 1601. Serves as repeat credit for PHYS 1601L. Not open to students who have earned credit for 1901
without permission. Credit for this course and 1901 will not exceed 5 credit hours. Credit reduced from second
course taken (or test or transfer credit) as appropriate. [1] (No AXLE credit)

PHYS 1502. Introductory Physics for the Life Sciences II. 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. Serves as repeat credit for PHYS 1602. Not open to students who have earned credit for 1902 without
permission. Credit for this course and 1902 will not exceed 5 credit hours. Credit reduced from second
course taken (or test or transfer credit) as appropriate. [3] (MNS)

PHYS 1602. General Physics I. Normally accompanied by 118a. 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. Serves
as repeat credit for PHYS 1501. Not open to students who have earned credit for 1901 without permission. Credit
for this course and 1901 will not exceed 5 hours. Credit reduced from second course taken (or test or transfer credit)
as appropriate. [3] (MNS)

PHYS 1601L. General Physics Laboratory I. Laboratory to accompany Physics 1601. Normally accompanied by
1601. Satisfies the AXLE lab course requirement when completed with 1601 (strongly preferred) or 1501. Serves as
repeat credit for PHYS 1501L. Not open to students who have earned credit for 1901 without permission. Credit for
this course and 1901 will not exceed 5 credit hours. Credit reduced from second course taken (or test or transfer credit)
as appropriate. [1] (No AXLE credit)

PHYS 1602L. General Physics Laboratory II. Laboratory to accompany Physics 1602. Normally accompanied by
1602. Satisfies the AXLE lab course requirement when completed with 1602 (strongly preferred) or 1502. Serves as
repeat credit for PHYS 1502L. Not open to students who have earned credit for 1902 without permission. Credit for
this course and 1902 will not exceed 5 credit hours. Credit reduced from second course taken (or test or transfer credit)
as appropriate. [3] (MNS)

PHYS 1911. Principles of Physics I. 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 weekly discussion on modern topics of interest. Not open to students who have earned credit in PHYS
1501, 1601, 1901, or 2051 without permission. Total credit for this course and PHYS 1501, 1601, or 2051 will not exceed 4
credit hours. Total credit for this course and PHYS 1901 will not exceed 5 credit hours. Credit reduced from second
course taken (or test or transfer credit) as appropriate. Corequisite: MATH 1301. [4] (MNS)

PHYS 1912. Principles of Physics II. Continuation of 1911. 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 weekly discussion on modern topics of interest. Not open to students who
have earned credit in PHYS 1502, 1602, 1902, or 2053 without permission. Total credit for this course and PHYS
PHYS 1902, 1602, or 2053 will not exceed 4 credit hours. Total credit for this course and PHYS 1902 will not exceed 5 credit hours. Credit reduced from second course taken (or test or transfer credit) as appropriate. Corequisite: MATH 2300 or 2500. [4] (MNS)

PHYS 1912L. Laboratory Skills for Physicists I. Fundamental laboratory skills and techniques. Experimental design, instrumentation, data handling and analysis, documentation, presentation of results. Prerequisite: 1501, 1601, 1911, or 2051. Corequisite: 1502, 1602, 1912, or 2053. [1] (No AXLE credit)

PHYS 2210. Classical and Modern Optics. 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 1912; and either MATH 1201 or 1301. [3] (MNS)


PHYS 2255L. Laboratory Skills for Physicists II. Fundamental laboratory skills and techniques. Experimental design, instrumentation, data handling and analysis, documentation, presentation of results. Prerequisite: 1502, 1602, 1912, or 2053; and 1912L or one of 1501L or 1601L and one of 1502L or 1602L. Corequisite: 2255 or 3651. [1] (No AXLE credit)


PHYS 2290. Electricity, Magnetism, and Electrodynamics I. 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: 2255 or 3651; and either MATH 2400, 2420, or 2610. [3] (MNS)


PHYS 2660. Experimental Nanoscale Fabrication and Characterization. Laboratory course introduction to nanofabrication and characterization. Independent and original research in nanotechnology and nanoscience. Nanomaterials, nanoelectronics, and photonics. [3] (MNS)

PHYS 2953L. Advanced Physics Laboratory: Introduction to Experimental Research. Fundamental physics experiments and measurements. Statistical analysis of measured data. One laboratory per week. Prerequisite: 2255L, and either 2255 or 3651; or 1912 and either 2255 or 3651; or either 2250W or 2260W. [1] (No AXLE credit)


PHYS 3200. Statistical Physics. Temperature, work, heat, and the first law of thermodynamics. Entropy and the second law of thermodynamics. Kinetic theory of gases with applications to ideal gases and electromagnetic radiation. Serves as repeat credit for students who have completed 3207. Prerequisite or corequisite: 2270 or 2275. [3] (MNS)
PHYS 3600. Seminar in Presenting Physics Research. Introduction, instruction, and practice in skills for presenting scientific research results. May be repeated for credit once, but students may earn only 1 credit per semester of enrollment and may count only 1 credit toward the major or minor in physics. Prerequisite: major or minor in Physics; and 2255 or 3651. [1] (No AXLE credit)


PHYS 3645. Radiation Detectors and Measurement. 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. Prerequisite: 2255 or 3125. [4] (MNS)

PHYS 3651. Quantum Mechanics I. Wave-particle duality, indeterminacy, superposition, the Schrödinger equation, angular momentum, the hydrogen atom, and spin and indistinguishability. Prerequisite: 2255; and Mathematics: MATH 2400; or one of (MATH 2410, 2600, 2501) and one of (MATH 2420, 2610). [3] (MNS)

PHYS 3652. Quantum Mechanics II. 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. Weak, strong, and electromagnetic forces as evidenced by the interactions of elementary particles. Classification of particles and experimental techniques. Corequisite: 2255 or 3651. [3] (MNS)


PHYS 3820. Methods in Physics Laboratory Teaching. Developing and running physics labs and classroom lecture demonstrations. Understanding safety protocols. Enrollment open only to students who are Secondary Education, Elementary Education, or Education Studies majors, are also either Physics majors or minors, and who have completed any 12 credit hours in satisfaction of requirements for major or minor in Physics. [3] (MNS)

PHYS 3850. Undergraduate Research. Research and scholarly investigation or directed readings in physics under close supervision of sponsoring faculty member. Enrollment by arrangement with sponsoring faculty member and approval of director of undergraduate studies. May be repeated for credit, for a total of no more than 10 total credit hours and for no more than 5 credit hours per semester. [1-5] (No AXLE credit)

PHYS 3890. Selected Topics. Prerequisite or corequisite: either 2250 or 2250W and either 2260 or 2260W. [1-3] (No AXLE credit)

PHYS 4005. Mathematical Methods for Physicists. Linear spaces and operators; matrix algebra; differential equations; Green's function; and complex analysis. Variational calculus; perturbation methods; group theory. Prerequisite: 2275, 2290; and one of MATH 2400, 2420, or 2610. [3] (MNS)

PHYS 4998. Honors Research and Senior Thesis. Independent experimental or theoretical investigations of basic problems in physics under faculty supervision, culminating in a written thesis submitted and an oral defense presented to a departmental faculty examination committee. Required for departmental honors in Physics. Enrollment by arrangement with sponsoring faculty member and approval of director of undergraduate studies. May be repeated for a total of 10 credits, but students may earn only up to 6 credits per semester of enrollment. Prerequisite: major in Physics, junior or senior standing. [1-6] (No AXLE credit)
Political Science

PSCI 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)


PSCI 1101. Introduction to Comparative Politics. 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. 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. 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)


PSCI 2170. ROCCA Lab I: Collaborative Research Skills. Basics of research design and social science communication. Participate in collaborative research projects under faculty supervision in the ROCCA Lab. Not open to students who have earned credit for 3895 section 01 offered spring 2020. Requires application to instructor. [3] (SBS)

PSCI 2171. ROCCA Lab II: Quantitative Reasoning. The intuition of quantitative reasoning. Collaborative research under faculty supervision in the ROCCA Lab. Not open to students who have completed 3895 section 01 offered spring 2020. Requires application to instructor. [3] (SBS)

PSCI 2201. Power and Resistance. Modern and contemporary political theories of power and resistance. Disciplinary power, biopower, sovereign power, and economic power. Law, violence, and revolution. [3] (HCA)


PSCI 2203. History of Modern Political Philosophy. Intensive analysis of the principal political philosophers in the modern tradition. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)

PSCI 2204W. American Political Thought. An analytical study of American political theories and their impact upon our political institutions. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (US)


PSCI 2207. Liberalism and Its Critics. 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 2207W. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)

PSCI 2207W. Liberalism and Its Critics. 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 2207. Prerequisite or corequisite: 1100, 1101 1102, 1103, or 1150. [3] (HCA)

PSCI 2208. Law, Politics, and Justice. Contemporary and classical theories of law and society: rights theories, gender and the law; 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. 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. 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 2211. Terrorism and Intrastate Conflict. Intrastate conflict and terrorism. Political violence. Organizational economics of militant groups; strategies for counterinsurgency. Data explorations and quantitative analyses. Offered on a graded basis only. No credit for students who have earned credit for 3895 section 02 offered fall 2018 or 3895 section 01 offered fall 2017. Prerequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2212W. Populism in Europe and Beyond. Rise of populist parties in advanced democracies. Theoretical and conceptual questions underlying the nature of populism. Right-wing populist parties from programs and voter base to organization and party leadership. Not open to students who have earned credit for 3894 section 01 offered fall 2019, or for EUS 2240 section 02 offered fall 2018, or for EUS 2240 section 01 offered spring 2018, or for 3895 section 01 offered spring 2017. [3] (SBS)

PSCI 2213. Democratization and Political Development. Comparative study of political development, with a focus on institutions. The effect of political choices about 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. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2215. Change in Developing Countries. 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. 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 2217. Development in South Asia. Political economy of development in South Asian countries, with a focus on India, Pakistan, and Bangladesh. Democracy, growth, poverty, inequality, education, health, and gender equity. Offered on a graded basis only. No credit for students who have earned credit for 3894-01 offered fall 2016, fall 2017, or fall 2018. [3] (SBS)

PSCI 2219. Politics of Mexico. 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. 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. 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. Critical analysis of major international and domestic factors shaping U.S. foreign relations as reflected in selected twentieth- and twenty-first-century experiences. Not open to students who have earned credit for PSCI 1111-01 without permission. Total credit for this course and PSCI 1111-01 will not
PSCI 2223. European Political Economy and Economic Institutions. 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. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2224W. Gender and Politics. Gender inequality; political representation; women and politics. Not open to students who have earned credit for 3894 section 02 offered spring 2020, 3894 section 02 offered spring 2018. [3] (SBS)

PSCI 2225. International Political Economy. 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. 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 2228W. The Political Economy of Gender. Female labor force participation; women's political representation; gender equality. Not open to students who have earned credit for 3894 section 01 offered spring 2020. [3] (SBS)

PSCI 2230. Middle East Politics. 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 2235. The United States Military. Structure and culture of the U.S. military across all branches. Policy issues related to the armed forces. The soldier and military in art and popular culture. [3] (US)

PSCI 2236. The Politics of Global Inequality. 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. 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. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)


PSCI 2240. Political Parties. 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 co-requisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2240W. Political Parties. 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. Serves as repeat credit for students who have completed 2240. [3] (SBS)

PSCI 2242W. Inter-branch Policy-making in the United States. Policy-making in the United States by all three branches of government. Political conflict between Congress, the president, executive branch agencies, and the courts. Inter-branch bargaining over public policy. [3] (SBS)

PSCI 2243. Political Campaigns and the Electoral Process. 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] (SBS)

PSCI 2245. The American Presidency. 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 2246W. Civil Conflict and Civilians. Regional case studies of territorial jurisdiction, succession, natural resources, colonial legacies, and socio-political identities. Criminal conflict in Mexico; intervention in El Salvador and Guatemala; African civil wars; and failed uprisings in the Middle East. Social movements and out-migration. Causes, duration, and consequences of civil conflicts. [3] (SBS)


PSCI 2255. Public Policy Problems. 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 2256. Politics of Public Policy. Understanding and navigating the policy process. Public opinion, media, elections, interest groups, and agenda settings. Legislatures, executives, decision making, implementation, and policy feedback. Current policy issues. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2259. Political Strategy and Game Theory. 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. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (SBS)

PSCI 2262. The Judicial Process. 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. Religion in modern societies. Faith and civic culture, religion's presence in the public square, religion and colonialism, abortion, gay marriage, faith-based initiatives. 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. Supreme Court's interpretation of the Bill of Rights and the Fourteenth Amendment. Case method. No credit for students who have earned credit for 261. Repeat credit for students who 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. The history of voting rights and the efficacy of representation in the American political system. Political participation, voting rights, felony disenfranchisement, redistricting, and alternative electoral systems. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (US)
PSCI 2270. Conducting Political Research. 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] (SBS)


PSCI 2274. Nature of War. 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 2300. Introduction to Data Science for Politics. Problems and techniques using data and statistics to describe and understand political phenomena. [3] (SBS)

PSCI 3206. Radical Political Theory. Major frameworks of modern and contemporary political theory. Subjection and domination, communism and capitalism, feminism and politics of work, neoliberalism and biopower, and colonialism and politics of race. [3] (HCA)

PSCI 3211. The European Union. 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. 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 3219. La politica de América Latina. Optional discussion taught in Spanish. Open to students concurrently enrolled in PSCI 3217, and who have proficiency in Spanish at or above intermediate-level. Corequisite: 3217. [1] (No AXLE credit)

PSCI 3228. International Politics of Latin America. 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. 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] (SBS)

PSCI 3235. Political Islam. 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. 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. 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. 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. 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. 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. 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 3255. Democratic Theory and Practice. 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. 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 3265. Human Rights in Activism. Role of human rights in struggles against injustice. Identification of key problems of injustice addressed by a human rights framework. Problems with human rights as a tool for activism. Discussion in contemporary politics. Intellectual and legal traditions that have developed around human rights. No credit for students who have earned credit for PSCI 3896 section 01 offered fall 2016. Offered on a graded basis only. [3] (INT)

PSCI 3266. Climate Change Justice. The challenge of addressing catastrophic climate change. Rationales for integrating or separating global climate and justice goals. Relationship between greenhouse gas emissions and poverty. Global and local public and private policy for climate change and justice. Offered on a graded basis only. [3] (INT)


PSCI 3271. Feminist Theory and Research. 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 3273. Networks and Politics. How webs of social relationships affect political behavior; applications to American politics, Comparative politics and international relations. Both online and offline social networks. Concepts, theory, and empirics. Prerequisite: 1101 or 1102. [3] (SBS)

PSCI 3274. Advanced Readings in Middle East Politics. Recent books on Middle East. Relevance of works to regional political, social, and economic problems. Prerequisite: 2230. [3] (P)

PSCI 3275. National Security. 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 3333. Law, Politics, and Justice in Times of Crisis. Contemporary and classical theories of law, politics and justice: rights theories, gender, race and the law; law and democratic politics; political institutions. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (HCA)


PSCI 3841. Directed Study. 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 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. 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 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 3841, 3842, 3851, and 3852] (No AXLE credit)

PSCI 3851. Independent Research. 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 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 3841, 3842, 3851, and 3852] (No AXLE credit)

PSCI 3852. Independent Research. 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 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 3841, 3842, 3851, and 3852] (No AXLE credit)
PSCI 3880. Internship Training. 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 3881. Internship Readings and Research. Under faculty supervision, students from any discipline can gain experience in a variety of settings relevant to Political Science. Hours earned are based upon readings and/or research supervised by a faculty member. A minimum of 1 hour in background readings and research must be completed in PSCI 3881 concurrently with and regardless of the number of hours earned in PSCI 3880. A substantial research paper must be submitted at the end of the semester during which the internship training is completed. These hours may count in the minimum required for the major. Normally, a 3.0 grade point average, 6 hours of prior work in Political Science, and prior approval of a specific plan of work by the director of undergraduate studies are required. Offered on a graded basis only and must be taken concurrently with PSCI 3880. Corequisite: PSCI 3880. [1-6] (No AXLE credit)

PSCI 3891. Topics in Contemporary Politics. 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. 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. 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. 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. 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. 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. 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. Commerce and capitalism in social and political life from the eighteenth century to the present. Questions of justice and equality, freedom, and democratic politics. Prerequisite or corequisite: 1100, 1101 1102, 1103, or 1150. [3] (HCA)

PSCI 4277. Future of Warfare. 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. 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. Open only to seniors in the departmental honors program. Prerequisite or corequisite: 1100, 1101, 1102, 1103, or 1150. [3] (No AXLE credit)
PORT 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

PORT 1103. Intensive Elementary Portuguese. 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. [3] (INT)

PORT 1111. First-Year Writing Seminar. 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. 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. 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. Not open to students who have earned credit for PORT 1111 Section 01 without permission. Total credit for this course and PORT 1111 Section 01 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (P)


PORT 3302. Brazilian Pop Culture. 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. 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. 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. 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. 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. 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. 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. Brazilian literature from the Semana de Arte Moderna to the present. Modernist and neo-Modernist movements. Prerequisite: 3303. [3] (HCA)

Psychology (AS)

PSY 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

PSY 1111. First-Year Writing Seminar. 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. 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. Not open to students who have earned credit for 1111, sections 1, 2, or 3. Total credit hours for this course and 1111 (sections 1, 2, or 3) will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (SBS)

PSY 2100. Quantitative Methods. 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 3100. Abnormal Psychology. 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. 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. 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. 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. 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. 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. 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. 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. Drug effects on neural circuits, human physiology, individual psychology, and society. Serves as repeat credit for students who have earned credit for NSC 3260 or NSC 3630. Prerequisite: 1200 or NSC 2201. [3] (SBS)

PSY 3635. Health Psychology. Neurophysiological, endocrine, and immune systems. Factors underlying health habits and lifestyles. 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. Optimal functioning in human psychology. Interdisciplinary approaches to well being, character strengths and virtues, positive emotions, and clinical implications. Not open to students who have earned credit for 1111, section 13. Total credit hours for this course and 1111, section 13, will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. 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. 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. 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 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3730. Learning and Memory. Principles of learning and memory and their neural bases. Classical and operant conditioning; declarative and procedural memories; working memory and cognitive control. Strategies for optimizing learning in college; emotional and social influences; aging and diseases of the brain. Not open to students who have earned credit for 1111, section 8. Total credit hours for this course and 1111, section 8, will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Prerequisite: 1111 section 1, 2, or 3, or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3750. Perception. 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: Either PSY 1111 section 1, 2, or 3 or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3755. Behavioral Decision-making. Affective, cognitive, and motivational processes involved in human judgment and decision-making. Accurate and inaccurate judgments. Optimal and suboptimal decisions. Offered on a graded basis only. Prerequisites: 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. 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. 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. 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] (MNS)

PSY 3785. Brain Damage and Cognition. 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 3780. The Visual System. 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] (MNS)

PSY 3810. Spatial Cognition. Cognitive and neural processes involved in spatial learning, memory, and navigation. Types and nature of spatial knowledge; path integration and wayfinding; gender and cultural differences in navigational skill; effects of technology (e.g., mapping applications); aging and diseases of the brain; comparative perspectives (humans vs. other mammals & insects). Serves as repeat credit for PSY 3810W or PSY 3891-01 in Fall 2017. Prerequisite: 1111 section 1, 2, or 3, or 1200; or a major in Child Development, Child Studies, or Cognitive Studies. [3] (SBS)

PSY 3810W. Spatial Cognition. Cognitive and neural processes involved in spatial learning, memory, and navigation. Types and nature of spatial knowledge; path integration and wayfinding; gender and cultural differences in navigational skill; effects of technology (e.g., mapping applications); aging and diseases of the brain; comparative perspectives (humans vs. other mammals & insects). Serves as repeat credit for PSY 3810. 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. 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. 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 3880. Internship Training. Under faculty supervision, students from any discipline can gain experience in a broad range of public and private organizations, institutions and agencies. Work must be related to issues within the spectrum of psychological science, including, but not limited to, neuroscience, clinical psychology, applied psychology, human development, behavior and performance. Credit hours earned are based upon actual work performed at the internship site. A minimum of 3 credit hours in background reading and research must be completed in PSY 3881 concurrently with and regardless of the number of hours earned in PSY 3880. A substantial research paper or report must be submitted at the end of the semester during which the internship is completed. These credit hours may NOT count in the minimum required for the Psychology major or minor. Normally, a 3.0 grade point average, 6 hours of prior course work in Psychology, and prior approval of a specific plan of work by the Director of Undergraduate Studies in Psychology are required. Offered on a Pass/Fail basis only and must be taken concurrently with PSY 3881. Corequisite: PSY 3881 Variable credit. [1-9] No AXLE Credit.

PSY 3881. Internship Readings and Research. Under faculty supervision, students from any discipline can gain experience in a broad range of public and private organizations, institutions and agencies. Work must be related to issues within the spectrum of psychological science, including, but not limited to, neuroscience, clinical psychology, applied psychology, human development, behavior and performance. Credit hours earned are based upon readings or
research supervised by one or more faculty to lend some intellectual foundation to the internship experience. At least one faculty supervisor must be a member of the Psychology Department in the College of Arts and Science at Vanderbilt. A minimum of 3 credit hours in background readings and research must be completed in PSY 3881 concurrently with and regardless of the number of hours earned in PSY 3880. A substantial research paper or report must be submitted at the end of the semester during which the internship training is completed. These credit hours may not count in the minimum required for the Psychology major or minor. Normally a 3.0 grade point average, 6 hours of prior course work in Psychology and prior approval of a specific plan of work by the Director of Undergraduate Studies in Psychology are required. Offered on a graded basis only and must be taken concurrently with PSY 3880. Corequisite: PSY 3880. [3-6] (No AXLE credit)

PSY 3890. Special Topics in Perception. 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. 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. 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. 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. 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. Individual readings, reports, and seminar discussions of research areas representative of psychological science at Vanderbilt. The ethical conduct of research, advanced research methods and design, and philosophy of science are representative content areas. Open only to departmental honors candidates. [3] (No AXLE credit)

PSY 3981. Honors Seminar. 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 3990. Teaching Psychological Science. Taken concurrently with an undergraduate course-coordinator or course-assistant appointment. Responsibilities and challenges, teaching techniques, and student engagement. Student-centered learning and teaching. Culminates with each student preparing and delivering one classroom session. Instructor's permission required to register. [3] (SBS)

PSY 3995. Directed Study for Learning Assistants. Participation as a Learning Assistant for a PSY course under direction of a PSY faculty member. Consent of both the course instructor 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. Offered on a graded basis only. Prerequisite: 1111 section 1, 2, or 3 or 1200. [3] (No AXLE credit)


PSY 4218. Computational Cognitive Modeling. Computational modeling of human perception and cognition. Model implementation, parameter estimation, and statistical model evaluation; developing and testing new models; stochastic processes, simulation, and Monte Carlo methods; high-performance computing. Recommended: prior (or concurrent) completion of PSY 3120, 3760, 3775, 3780, or NSC 3270. Prerequisite: one of CS 1101, 1103, or 1104. [3] (MNS)
PSY 4219. Scientific Computing for Psychological and Brain Science. Computer programming, scientific computing methods, and high performance computing applied to psychological and brain sciences problems, such as experimental control, data analysis and visualization, image and signal processing, optimization, and simulation. Some prior coursework in psychology or neuroscience recommended. Prerequisite: CS 1101, 1103, or 1104 [3] (MNS)

PSY 4220. Bayesian Modeling with Python. Statistical and cognitive modeling. Models of memory, psychophysics, categorization, and decision-making. Probabilistic programming in Python. Bayesian parameter estimation and model comparison. Recommended: prior completion of one or more of 3120, 3755, 3760, 3775, or 3780. Prerequisite: one of 4218, CS 1101, 1103, 1104, or NSC 3270. [3] (MNS)


PSY 4730. Laboratory in Experimental Psychology. Experimental methods in psychological science. Evaluation of scientific literature, development of testable hypotheses, and computer-based experimentation including programming, data collection, and analysis. Prerequisite: 2150; and 2100 or PSY-PC 2110. [3] (MNS)

PSY 4775. Models of Human Memory. Mathematical and computational models of the cognitive processes underlying human memory. Attribute-based models, instance theories, neural network models, retrieved-context models, executive function, and working memory models. Methods of fitting models to empirical data. Prerequisite: 3775, and one of CS 1101, 1103, or 1104. [3] (MNS)

PSY 4998. Honors Thesis. 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. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

PPS 2200. Social Contexts of Public Policy. Sociological underpinnings and aims. Theoretical and empirical works in sociology, anthropology, political science, and economics. Public policy outcomes and their relation to broader social structures, goals, and values. [3] (SBS)


PPS 3150. Public Finance. State and local government finance. Revenue sources including taxation, debt, and fees. Financing and budgeting tools. The politics of financial decision making for state and local governments. No credit for students who have earned credit for 3890-01 offered spring 2017 or spring 2018. [3] (SBS)


PPS 3850. Independent Research in Public Policy. Normally only open to majors in Public Policy Studies. May be repeated for a total of 6 credit hours, but students may only earn up to 3 credits per semester of enrollment. [1-3] (No AXLE credit)

PPS 3890. 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)

PPS 4960. Senior Seminar on Research in Public Policy. Supervised research project in policy area incorporating methodologies and analytical insights from more than one discipline. Offered on a graded basis only. [3] (SBS)

PPS 4980. Senior Honors Seminar. Senior honors thesis development. [3] (No AXLE credit)

PPS 4981. Senior Honors Seminar. Senior honors thesis development. [3] (No AXLE credit)

Religious Studies

RLST 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)


RLST 1100. Introduction to African American Religious Traditions. 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. 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. 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] (SBS)

RLST 1200. Introduction to Judaism. 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. 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. 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, sufism and political philosophy. Islam in Africa, India, Spain, and southeast Asia as well as the Middle East. [3] (HCA)


RLST 1820. Religion, Sexuality, Power. 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 2220. Jewish Ethics. A study of the logic and basic values that, in the Jewish tradition, guide thinking about moral problems. Examination of family and social ethical issues found in Talmud and other Jewish classical texts. Basic religious views of modern Jewish thinkers and their relation to contemporary Jewish life. Offered alternately with 1200. [3] (HCA)

RLST 2250W. History of the Bible. Jewish and Christian Bibles from the formation of earliest bibles to the present. Major forms of the Bible, major interpretive approaches, and impact on politics and culture. [3] (HCA)

RLST 2310. Interpreting the Gospels. 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. 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 2472. Religion, Ecology, and Power in Africa. 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 2811. Natural Science and the Religious Life. How scientific discoveries and religious teachings are related. Descriptions of the physical universe from Aristotle through Albert Einstein are compared to contemporaneous definitions of the moral life by religious thinkers such as Thomas Aquinas, Martin Luther, Immanuel Kant, and Martin Buber. [3] (P)


RLST 3119. Martin Luther King, Jr., and the Social Roles of Religion. 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 3129. Race and Religion in America. The religious foundations of racial myths, symbols, images, conflicts, and cultures from the sixteenth century to the present. Gender, violence, sexuality, media, and popular culture. [3]. (US)


RLST 3229. The Holocaust: Its Meanings and Implications. 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. [3] (P)

RLST 3270. Jewish Theories of Religion. 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. Evangelical traditions from the reformation to their present 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. 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. An introduction to Pauline Christianity and its place in the early church, using the letters of Paul, the deuto-Paine letters, and the portrait of Paul in Acts. [3] (HCA)

RLST 3316. Christianity in the Reformation Era. 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. 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 3472. Religion and Climate Change. Role of religion in climate change and as response to planetary catastrophe. Religious and literary texts. Historical, philosophical, and anthropological work. [3] (P)


RLST 3650. Classical Philosophies of India. 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. 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 premodern to modern periods, and local to global contexts. [3] (INT)


RLST 3749. Zen Buddhism. 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. 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. 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. 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. 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 3921. Ethics and Ecology. Relationships among humans, nature, and the sacred. Focus on understandings of our 'dominion' over non-human nature. The role of religion in shaping attitudes and behaviors regarding the environment. Topics include eco-centered ethics, 'creation care,' reliance on fossil fuels, and alternative sustainable scenarios. [3] (SBS)

RLST 3926. Ancient Goddesses. 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. 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. 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 4371. Through the Eyes of the Other: A History of Muslim-Christian Relations. Travelogues and interpretive accounts of encountering the religious and cultural 'Other,' Christian or Muslim. Increased awareness of long-standing relationship between two major religious traditions. Offered on a graded basis only. [3] (HCA)

RLST 4551. Islamic Mysticism. 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 4554. The Qur'an and Its Interpreters. 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. 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. 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. 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: 1820. [3] (SBS)

RLST 4835. Freudian Theories and Religion. 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 4837. Psychology of Religious Myth and Ritual. 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)


RLST 4939. Religious Autobiography. The construction of identity in religious autobiography: motivations (personal salvation, witness, proselytism); relationships among self, God, and religious tradition; role of memory; cultural, gender, and religious differences. Readings may include Augustine, Gandhi, Malcolm X, Angelou, Wiesel. [3] (P)

RLST 4960W. Approaches to the Academic Study of Religion. Theories and methods for the academic study of religious traditions. Open only to junior and senior majors and minors. [3] (HCA)

RLST 4970. Majors Colloquium. Regular presentations and critical readings of student projects and professional writings. May be repeated for credit twice for a total of 3 credit hours. Open only to majors. [1] (No AXLE credit)

RLST 4998. Senior Honors Thesis. Reading of primary research sources and writing an honors thesis under the supervision of the thesis adviser. Open only to senior departmental honors students. [3] (No AXLE credit)
RLST 4999. Senior Honors Thesis. Reading of primary research sources and writing an honors thesis under the supervision of the thesis adviser. Open only to senior departmental honors students. [3] (No AXLE credit)

Robert Penn Warren Center

RPW 2610W. A Hands On History of the American Research University. Vanderbilt as a case study of the American research university after the Civil War. Literary and artistic works. Thematic and chronological attention: Rise of the University; the Gilded Age; Great Depression; World War II and the Cold War; the Civil Rights Movement; and the present day. Primary documents from the University Archives and Special Collections. [3] (US)

RPW 3333. Rethinking Pandemics: A Cultural History from Antiquity to Now. Description pending. [3]

Russian

RUSS 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

RUSS 1101. First-Year Russian. Elementary conversation and reading with an emphasis on everyday situations. Introduction to Russian culture and life through contemporary Russian materials. No credit for students who have earned credit for a more advanced Russian language course. [4] (No AXLE credit)

RUSS 1102. First-Year Russian. 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. [4] (INT)

RUSS 1111. First-Year Writing Seminar. 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 1500. Introduction to Russian and East European Studies. History and culture of Russia and East Europe, 1700-present. Political history, intellectual history, literature, and culture of region. Russia and East Europe in historical and geopolitical context. [3] (P)


RUSS 1910W. 19th Century Russian Literature. Literature as a battleground for the conflict between traditional values and new, rationalistic values introduced by industrialization and modernization. Gender relations, role of religion, social status of art, and rise of radical political movements. Texts by Tolstoy, Dostoevsky, and Chekhov. Knowledge of Russian not required. No credit for students who earned credit for 2310. [3] (HCA)

RUSS 1911W. 20th Century Russian Literature. Masterpieces of literature as reflections of and reactions to massive social and political changes. Utopian and dystopian writing; literature as investigative reporting; and sincerity vs. postmodern irony. Return to nationalism in Putin's Russia. Including writings by Nabokov and six Nobel laureates: Bunin, Pasternak, Sholokhov, Solzhenitsyn, Brodsky, and Alexievich. Soviet and contemporary genre fiction. Knowledge of Russian is not required. [3] (HCA)

RUSS 2201. Second-Year Russian I. Reading, speaking, listening, and writing. Grammar review and reading of contemporary Russian texts. Prerequisite: 1102. [4] (INT)

RUSS 2202. Second-Year Russian II. Reading, speaking, listening, and writing. Grammar review and reading of contemporary Russian texts. Prerequisite: 2201. [4] (INT)

RUSS 2210. Russia Today: Politics, Economics, and Culture. Four-week immersion in the history and culture of Russia. Travel to and interaction with residents in Vladimir, 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. 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 2273. Russian Science Fiction. 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. Serves as repeat credit for students who have earned credit for RUSS 2273W [3] (INT)

RUSS 2273W. Russian Science Fiction. Radical ideas at the intersection of technology, ideology, and the human as physical form and humanity in science fiction. Masterpieces of the genre including Andrei Tarkovsky's films, the novels of the Strugatsky Brothers, and Protazanov's Aelita. Film, fiction, conceptual art, video games, and their historical contexts throughout the twentieth century. Knowledge of Russian not required. Serves as repeat credit for students who have earned credit for 2273. [3] (INT)


RUSS 2436. Tolstoy's War and Peace. Tolstoy's famous novel in cultural, historical, political, and religious context. Selected early and late pieces by Tolstoy; critical commentaries on his place in Russian culture; and film and operatic adaptations of War and Peace. Tolstoy as artistic innovator, political anarchist, and significant moral voice for the 19th century. Serves as repeat credit for RUSS 2435 in Spring 2016. Knowledge of Russian is not required. [3] (INT)

RUSS 2438. Dostoevsky's The Brothers Karamazov. Historical, social, political, philosophical, and religious contexts of one of the great epics of Western and Russian literature. Influence on 20th and 21st century literature and culture. Knowledge of Russian is not required. [3] (INT)


RUSS 2537. Vladimir Nabokov. Major works including The Luzhin Defense, Lolita, Pnin, and 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 2600. Women and Resistance in Russia. Cultural and political history of women's resistance in Russia, starting in the Putin era working back through the Soviet Union and Imperial Russia to Medieval saints. The concept of resistance and the specificity of female resistance in Russia. Historical narrative in light of missing sources. [3] (INT)


RUSS 2915. Russia: The U.S.S.R. and Afterward. 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)


RUSS 3306. Advanced Russian Language through Culture and Literature. Literature, history, aesthetics, and politics in Russian-speaking cultures. May be repeated for credit if there is no duplication in topic. Prerequisite: 2202. [3] (INT)

RUSS 3307. Advanced Russian Language through Visual Culture and Media. Cinema, media arts, visual culture, and media history of Russian-speaking cultures from pre-digital to the digital age. May be repeated for credit if there is no duplication in topic. Prerequisite: 2202. [3] (HCA)

RUSS 3308. Advanced Russian Language through Russian Society. Seminal aspects of Russian literature, culture, and civilization through interdisciplinary lenses. May be repeated for credit if there is no duplication in topic. Prerequisite: 2202. [3] (P)

RUSS 3850. Independent Readings. 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. 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. [3; maximum of 6 credits total for four semesters of RUSS 3850 and 3851] (No AXLE credit)

RUSS 3880. Internship Training. 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: 3881. [Variable credit: 1-9] (No AXLE credit)

RUSS 3881. Internship Readings and Research. 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 in Russian 3881 must be
completed 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. Corequisite: 3880. [Variable credit: 3-6] (No
AXLE credit)

RUSS 3890. Selected Topics. 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. [1-3; maximum
of 12 credit hours total for all semesters of RUSS 3890 and 3891] (No AXLE credit)

RUSS 3891. Selected Topics. 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. [1-3; maximum
of 12 credit hours total for all semesters of RUSS 3890 and 3891] (No AXLE credit)

RUSS 4999. Senior Honors Thesis. [3] (No AXLE credit)

Sanskrit

SNSK 1101. Elementary Sanskrit I. Fundamental elements of Sanskrit language in Devanagari script. [3] (No AXLE
credit)

SNSK 1102. Elementary Sanskrit II. Development of reading, pronunciation, recitation, and grammatical
proficiency. Materials from classical works of religion, philosophy, folklore, drama, and poetry. Discussion of
Sanskrit milieu and historical development. Prerequisite: 1101. [3] (HCA)

SNSK 2201. Intermediate Sanskrit I. Readings in authentic works of philosophy, religion, poetry, history, and
drama. Prerequisite: 1102. [3] (HCA)

SNSK 2202. Intermediate Sanskrit II. Readings in authentic works of philosophy, religion, poetry, history, and
drama. Prerequisite: 2201. [3] (HCA)

Sociology

SOC 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE Credit)

SOC 1010. Introduction to Sociology. 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. 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. 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. 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 1030. Environment and Society. Inequality, population, social change, technology, and the state. Application of concepts from general sociology and environmental sociology to environmental problems across institutional sectors such as food, water, energy, health, and transportation. [3] (SBS)

SOC 1041. Men and Women in American Society. 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. 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. 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. 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. 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. 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, 1020W, or 1030. Open only to sociology, environmental sociology, and public policy majors. [3] (SBS)

SOC 3003. Research Practicum. Review of sociological concepts and methods coupled with experience in data collection and analysis as applied to a research project underway by one or more sociology faculty members. May be repeated for a total of 6 credits if there is no duplication of content. [3] (No AXLE credit)


SOC 3202. Cultural Production and Institutions. 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. [3] SBS


SOC 3204. Tourism, Culture, and Place. Nature of tourist encounters. Marketing and displaying culture to tourists. Implications for urban economies and landscapes, and for tourists and locals. Ethics and dilemmas. Nashville as case study. Field-trip based learning. Frequent travel off-campus will pose scheduling conflicts with other classes immediately prior or after. Prerequisite 1010 or other Sociology class. [3] (SBS)

SOC 3205. Seeing Social Life. History, theory, and ethics of visual images in sociological research. Truth status of visual data. How individuals and groups use photographs to make sense of social worlds. Race, ethnicity, gender,
social class, and their visual documentation. Methods for collection and analysis of visual data, especially photographs. Prerequisite: SOC 1010, 1010W, 1020, 1020W, 1041, 1041W, or ANTH 1101. [3] (SBS)

SOC 3206. Creativity and Innovation in Society. 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. 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 3221. The Family. Study of the relationship of family structure to social organization. Comparative and historical approaches to the family. Recent changes in the American family. Courtship, marriage, marital adjustment, parenthood, and family dissolution in relation to contemporary American society. [3] (P)

SOC 3222. Sociology of Religion. 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. 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 3224. Sociology Through Baseball. Baseball as a social institution. Group dynamics; baseball as work and business. Free agency and law; race and ethnic relations. Globalization. Serves as repeat credit for students who have earned credit for 3224W. [3] (SBS)

SOC 3224W. Sociology Through Baseball. Baseball as a social institution. Group dynamics, baseball as work and business. Free agency and law, race and ethnic relations, and globalization. Serves as repeat credit for students who have earned credit for 3224. [3] (SBS)


SOC 3232. Contemporary Mexican Society. 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 3233. Contemporary American Society. Shifts in the political, economic, and social structure of the United States; changes in technology, demography, and social mores. [3] (US)

SOC 3301. Society and Medicine. Cultural and social factors in the perception, definition, diagnosis, treatment, and distribution of disease. Doctor-patient relations; role of nurses and other health professions. Social consequences of hospitals, medical technology, medical specialization, and health insurance. [3] (SBS)


SOC 3304. Race, Gender, and Health. 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 3306. Gender and Medical Work. Gender inequality in the health professions. Relationship between gender inequality and other forms of inequality in health care work. [3] (SBS)

SOC 3311. Climate Change and Society. 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. Relationship 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. 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. Not open to students who have earned credit for WGS 1111 Section 4 without permission. Total credit for this course and WGS 1111 Section 4 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. [3] (SBS)


SOC 3317. Energy Transitions and Society. Comparisons of contemporary societies' transition to low-carbon energy systems. Emphasis on renewable energy and energy efficiency. Perspectives include both wealthy and poor countries. [3] (INT)


SOC 3319. NGOs, Society, and the Environment. Integrated sociological, political science, and nonprofit studies' perspectives on the roles and operation of nonprofits and environmental NGOs (ENGOs). NGOs as agents of social and environmental change. ENGOs as setters and implementers of environmental governance agendas and regimes. ENGOs as complex organizational actors. Internal logics and operation of NGOs. Basics of nonprofit management. [3] (SBS)


SOC 3601. Self, Society, and Social Change. Problems and prospects for individual participation in social change; volunteering, community service, and philanthropy; role of individuals and voluntary associations in social change.

SOC 3602. Change and Social Movements in the Sixties. Mid-1950s to mid-1970s. The rise and influence of social movements in the 1960s, including civil-rights, student, anti-Vietnam War, feminist, and countercultural.

SOC 3603. Women and Social Activism. History of women's participation in social movements. Women's citizenship, environmentalism, second- and third-wave feminism, hate movements, and global feminist activism. Theories of mobilization, collective identity, strategy, and movement outcomes. Not open to students who have earned credit for SOC 1111 Section 17 without permission. Total credit for this course and SOC 1111 Section 17 will not exceed 3 credit hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate.

SOC 3604. American Social Movements. Key social movements in American society. Mobilization, strategy, and effects of movements such as civil rights, LGBT+, feminism, environmental, and labor movements.

SOC 3605. Law and Social Movements. Social activists and their relationship to the law and legal institutions. Activist litigation, movement legislative influence, protest policing, government surveillance of activists, and rights consciousness. Civil rights, women's, LGBT, environmental, and labor movements.


SOC 3612. Class, Status, and Power. 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.

SOC 3613. Law and Society. Law, inequality, and racial, ethnic, gender, and economic groups in society. Operation of the legal system, including lawyers, courts, and police. Advantages and disadvantages in law. Law's role in social change.

SOC 3614. Politics, State, and Society. 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.

SOC 3615. Human Behavior in Organizations. 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.

SOC 3616. Women and Public Policy in America. 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.

SOC 3621. Criminology. The nature, distribution, causes, and control of crime with emphases on contemporary American society and a broad range of types of crime.

SOC 3622. Delinquency and Juvenile Justice. The nature, distribution, causes and control of juvenile delinquency and the operation of the juvenile justice system in contemporary American society.

SOC 3623. Deviant Behavior and Social Control. 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.


SOC 3711. Women, Gender, and Globalization. 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. 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. 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. 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. 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. 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. 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. [1-9] (No AXLE Credit)

SOC 3881. Internship Readings and Research. 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. 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. 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 iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

SPAN 1100. Elementary Spanish I for True Beginners. 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. 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. 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. 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. [5] (INT)

SPAN 1111. First-Year Writing Seminar. 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. Development of intermediate linguistic competence in Spanish (listening, speaking, reading, and writing) using a communicative approach. Study of cultures 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 2780. Intensive Spanish. A one-month intensive course in the Spanish language, meeting before regular classes begin. Emphasis is placed on conversation, reading, composition, and grammar. Offered only in the Vanderbilt in Spain program. [3] (INT)

SPAN 2995. Contemporary Latin American Prose Fiction in English Translation. 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. 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. 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. 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. 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. 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. Prerequisite: 3301W and 3302. [3] (HCA)


SPAN 3340. Advanced Conversation. 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. 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. 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. 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. The cinema and Spanish cultural evolution during and after the Franco dictatorship. Prerequisite: 3303. [3] (INT)

SPAN 3370. Spanish American Civilization. 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. Latin American cinema in historical perspective. Screenings, critical readings, and supplementary texts. Prerequisite: 3303. [3] (INT)

SPAN 3380. The Spanish Language. 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 3380. Spanish for the Medical Profession. 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 3385. Latino Immigration Experience. 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 3385. Independent Study. 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 3385] (No AXLE credit)

SPAN 3380. Internship Training in Spain. 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 3381. Corequisite: 3881. [1] (No AXLE credit)

SPAN 3381. Internship Readings and Research in Spain. Under faculty supervision, students gain experience in public or private organizations, and complete research and readings. Must be taken concurrently with 3380. Corequisite: 3880. [3] (No AXLE credit)

SPAN 33891. Special Topics in Hispanic Culture. 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 33892. Special Topics in Spanish Language and Linguistics. 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. 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. Theory and practice of translation and interpretation, both from English to Spanish and Spanish to English. Practical knowledge of the basic modes of translation (direct and oblique) and interpretation (sight, consecutive, and simultaneous). Emphasis on the fundamentals of translation in legal, medical, literary, business, commercial, media, sports, and other fields. Prerequisite: 3303. [3] (SBS)

SPAN 4315. Contrastive Analysis of Spanish and English. 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] (SBS)

SPAN 4320. Phonology. 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] (SBS)

SPAN 4325. Dialectology. 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] (SBS)

SPAN 4330. Words and Stems. 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] (SBS)

SPAN 4335. Morphology and Syntax. 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] (SBS)


SPAN 4345. The Languages of Spain. 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] (SBS)


SPAN 4355. Spanish in Society. 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] (SBS)


SPAN 4400. The Origins of Spanish Literature. 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. 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. 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. Representative authors and works. Prerequisite: 3303. [3] (HCA)


SPAN 4425. Spanish American Literature from 1900 to the Present. The works of Neruda, Borges, Paz, Garcia Márquez and others. Prerequisite: 3303. [3] (HCA)

SPAN 4440. Development of the Short Story. From early manifestations in Spain through its current forms in Spain and Spanish America. Prerequisite: 3303. [3] (HCA)

SPAN 4445. Development of the Novel. From the seventeenth century through Realism and Naturalism in Spain and Spanish America. Prerequisite: 3303. [3] (HCA)


SPAN 4455. Development of Drama. Spanish theatrical works from 1600 to 1900, including the Golden age comedia, neoclassicism, romanticism, and early realism in drama. Prerequisite: 3303. [3] (HCA)

SPAN 4460. Love and Honor in Medieval and Golden Age Literature. 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 4465. The Theory and Practice of Drama. Critical works and plays from different periods. Introduction to the principles of dramaturgy. Prerequisite: 3303. [3] (HCA)

SPAN 4470. Development of Lyric Poetry. Popular and traditional forms; the sonnet and other Renaissance and Baroque classical forms. Romanticism. Prerequisite: 3303. [3] (HCA)

SPAN 4475. Contemporary Lyric Poetry. From Modernism to the present in Spain and Spanish America. Prerequisite: 3303. [3] (HCA)

SPAN 4550. The Theory and Practice of Literary Translation. 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. Prerequisite: 3303. [3] (HCA)

SPAN 4620. Love and Honor in Medieval and Golden Age Literature. 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. 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. Prerequisite: 3303. [3] (P)

SPAN 4720. Literary Genres and National Identities in Latin America. 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 Argentine Gauchos. Prerequisite: 3303. [3] (P)

SPAN 4725. Jungle Narratives in Latin America. From the colonial period to the present. Evolution of the representation of the jungle. Prerequisite: 3303. [3] (HCA)

SPAN 4730. Modern Latin American Poetry. Development of poetry in Spanish America and Brazil during the twentieth century. Major poets and movements, including both Spanish American Modernismo and Brazilian

SPAN 4740. Spanish-American Literature of the Boom Era. 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. The post-Boom novel from the 1970s to the present; analysis of related films. Manuel Muig's Boquitas pintadas, Me llamo Rigoberta Menchú, Laura Esquivel's Coma agua para chocolate, Reinaldo Arena's Viaje a La Habana, and Daisey Rubiera Castillo's Reyita, sencillamente. Prerequisite: 3303. [3] (P)

SPAN 4750. Afro-Hispanic Literature. 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. 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. Literary representations of cityscapes in Spain and Latin America. Prerequisite: 3303. [3] (HCA)

SPAN 4980. Undergraduate Seminar. 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. [3] (No AXLE credit)

SPAN 4999. Senior Honors Thesis. [3] (No AXLE credit)

Theatre

THTR 1001. Commons iSeminar. Topics vary. General Elective credit only. [1] (No AXLE credit)

THTR 1010. Theatre and Culture. An introduction to the various elements that combine to form a theatrical experience; the development of critical standards to judge these elements in performance. Not open to students who have earned credit for THTR 1111. Total credit for this course and THTR 1111 will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Repeat credit for students who have completed 1010W. [3] (HCA)

THTR 1010W. Theatre and Culture. An introduction to the various elements that combine to form a theatrical experience; the development of critical standards to judge these elements in performance. Not open to students who have earned credit for THTR 1111. Total credit for this course and THTR 1111 will not exceed 3 hours. Credit hours reduced from second course taken (or from test or transfer credit) as appropriate. Repeat credit for students who have completed 1010. [3] (HCA)

THTR 1111. First-Year Writing Seminar. 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. 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. 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 1811. Marshals, Mobsters, Monsters, Magnums, and Musicals: American Movie Genres. Western, gangster, horror, private eye, and musical genres. Representative films from each category reflecting the evolution of the genre and the changing American landscape. [3] (US)


THTR 2202W. The European Stage. 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. The U.S. Stage. 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 2311W. Writing for the Stage and Screen. Techniques for writing plays and screenplays with critical attention to dramatic themes and characterization. [3] (HCA)

THTR 2651. Play Direction. Play direction as an aid to critical understanding and appreciation of the theatre. Development of techniques. Prerequisite: 1611. [3] (HCA)

THTR 2781. The History of Fashion. 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. Dramatic literature and performance theory. Advanced techniques in writing performance criticism. Prerequisite: at least sophomore standing and 1010, 1010W, or 1111. [3] (P)

THTR 3207. Storytelling as Performance. Multiple cultural traditions, including the development and practice of oral language skills. [3] (HCA)

THTR 3281. Theatre in London. 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. 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 3333. Cultural Identity and the American Musical. Introduction to the cultural analysis of musical theatre texts (book, music, and choreography) and production practices on Broadway and in Hollywood films. Study of musical history, musical artistry, and cultural theory, including constructions of race, ethnicity, gender, and sexuality, to teach critical spectatorship. [3] (US)

THTR 3600. Rehearsal-Acting. 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. 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. 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. Costume Design. 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 3781. Management in the Theatre. Roles of theatre and stage managers. Tools and methods. Organizational theories and skills. Prerequisite: consent of instructor. [1-2; maximum of 3 credits total for all semesters of THTR 3781] (No AXLE credit)

THTR 3851. Independent Study. 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. 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. Selected plays and scenes. Theoretical and practical exploration of script, theatre, and audience in terms of production, past and present. [3] (HCA)

THTR 4611. Problems of Acting Style. 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. 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. 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. 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 1102. Elementary Tibetan II (UVA). Grammar and syntax of spoken and written Tibetan; listening, speaking, reading and writing. Examples from Tibetan short stories and proverbs, among other sources. Exposure to Tibetan
culture to improve communication skills, using a dynamic, interactive format. Offered on a graded basis only. Prerequisite: 1101. [4] (INT)

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] (INT)

TBTN 2202. Intermediate Tibetan II (UVA). Grammar and syntax of spoken and written Tibetan; listening, speaking, reading and writing through spoken and literary forms. Further study of Tibetan culture to improve communication skills. Offered on a graded basis only. Prerequisite: 2201. [4] (INT)