# Accounting Minor 

## Department of Business Management

## Division of Social Sciences

S. Lansing Williams, Director

The Accounting Minor covers knowledge of the accounting principles and practices fundamental to the capture and analysis of financial information about the firm, the use of accounting information to plan and control activities, accounting theory, and practical application of accounting in the areas such as taxation and auditing.

Once basic skills of reading financial statements and balance sheets have been learned, accounting is a discipline marked by critical thinking, analytic precision, ethical awareness, and clarity with words, numbers, and visual display of information. Accountants ask questions, communicate answers, and clarify the difficult choices that organizations, both for-profit and not-for-profit, face with regards to budgets and strategic planning. They also ensure that organizations adhere to ethical and legal guidelines in gathering and reporting information and in their internal and external activities. This minor is suitable for students desiring to pursue careers in both private and public accounting and offers courses needed for entry into graduate studies in accounting.

While internships are not required for the minor, they are strongly encouraged. Please contact the Director of the Minor or the Chair of the Department of Business Management for information regarding earning academic credit for internships.

## Four Core Courses

ECN 111. Introduction to Macroeconomics, or ECN 112. Introduction to Microeconomics
BUS 109. Managerial Statistics, or ECN 215. Data Analysis, or equivalent course
BUS 112. Introduction to Financial Accounting
BUS 209. Financial Analysis

## Four Elective Courses (select four of the following)

BUS 212. Managerial Accounting (offered in the fall semester)
BUS 340. Intermediate Accounting I (offered in the fall semester)
BUS 341. Income Tax Accounting (offered in the fall semester)
BUS 342. Auditing (offered in the spring semester)
BUS 343. Intermediate Accounting II (offered in the spring semester)
Special topic elective courses are also offered from time to time.

With the prior permission of the Director of the Accounting Minor or the Chair of the Department of Business Management, relevant special topic courses from other Washington College departments or taken at study-abroad partners may also be counted for the minor. See the catalog entry for the Business Management major for more information regarding study-abroad partners offering business-related courses.

## Preparation for Graduate Studies and the Certified Public Accounting (CPA) Exam

Students intending to pursue careers in public accounting are encouraged to consider entry into a Master of Accounting program upon graduation. Students who have completed BUS 112 Introduction to Financial Accounting will be able to take the additional electives. A suggested sequence could be:

## Junior Year

Fall: Intermediate Accounting I
Spring: Intermediate Accounting II
Senior Year
Fall: Managerial Accounting, Income Tax Accounting
Spring: Auditing
For more information, please contact the Director of the Accounting Minor or the Chair of the Department of Business Management.

## American Studies

Interdisciplinary Major

Richard De Prospo (English and American Studies), Director<br>Adam Goodheart (Director, Starr Center for the Study of the American Experience)<br>Heather Harvey (Art)<br>Michael Harvey (Business)<br>Alisha Knight (English and American Studies)<br>Alicia Kozma (Communication and Media Studies)<br>Sean R. Meehan (English)<br>Kenneth Miller (History)<br>Patrick Nugent (American Studies, Starr Center Deputy Director)<br>Joseph Prud'homme (Political Science)<br>John Seidel (Director, Center for Environment and Society)<br>Kenneth Schweitzer (Music)<br>Richard Striner (History)<br>Aileen Tsui (Art History)<br>Michele Volansky (Theatre and Dance)<br>Carol Wilson (History)

The American Studies major is designed for the unusually independent student who will take on the responsibility of helping to determine the structure of her major and who seeks the freedom to participate actively in the selection of her curriculum. American Studies explores US culture and American national identity from cross-disciplinary perspectives in order to help students develop a rich understanding of the American experience. For instance, students might explore racial, ethnic, gender, LGBTQ, or class identities-all central themes in current American Studies-in many different fields: history courses on slavery or the Civil Rights Movement; literature courses on the Harlem Renaissance, Irish and Irish-American literature, Jewish-American literature, and European colonial through twenty-first century American literature; cultural studies courses on popular culture, gender, race, class, sexuality, and generation; music courses on jazz and American music; art courses on American painting, the history of US photography, and US museology; a summer-session archaeology field school conducting excavations on Maryland's Eastern Shore.

## Student Opportunities

American Studies students benefit from the American Studies Program's close relationship with the Starr Center for the Study of the American Experience. The Center, located in the historic eighteenth-century Custom House on the Chester River in downtown Chestertown, supports student research, hosts special events, sponsors many internships, and provides significant funding for undergraduate research, including Comegys Bight Fellowships for summer research in American Studies and Frederick Douglass Fellowships for spring-semester research in African-American studies.

## The Curriculum

The major in American Studies requires completing twelve semester courses. Four of these are lower-level (200-level) semester courses in two introductory sequences, one in American

Culture and one in American History. To satisfy the sequence in American Culture students must take one of the three following course sequences, either

Introduction to American Culture I (AMS 209 cross-listed as ENG 209) and Introduction to American Culture II (AMS 210 cross-listed as ENG 210), or

Introduction to American Culture I (AMS 209 cross-listed as ENG 209) and Introduction to African-American Literature II (AMS 214 cross-listed as ENG 214 and BLS 214), or

Introduction to African-American Literature I (AMS 213 cross-listed as ENG 213 and BLS 213) and Introduction to American Culture II (AMS 210 cross-listed as ENG 210)

To satisfy the sequence in American History, students must take both of the following courses:

History of the United States to 1865 (HIS 201)
History of the United States since 1865 (HIS 202)
Beyond completion of these four prerequisite courses the American Studies major requires completion of an additional eight upper-level ( 300 level or above) semester courses. Two of these are required: American Studies Seminar (AMS 400), offered in the fall, and the Senior Capstone Experience Seminar (AMS SCE).

The remaining 6 upper-level semester courses will be elected from among the courses listed below. Course choices will be determined according to individual American Studies majors' interdisciplinary interests in consultation with the Director of American Studies.

Because of the program's interdisciplinary nature, there is no minor in American Studies.

## Course Descriptions

## AMS 209 (ENG 209). Introduction to American Culture I

Taught in the fall semester, the course is concerned with the establishment of American Literature as a school subject. Texts that have achieved the status of "classics" of American Literature, such as Hawthorne's The Scarlet Letter, Thoreau's Walden, and Mark Twain's The Adventures of Huckleberry Finn, will be read in the context of the history and politics of their achieving this status. Texts traditionally excluded from the canon of American literature, in particular early Hispano- and Franco-American texts, will be considered in the context of their relative marginality to the project of establishing American Literature in the American academy. Other-than-written materials, such as modern cinematic representations of the period of exploration and colonization of North America, as well as British colonial portraits and history
paintings, will be studied for how they reflect on claims for the cultural independence of early America. Other-than-American materials, such as late medieval and early Renaissance Flemish and Hispanic still lifes, as well as the works of nineteenth-century European romantic poets and prose writers, will be sampled for how they reflect on claims for the exceptional character of American culture.

## AMS 210 (ENG 210). Introduction to American Culture II

Taught in the spring semester, the course is concerned with the establishment of American Studies as a curriculum in post-World War II American colleges and universities. Readings will include a variety of written texts, including those not traditionally considered "literary," as well as a variety of other-than-written materials, including popular cultural ones. Introductions to the modern phenomena of race, gender, sexuality, class, and generation in U.S. culture will be included. A comparatist perspective on the influence of American culture internationally, and a review of the international American Studies movement in foreign universities will also be introduced.

## AMS 213 (ENG 213). Introduction to African American Literature I

This course is a survey of African American literature produced from the late 1700 s to the Harlem Renaissance. It is designed to introduce students to the writers, texts, themes, conventions and tropes that have shaped the African American literary tradition. Authors studied in this course include Phillis Wheatley, Frederick Douglass, Harriet Jacobs, William Wells Brown, Frances E. W. Harper, Paul Laurence Dunbar, Nella Larsen and Langston Hughes.

## AMS 214 (ENG 214). Introduction to African American Literature II

This course surveys African American authors from the Harlem Renaissance to the present. It is designed to expose students to the writers, texts, themes, and literary conventions that have shaped the African American literary canon since the Harlem Renaissance. Authors studied in this course include Zora Neale Hurston, Richard Wright, Ralph Ellison, Gwendolyn Brooks, James Baldwin, and Toni Morrison.

AMS 400 The American Studies Seminar (required for the major)
This course is offered every Fall semester. The course will include a review of American Studies' institutional background, in particular the nativist origins of American Studies at Yale and the more genteel nationalist consolidations established by the post-war Harvard American Civilization Program. Specific topics and readings will vary yearly but will always be chosen from among: 1.) those that helped establish the cross-disciplinary foundations of American Studies; 2.) several texts, both literary and social-scientific, that have become iconic in the discipline; and 3.) texts critical of the chauvinist tendencies inherent in the origins of the discipline. Students in the seminar will be encouraged to develop independent research projects that can mature into Senior Capstone Experience (SCE) theses. The course is intended primarily for American Studies majors in the first semester of their senior years to give them a running start into the Senior Capstone Experience (AMS SCE) that they will complete in the spring semester. Because the curriculum for the course will change yearly American Studies majors will be allowed to take it twice, and because the focus of the course will be on how to develop and execute research papers, it should be of interest to students facing a senior thesis SCE in other humanities and social science majors as well. The course will either be taught by the Director of

American Studies or will be team-taught by the Director of American Studies and another American Studies faculty member.

The American Studies Senior Capstone Experience (AMS SCE, required for the major), offered every Spring semester. Graduating American Studies majors will complete an independent research project under the guidance of an American Studies faculty member of their choosing.

AMS 190, 290, 390, 490. Internships
AMS 194, 294, 394, 494. Special topics
AMS 195, 295, 395, 495. On-campus research
AMS 196, 296, 396, 496. Off-campus research
AMS 197, 297, 397, 497. Independent Study

## American Studies Electives in the Humanities

ART 322. The Arts in America
THE 306. Theater and Drama: American Musical Theater
THE 308. After Angels: American Theater since 1992
ENG 341. Native American Literature
ENG 343. American Short Story
ENG 344. The American Novel
ENG 345. The African-American Novel
ENG 346. The Postmodern American Novel
ENG 347. American Environmental Writing
ENG 360. The Literature of the European Colonies of North America and of the Early U.S.
ENG 361. Literary Romanticism in the U.S. I
ENG 362. Literary Romanticism in the U.S. II
ENG 363. The Gilded Age and American Realism
ENG 370. The Harlem Renaissance
ENG 371. Faulkner and Modernism in the United States
ENG 372. American Poetry Since 1945
ENG 373. American Fiction Since 1945
ENG 374. Main Divisions in American Culture: Race, Gender, Sexuality Generation, Class
ENG 375. Body Language: Representation and Transgression from Dreiser and Chopin through Baker and Easton Ellis
ENG 376. Culture of the Old/Cultures of the Young
ENG 377. 2PACalypse Now! The Cult of Heart of Darkness among White Male Anglophone Intellectuals
ENG 470. Toni Morrison
ENG 409, 410. Special Topics in American Literature
MUS 206. Jazz History
MUS 303. American Music

## American Studies Electives in the Social Sciences

ANT 137. Cultures and Environments of the Chesapeake

ANT 208. Archaeological Method
ANT 296. Archaeological Field School
ANT 474. Historic Preservation and Cultural Resource Management
ECN 312. Public Finance: Theory and Policy
EDU 251. Principles of Education
EDU 354. Literature for Children, K-8
HIS 313. Seventeenth and Eighteenth-Century America
HIS 315. The Early Republic
HIS 319. African-American History
HIS 334. American Civil War
HIS 335. Reconstruction and the Gilded Age
HIS 336. Progressivism and the Twenties
HIS 337. The New Deal and World War II
HIS 338. The United States Since 1945
HIS 342. Victorian America
HIS 343. History of American Women
HIS 344. Hollywood Films in the Depression and World War II
HIS 414. Comparative Cultural Encounters
HIS 494. Selected Topics in American History
POL 311. Congress and the Legislative Process
POL 312. The American Presidency
POL 313. Elections and the Political Process
POL 317. State and Local Politics
POL 320. Law and Society
POL 321. Women and Politics
POL 323. Constitutional Law
POL 324. American Political Thought
POL 334. Media and Politics
POL 380. American Foreign Policy
SOC 351. Religion in the United States
ENV 109. Introduction to GIS
ENV 490. GIS Internship

## Anthropology

Division of Social Sciences

Julie Markin, Chair

Aaron Lampman
Erica McMaster
Bill Schindler
Elizabeth Seidel
John L. Seidel
Emily Steinmetz

The anthropology major provides students with the knowledge to understand the complexities of human behavior in the past and present and the practical skills to conduct rigorous research into the environmental and social forces that influence human cultural development across the globe. The major provides students with multiple perspectives for solving theoretical and practical issues through courses in the subfields of sociocultural anthropology, archaeology, linguistics, and biological anthropology. Students graduate with a broad understanding of human evolution and adaptation, changes in food and technology, the rise of civilizations and urban life, how language shapes worldviews, the diversity of cultural belief systems, and the human consequences of globalization. Trained in data collection and analysis, critical thinking, persuasive writing, and professional presentation, anthropology graduates find employment opportunities in business, national and international government agencies, NGOs, museums, and academia. Recent graduates have continued postgraduate work in anthropology and have found careers in geospatial intelligence, foreign service, sociocultural data analysis, international health and medicine, cultural tourism, grant writing, political analysis, international education, law, social justice, journalism, and environmental advocacy. We often have assistantships and internships available to students interested in geographic information systems. We offer educational-experiential programs in the American Southwest, Cuba, and Tanzania as well as a summer field school in archaeology. In conjunction with the Music department, we offer an interdisciplinary minor in ethnomusicology.

## REQUIREMENTS FOR THE ANTHROPOLOGY MAJOR

## Core Courses (take all five)

ANT 105 Introduction to Cultural Anthropology
ANT 107 Introduction to Environmental Archaeology
ANT 208 Archaeological Method
ANT 305 Ethnographic Method
ANT 405 Junior Seminar

| Foundational Courses (take at least three of the following courses, one at the $\mathbf{2 0 0}$ level, two at the 300 level or above) |  |
| :---: | :---: |
| ANT 215 | Sex, Gender, and Culture |
| ANT 234 | Human Evolution and Biological Anthropology |
| ANT 300 | Language \& Culture |
| ANT 320 | Race and Ethnicity |
| ANT 374 | North American Indians |
| ANT 312 | Contemporary Issues in Archaeology |
| ANT 402 | Anthropology of Food |
| ANT 420 | Media and Power |
| Applied Courses (take at least one) |  |
| ANT 210 | Intermediate Geographic Information Systems |
| ANT 282 | Experimental Archaeology |
| ANT 306 | Marine Archaeology |
| ANT 313 | Ethnomusicology of Latin America |
| ANT 415 | Cultural Ecology |
| ANT 474 | Historic Preservation and CRM |
| ANT 294 and ANT 394 Special Topics courses as approved by the Chair |  |
| Elective Courses (take at least one) |  |
| ANT 104 | Introduction to World Music and Ethnomusicology |
| ANT 137 | Cultures and Environments of the Chesapeake |
| ANT 280 | Traditional Ecological Knowledge |
| ANT 235 | Cultures of Latin America |
| ANT 354 | Visual Anthropology |
| ANT 294 and ANT 394 Special Topics courses as approved by the Chair |  |
| Field Application or Practical Learning Courses (take at least one) |  |
| ANT 329 | Cuba Music and Culture |
| ANT 394 | Cultures and Environments of the Southwest |
| ANT 394 | Tanzania Seminar |
| ANT 396 | Archaeology Field and Laboratory Methods |
| CRS 242 | Society and Estuary (note CRS 242 is taken as part of the Chesapeake Semester) |
| Semester-long study abroad |  |
| Other courses as approved by the Chair |  |

## The Senior Capstone Experience

The Senior Capstone Experience integrates the theoretical knowledge and practical skills that students have acquired throughout their undergraduate years, not only within the major, but also across the liberal arts and sciences. The Capstone Experience is an independent research project, on an anthropological topic of the student's choosing, undertaken with the close guidance of a faculty thesis advisor. Thesis proposals are typically developed during the spring of the third year in the Anthropology Seminar. Course credit for this senior thesis project is awarded through registration, in the fall or spring semester of the senior year, for ANT SCE.

## REQUIREMENTS FOR THE ANTHROPOLOGY MINOR

Six courses, including Anthropology 105, 107, and either 208 or 305, plus three additional anthropology courses (CRS 242 may count as an Anthropology elective).

## The Distribution Requirement in Social Science

May be satisfied by taking ANT 105 and ANT 107.
To satisfy the requirement of a third (unpaired) course for social science distribution, students may take ANT 105 or ANT 107.

## ETHNOMUSICOLOGY MINOR

Using music as an entry into a variety of cultures, social classes, and populations, the ethnomusicology minor offers a unique opportunity for students interested in both anthropology and music. Ethnomusicologists take a global, interdisciplinary approach to the study of music and seek to understand music as a social practice, viewing music as a human activity that is shaped by its cultural context. Students who study ethnomusicology have a global outlook, are critical thinkers, and are better able to appreciate the cultural and aesthetic diversity of the world and communicate in ways that are ethically sensitive.

The minor in ethnomusicology is 23 credits and is open to students in all subject areas, including anthropology, and there is no expectation that you have prior experience as a musician. None of the 4-credit classroom courses in the minor presume an ability to read music notation, and the required 1-credit ensembles can be taken in subjects that do not assume prior ability to read music. To ensure that anthropology students take this opportunity to expand their knowledge in a supplemental area, anthropology majors who minor in ethnomusicology will have to observe the following guidelines: (1) they may only double count 2 courses between the ANT major and the Ethnomusicology minor, and (2) at least 2 of the electives must have a MUS designation. Students will not be permitted to minor in both anthropology and ethnomusicology simultaneously. For more information and a full list of requirements, see the catalog entry ETHNOMUSICOLOGY.

## Courses In Anthropology

## ANT 105. Introduction to Anthropology

The study of human diversity with emphasis on cultural anthropology. Topics include the anthropological perspective, resources of culture, organization of material life, systems of
relationships and global forms of inequality. The course examines how anthropologists apply their skills to solve contemporary human social problems. Basic ethnographic interviewing skills. Introduction to ethnography. An Honors section of ANT 105 is offered every fall semester.

## ANT 107. Introduction to Environmental Archaeology

Exploration of the variety of past human societies and cultures through archaeology, with an emphasis upon the interplay between environment and culture. The course covers a wide time span, from the biological evolution of hominids and the origins of culture to the development of complex civilizations and the more recent historical past. An Honors section of ANT 107 is offered every spring semester.

## ANT 109. Introduction to Geographic Information Systems

Geographic Information Systems (GIS) can be found throughout our modern society. Programs such as MapQuest and Google Earth have brought this technology into the lives of many citizens of our world. More advanced software systems such as ArcGIS are being used in academia, business, and government to manage large datasets of spatially-linked information and provide the users with powerful analytic tools. The course lectures will review the fundamental theories of GIS and will also focus on the various organizational and ethical issues that impact the implementation and sustainability of GIS in our society. The lab portion of the course will teach the student how to operate the ArcGIS Desktop software product; ArcGIS Pro. Introduction to GIS will be taught as a blended course, which means that online content will be used to supplement the course. The online content will not replace the traditional lecture and lab components of the course, but is instead meant to enhance the content, and allow for materials to be available outside of class time. Content will be reviewed prior to attending class, which will provide time for discussion, clarification, and problem solving during class time. All course materials along with lab assignments, quizzes, and exams will be managed in our innovative Canvas virtual learning environment. There will be little paper handed out or turned in during this class. (Also ENV 109)

## ANT 137. Cultures and Environments of the Chesapeake

An examination of prehistoric and historic societies in the Chesapeake Region. Archaeological, historical, and environmental evidence is used to understand cultural development and the relationships between people and their environment. Topics include the arrival of humans in the region, Native American groups, colonial settlement in the Tidewater, and the 19th Century. (Also ENV 137)

## ANT 194. Introductory Topics in Anthropology

Topics vary.

## ANT 208. Archaeological Method

An examination of the methods of archaeology and theoretical perspectives. Course topics include research design, site surveys, remote sending technology, excavation techniques, dating methods, the analysis of material culture, and theory building. Students will be involved in
exploration and research using the wide variety of resources available in the region, including local excavations, local and regional archives, and museum collections. Prerequisite: Anthropology 107.

## ANT 210. Intermediate Geographic Information Systems

This second course in geographic information systems builds upon the theories discussed in Introduction to Geographic Information Systems, and focuses on the more technical aspects of GIS. Laboratory activities teach the student to use more advanced functions of GIS software, and the fundamentals of advanced GIS analysis and display programs. The student will also learn to operate a precision GPS field data collector. Prerequisite: Anthropology 109.

## ANT 215. Sex, Gender, and Culture

The study of the biological differences of sex in relationship to the cultural construction of gender. The importance of modes of production and ideology in forming gender concepts for all human societies. Cross-cultural issues of gender identity, roles, relationships, and equality or inequality. Prerequisite: Anthropology 105.

## ANT 234. Human Evolution and Biological Anthropology

This course will utilize a holistic approach to explore the evolution of the human species. Students will learn the basics of evolutionary theory, biology, and fossil and archaeological evidence through lectures, discussion, readings, videos and hands-on learning. This course is divided into three main sections titled: (a) how evolution works, (b) the history of the human lineage, and (c) evolution, technology, and modern humans.

## ANT 235. Cultures of Latin America

Prehistory of the Americas and survey of indigenous cultures in Latin America today (Mesoamerica, the Andean countries and the Amazonian countries). Introduction to environmental anthropology and applications to environmental issues. Prerequisite: Anthropology 105 or permission of the instructor. Interested students who have a background in history, political science, Spanish or international studies are encouraged to seek the instructor's permission.

## ANT 280. Traditional Ecological Knowledge

This course introduces students to the anthropological study of indigenous peoples and how they respond to the forces of globalization. Traditional Ecological Knowledge (TEK) refers to the knowledge base acquired by indigenous and local peoples over many hundreds of years through direct contact with the environment. It includes nomenclature, classification, beliefs, rituals, technology, environmental management strategies and worldviews-all of which have helped shape environments for millennia. This course explores these different forms of knowledge and poses a series of questions about their importance and use, such as: How is globalization affecting TEK? Who possesses TEK? Who "owns" TEK? Should the owners of TEK be compensated for their knowledge? Does TEK promote sustainability? Can nation-states utilize TEK? What are the impacts on indigenous groups when TEK is "promoted"? How can
traditional knowledge of the natural world be responsibly and ethically collected, studied and applied in modern medicine and global commerce?

## ANT 282. Primitive Technology and Experimental Archaeology

Students in this course are exposed to the field of experimental archaeology and gain an appreciation for the valuable contribution it can make to our understanding of the past. Students will explore various primitive technologies utilized throughout prehistory. These technologies were not only crucial to the survival of our ancestors but also played an important role in the development of culture. A holistic, project based learning approach will be utilized during the semester, which includes lectures, discussions, reading, hands-on learning, self-reflection, and group work. Prerequisite or Corequisite: Anthropology 107, or permission of instructor.

## ANT 294. Special Topics in Anthropology

Contents vary. Prerequisite: Anthropology 105 or 107, or permission of instructor.

## ANT 296. Archaeological Field School

An introduction to archaeological fieldwork methods and to the theoretical concerns of anthropological archaeology. includes participation in archaeological survey and excavation as well as lectures, readings, and writing assignments. It typically is a six-week summer program, with a minimum obligation of 20 hours per week. Prerequisites: Anthropology 105, Anthropology 107 or History 201; or permission of instructor.

## ANT 300. Language and Culture

This course will introduce the student to the study of linguistics. Concepts of both historical and descriptive linguistics are included. Some of the areas of study are: linguistic history and methodology, language origin, language and society, language structure, dialects and language families. The course is open to all students.

## ANT 305. Ethnographic Method

Introduction to cultural anthropological field methods and the writing of ethnographies. Students practice skills of observation, participation, reflection, mapping, selection of informants, ethnographic interviewing, analysis, proposal writing, and ethnographic writing. Each student researches a cultural scene in the Chesapeake region and writes an ethnography. Prerequisite: Anthropology 105.

## ANT 306. Marine Archaeology

Introduction to underwater archaeology. Gives students an overview of the history and methods of the field. In addition to class activities, students will be involved in practical exercises such as mapping and data analysis; field trips, including remote sensing work on the College's workboat and visits to historic vessels; and outside lectures on marine history and archaeology. A basic understanding of archaeological method and theory is useful for the course. Prerequisite: previous archaeological coursework or permission of instructor.

## ANT 312. Contemporary Issues in Archaeology

In the absence of written records, archaeology plays a critical role in answering questions about how past peoples interacted (trade, warfare) and were organized socially and politically (gender, elites, priests). However, reconstructing past lifeways based on material remains poses unique problems. Through class discussions and independent research, students will explore current technical and ethical issues. Topics include the assessment of gender and children; the utility of remote sensing techniques; collaboration between archaeologists and indigenous groups; the ethics of museum display; and the illicit antiquities trade. Prerequisite: Anthropology 107.

## ANT 320. Race and Ethnicity

The dangers of using the concept "race." Focus on the cultural construction of ethnic, racial, and national identities in the contexts of immigration, colonialism, nationalism, and globalization. Symbols of ethnic identity, stereotyping, style, tactics of choice, situational ethnicity.
Prerequisite: Anthropology 105.

## ANT 354. Visual Anthropology

The goal of visual anthropology is to immerse students in the study and production of ethnographic media and documentary film. We will begin by exploring the varied genres of historical anthropological documentary which range from salvage ethnography to ethnofiction and include more recent attempts to empower cultures by encouraging them to visually capture their own unique social, political and expressive worldviews. We will also examine and critique other cultural forms of visual media ranging from film and photography to petroglyphs and tattoos. Once we have an understanding of the varied approaches to media production, students will engage in the creative process of developing an idea for an ethnographic film, storyboarding, shooting film, and editing complete ethnographic documentaries. Prerequisite: Anthropology 105

## ANT 374. North American Indians

Although pre-Columbian North America did not see the rising and falling of states that unified people through a single language or economy, it is extraordinarily rich in histories. The archaeology of North America aims to understand the diversity of histories lived by peoples from the Atlantic to Alaska, from the Plains to the Bayou, from nomadic hunting and gathering groups to large-scale horticulturalists. We will explore the human experience on the continent north of Mexico from the first footsteps on the continent to the impact of European contact to the relationship between archaeologists and American Indians today. By the end of this course, you will have an understanding of the history of archaeology in North America and the diverse prehistoric Native American cultures. You will have a good handle on the issues faced by and methods utilized in reconstructing past settlement patterns, subsistence strategies, religious practices and social and political organization.

## ANT 394, 494. Special Topics in Anthropology

Contents vary. Prerequisite: two prior anthropology courses.

## ANT 402. Anthropology of Food

The manner in which we select, prepare, and consume food is based upon culturally transmitted notions of taste, nutrition, social regulations, and religious meaning. The meaning of food is closely aligned with all aspects of our culture and the food choices we make are linked to our identity. This course will use food, and the many ways in which people utilize food for nutritional and cultural purposes, to better understand different societies throughout time and place. Armed with a grounding in anthropological theory and informed through an understanding of the prehistory and history of foodways, students will learn to contextualize modern food systems throughout the world. Then, through hands-on, project-based learning students will build upon what they learned from other cultures through time to explore many of the healthy and sustainable alternatives to the modern western diet. Prerequisite: Anthropology 107

## ANT 405. Seminar in Anthropology

Discussion of significant contemporary issues in anthropology. Application of anthropology to ethical issues and careers. Familiarity with professional literature and professional style guides. Research design and location and assessment of source materials. Grant writing and research. Exploration of careers and higher studies in anthropology. Required course for anthropology majors and minors. Should be taken in the spring semester of junior year.

## ANT 415. Cultural Ecology

This course focuses on the human-environment relationship and the state of world ecosystems resulting from this interaction across space and time. The course is focused on four paradigms central to the anthropological understanding of the human-environment relation. The first focuses on fundamental human-ecological principles; the second on the ecological dynamics of foraging and domestication; the third on indigenous ecological knowledge and community-based conservation, and the fourth on new approaches in human ecology. Prerequisite: Anthropology 105

## ANT 420. Media and Power

By investigating the idea that what we view and express regarding cultural identity and cultural difference is artificial, we can see that popular entertainment, global news broadcasts, monuments and museums, and the internet might be doing more than merely "capturing," "reporting," or "exhibiting." Understanding this, we can uncover something more about how representations are created, how they have been manipulated historically to oppress or devalue certain groups, and how they can be contested. Knowing that images are constructed and not real, we can turn our focus to how people can reclaim their identities and thus their own power through revising or even appropriating the representations that have been made of them.
Prerequisite: Anthropology 105

## ANT 474. Historic Preservation and Cultural Resource Management

Provides a comprehensive overview of historic preservation and cultural resource management as practiced in the United States. Examines the history of the preservation movement, the role
of preservation in American culture, and the legislative framework for historic preservation. Reviews the growing field of cultural resource management, looking at issues in architectural design, contract or "salvage" archaeology, and heritage tourism. Prerequisite: 200-level coursework in archaeology or American history, or permission of instructor.

## ANT 290, ANT 390, ANT 490. Anthropology Internship

The department encourages students with prior courses in anthropology to develop, with a member of the department, internship opportunities. Students interested in pursuing internships should read "Internships And Other Opportunities" in this Catalog. In addition to the requirements listed there, interns should expect to write a paper describing their experiences, as relevant to anthropology, and connected to a reading list to be developed and agreed upon by the intern and the supervising faculty member.

## ANT 297, ANT 397, ANT 497. Independent Study

Junior and senior students with a strong interest and background in anthropology may, working with a faculty member in the department, develop either a research project or a course of study in order to pursue a subject or topic within the discipline not a covered by the department's regular offerings. The student and faculty member will agree upon a reading list, and either a formal research project or a substantial paper. The student should expect to meet regularly with his or her instructor to demonstrate progress in, and knowledge of, the readings; and to discuss, and to receive guidance on the project or paper. (Note that students may not use independent study courses to gain academic credit for work on their Senior Theses).

## ANT 295, ANT 395, ANT 495. On-campus Research

## ANT 396, ANT 496. Off-campus Research

## ANT SCE. Anthropology Senior Capstone Experience

The anthropology senior capstone experience is a significant piece of independent research experience in the form of a thesis or project undertaken by each senior with the guidance and mentorship of a department faculty member. All senior capstone experiences must include anthropological methods and theory. A student who successfully completes the SCE will receive a grade of Pass or Honors, and will be awarded 4 credits. A more extensive description of the SCE is available from the department chair. Discussion of a joint thesis, undertaken by a student with two majors, can be found in the Academic Program section of the catalog.

## Art and Art History

Division of Humanities and Fine Arts

Heather Harvey, Chair

Benjamin Tilghman
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Washington College has a long and inspired tradition in the visual arts. Elizabeth Callister Peale and her sister, Sarah, taught drawing and painting here in the 1780s-perhaps the first women to teach at any institution of higher learning in North America. In the middle part of this century, one of our graduates, Anthony Kloman, was a prime mover at the Institute for Contemporary Arts, London, behind an extraordinary yet ultimately unsuccessful competition for a monument to the Unknown Political Prisoner, the winning maquette for which, selected from some 2700 entries from 57 countries, survives in the Tate Modern. More recently, we had a special relationship with the South-African photographer Constance Stuart Larrabee, whose name adorns our studio facility, and whose work, a corpus of which she bequeathed to the College, hangs, among other places, in the Smithsonian National Museum of African Art. At a time when images shape our lives in ways hard to imagine even a decade ago, and neuroscientists and evolutionary biologists are plumbing the ways in which image-making is thought to make us uniquely "human," we in the Department of Art and Art History try continually to map the relations between thinking and making, to contemplate the role of the beautiful--yes, the beautiful, which, in the work of certain aestheticians has again been linked to ideals of social justice--and to live up to the ideal set forth in the Renaissance, that image-making at its best (at that time, painting) is, in fact, the eighth liberal art, in dialogue with, and building on, the other seven: logic, rhetoric, grammar, music, astronomy, geometry and arithmetic.

The student interested primarily in the study of visual cultures, past and present, is given the tools for historical analysis and a theoretical grounding in the discipline of art history, as well as some understanding of techniques and concepts of current studio practice. The student concentrating in studio art, in turn, benefits from the perspective of those artists who came before her/himself, by taking both introductory and advanced courses in art history, and learning something of the traditions of which she/he is--or is not--a part, in addition to immersing herself/himself in contemporary visual culture.

Whatever one's interest, the major is structured to serve as an intellectual base from which the student can make connections across disciplines, as she/he seeks to understand, criticize, and engage our world, and especially the role of the visual in it-from study of works of art in museums, to the images scientists use to model our bodies and cosmos. In fact, many of our majors complete an additional major while here, in fields ranging from anthropology, English, and political science, to business, biology, psychology, and mathematics.

The curriculum throughout is integrated with a vigorous complement of internships, study abroad programs, exhibitions, public lectures and classroom visits by leading artists, critics, historians and curators, as well as regular departmental field trips to galleries and museums in Baltimore, Philadelphia, New York, and Washington, DC.

A highlight of the academic year is the Janson-La Palme Distinguished Lecture in European Art History. Endowed by Washington College Professor of Art History Emeritus Robert J.H. Janson-La Palme and his wife, Bayly, this series "brings internationally known scholars of European Art to campus for public lectures and presentations." Among those who have delivered the Janson-La Palme lecture in recent years are Earl A. Powell III (National Gallery of Art), Thomas Crow (New York University), Martin Kemp (Oxford University), Mariët Westermann (Andrew W. Mellon Foundation), and Joseph Koerner (Harvard University).

We also have the advantage of having a new, secure and climate-controlled art gallery on campus, Kohl Gallery. Kohl Gallery fosters the study and understanding of art through a diverse range of exhibitions and public programs. Embracing its liberal arts context, Kohl endeavors to present fresh perspectives on historical and contemporary art and to promote interdisciplinary conversations about historical, social, and cultural issues of significance to the community of Washington College, Chestertown, and beyond.

In recent years our majors have been admitted to post-baccalaureate programs at such institutions as Parsons School of Art and Design, New York; Christie's, London; Maryland Institute College of Art; University of Maryland, College Park; University of lowa; University of Virginia; University of Pennsylvania; University of Texas, Austin; Fashion Institute of Technology, San Francisco; University of St. Andrews, Scotland; University of Glasgow, Scotland; and the Courtauld Institute of Art, London. They have flourished in many other fields beyond studio art and art history as well, including teaching, medicine, business, and law, and, perhaps most important (and this is true of the former group as well), continue to learn throughout their lives, and make significant contributions to their families, communities and the larger worlds of which they are a part.

## REQUIREMENTS FOR THE ART AND ART HISTORY MAJOR

Fulfillment of the major requires ten 4-credit courses (plus the not-for-credit Senior Seminars in Fall and Spring of senior year for studio majors only). All majors are required to take ART 200 and either ART 251 or one of the Intermedia studio courses; both introductory courses are recommended in the first year. Beyond the two introductory-level courses, six additional Art or Art History courses are required. These eight required courses do not include the further requirements described below for each concentration.

Studio Art Concentration: Students who plan to major in Art and Art History with a concentration in Studio should be aware that many upper-level studio courses have pre-requisites that include ART 251 or any Intermedia studio course. At least one of the six
additional Art or Art History courses referenced above must be a 300- or 400-level studio course, and at least two must be 300- or 400-level Art History courses. Studio students are encouraged to take more than one upper-level studio course and strongly encouraged to take a class in the history of contemporary or twentieth-century art by their sophomore year. In addition to the eight required courses described above, studio majors are also required to take: 1. Contemporary Practices: Junior Seminar in Spring of junior year (4 cr), 2. Both Studio Art Senior Seminars in Fall and Spring of senior year ( 0 cr) , and 3. SCE Studio Senior Capstone Experience in Spring of senior year (4 cr).

Art History Concentration: At least three of the six additional Art or Art History courses referenced above must be a 300- or 400-level Art History courses. In addition, students who plan to major in Art and Art History with a concentration in Art History are also required to take 1. Junior Seminar: Methods and Theories of Art History, preferably in Spring of junior year (4 cr), and 2. SCE Art History Senior Capstone Experience in Spring of senior year (4 cr). Students concentrating in Art History are also encouraged to develop facility in a foreign language, to participate in the College's Study Abroad Programs, and to intern in the College's Kohl Gallery.

## Senior Capstone Experience (SCE)

SCE for the Art History Concentration: Either a comprehensive examination or, in the case of those who have earned a cumulative grade point average of 3.5 or higher in the major, an art history thesis, or curating an exhibition of works of art or other artifacts.

SCE for the Studio Concentration: An year-long studio research project, developed in ongoing consultation with studio art faculty, successful completion of which will demonstrate not only extensive knowledge of the medium or media involved, but more importantly, the ability to think critically, conduct research, and produce independently a substantial body of work. The final culminating requirement of the SCE is a spring exhibition conceived and produced throughout fall and spring of senior year. Students whose senior seminar work fails to meet standards for the public exhibition will be asked to complete an alternate visual and written thesis that does not include a final exhibition component.

## REQUIREMENTS FOR THE ART AND ART HISTORY MINOR

For the minor, five courses are required: ART 200; either ART 251 or any Intermedia studio art course; and any three additional studio art and/or art history classes.

## ART HISTORY - COURSE DESCRIPTIONS

## 200. Introduction to History of Western Art

A careful discussion and analysis of a selection of significant topics in the history of Western art from the earliest times to our own century. Emphasis is placed on the methods and approaches of the art historian. The term paper is written on a museum object or objects. Required of all majors.

## 311. Italian Renaissance Art

After discussion of the special historic-cultural conditions that made the Italian city-state possible, the greatest painters and sculptors of Florence and Venice will be examined in this art history course. Giotto, Michelangelo, Leonardo, Donatello, Botticelli, and Bellini are some of the major figures of the fifteenth and sixteenth centuries to be included. Field trip to the National Gallery of Art. Prerequisite: Art 200 or permission of instructor.

## 315. Northern Renaissance Art

This art history course covers painting and the graphic arts in Germany and the Low Countries during the fifteenth through the seventeenth centuries, with special emphasis on Van Eyck, Dürer, Bosch, Brueghel, Rubens, Rembrandt, and Vermeer. Field trip to the National Gallery of Art. Prerequisite: Art 200 or permission of instructor.

## 316. European Art from the Baroque to Neoclassicism

This art history course covers the seventeenth-century grand manner in Italy, France, Spain, and England, followed by the rococo and finally the austere style of revolution in the late eighteenth century. Caravaggio, Bernini, Poussin, Velazquez, and Gainsborough are a few of the principal artists. Prerequisite: Art 200 or permission of instructor.

## 318. Nineteenth-Century European Art

Starting with Romanticism, this art history course gives intensive coverage to the major nineteenth-century movements in European art. The art of the period is seen in its cultural context with special reference to literature and to social conditions. Field trip to the National Gallery of Art. Prerequisite: Art 200 or permission of instructor.

## 320. Twentieth-Century Art

This art history course discusses major artistic developments and key figures in twentieth-century art from Matisse and Picasso into the twenty-first century. The emergence of abstraction, the historical position of the avant-garde, and theories of visual modernism are among the themes discussed in the course. Field trips to Philadelphia and Washington museums. Prerequisite: Art 200 or permission of instructor.

## 322. The Arts in America

Although this art history course sketches in the art of the early colonies, its main body begins at the period of the American Revolution. Lectures and discussion explore the changing significance of the visual arts in American life and culture through the 1930s. Field trips to museums in Washington. Prerequisite: Art 200 or permission of instructor. This course is cross-listed under American Studies.

## 324. Photography's First Century

This art history course examines historical developments in photography from the 1830s to the 1920s, from the medium's inception through early modernism. Lectures and discussion will consider topics at issue in debates about photography's place in the history of art, such as changing attitudes toward photography's dual role as aesthetic creation and as documentary
artifact. Prerequisite: Art 200 or permission of instructor.

## 327. Washington Center Internship

A full-time, semester-long internship in Washington, DC, with a federal government agency, museum or gallery, or the like. The student must develop a substantial portfolio as part of their internship experience. Prerequisite: ART 200, a cumulative GPA of 2.8, permission of an instructor, and successful application to The Washington Center for internships and Academic Seminars. This course is normally open only to juniors and seniors. 12 credits. The internship package of Art 327, 328, and 329 will yield 16 credits towards graduation and 8 credits toward the art major or minor.

## 328. Washington Center Seminar

Washington Center Interns participate in an evening seminar selected from a variety of topics offered during the semester concerned. Students engage in class discussion, and may also be required to research seminar topics, prepare written assignments, and take examinations. Required of and limited to students enrolled in Art 327. Three credits.

## 329. Washington Center Forum

Washington Center Interns participate in lectures, site visits, small group discussions, briefings, and other required events, designed to help them understand the connection between their academic and professional goals and the special educational opportunities available through living and working in Washington, DC. Evaluations of these experiences are included in the student portfolio. Required of and limited to students enrolled in Art 327. 1 credit.

## 393. Junior Seminar: Methods and Theories of Art History

Required of all art history majors, this seminar, which should be taken in the spring semester of the junior year, will provide a more theoretical framework for art and its histories than is possible in 300-level courses, while also modeling the best professional practices. The class is run in a seminar format with student oral presentations, close analysis of assigned texts, and frequent written assignments. The seminar's exploration of the variety of methodologies in the discipline of art history helps to prepare students for writing the senior thesis in art history.

## 425. Women Artists and Feminist Art History (Honors)

In recent decades, growing scholarly attention has been brought to the previously neglected productions of female artists. This art history seminar examines the variety of approaches that feminist art historians have taken in studying art made by women in the modern period. We will be concerned both with the historical analysis of the visual productions of particular female artists and with an exploration of how feminist theories, practices, and political commitments have affected, and can continue to change, the discursive and institutional construction of the history—or histories—of art and visual culture. Prerequisite: Art 200 or permission of instructor. This course is cross-listed under Gender Studies.

## 440. Rembrandt (Honors)

This art history course, which has as its subject the life and art of Rembrandt van Rijn (1606-69), not only opens a window onto the culture of the Netherlands in the seventeenth century, but also serves as an introduction to the methodology of art history-from the scientific examination of paintings, to theories of interpretation-for few artists raise so many fundamental issues as to what it is we do as art historians-indeed resist traditional methods of interpretation-as does Rembrandt. The format of the course is that of a seminar, with students giving presentations, aimed at honing their ability, not only to tackle tough art historical questions, but also to articulate their ideas, in visual, oral, and written forms.

## 294, 394, 494. Special Topics

The intensive study of some selected art form, movement, or other specialized subject in art history. See the Department of Art and Art History's website for descriptions of individual courses being offered.
Recent Art History special topics courses include:
Art and the Natural World, Global Sixties, Art of Stuff, Contemporary Arts of Africa, Not About Beauty, Art of the Islamic World, Women Artists, Whistler and His Contemporaries, Performance Art 1909 to the Present, Medieval Art and Architecture, Ancient Egyptian Art, Oceania Art \& Culture, Classical Art: An Odyssey in Method, American Pictures, Dürer and His Culture, and Art and Nature, Then and Now.

## 290, 390, 490. Internships

## 295, 395, 495. On-campus Research

## 296, 396, 496. Off-campus Research

## 397, 497. Independent Study in Art History

Exceptional students in their Junior or Senior years seeking to define their own course of study, distinct from the course offerings in the department, may submit a formal application to do so. The deadline for applications is the end of the 7th week of the preceding semester, and must consist of a 1-page written proposal for the student's course of study, a portfolio of recent written work, a bibliography of texts relevant to the proposed course of study, and a proposed course syllabus. Proposals will be reviewed and notice will be given by the department's faculty. If the student's application is accepted, notification of acceptance will be accompanied by an assigned art history advisor to facilitate the course of study during the desired semester. Prerequisite: Art 200.

## 490. Museum Internship

This internship is for seniors with a strong academic record in the Department. In recent years, art majors have held internships at such places as the Walters Art Museum, Baltimore; the Massachusetts Museum of Contemporary Art, North Adams, Massachusetts; the Kunstmuseum, Bonn; and the British Museum, London. Students can also intern for academic credit at the College's Kohl Art Gallery.

## SCE. Art History Senior Capstone Experience

Meant to be the summation of all one has done in the Department, the SCE involves some combination of comprehensive examinations and/or an art history thesis or curatorial project. The SCE will be accorded Pass, Fail, or Honors, and, upon successfully completing it, the student will receive four credits.

## STUDIO ART - COURSE DESCRIPTIONS

## 231. Creative Process

In this studio course students learn how to develop an idea over time. Students are expected to focus on one concept and develop it more fully each week as the semester progresses. All media and art forms are acceptable, including the written word, video, performance, painting, photography, sound, construction, etc. Though centered upon the student and their ability to be objective about their work, it also demands they help others to see the values, problems, and potentials in their work. Thoughtful class participation in the form of discussion during weekly presentations and critiques is expected from each student. Prerequisite: One course of Studio Art, Music, Theatre or Creative Writing or permission of the instructor.

## 241. Environmental Art

This studio course introduces students to the basic concepts of environmental art through a series of environmental art projects made both inside and outside, in the field. The curriculum centers on deepening student awareness of how a range of materials and spaces can be used to make environmental art projects. The course is open to both individual and collaborative projects. Students regularly engage in studio work, followed by related class discussions and critiques. Readings \& screenings about environmentally engaged artists coincide with studio projects. Prerequisite(s): One Studio Art Course or permission of instructor.

## 245. Photography

This studio course serves as an introduction to digital photography, and will cover basic camera skills and photographic processes, although course emphasis is on the conceptual and creative uses of photography as an artistic medium. Students will gain the technical and critical skills to fulfill creative goals. Complex relationships between imagery, composition and meaning will be explored through creative assignments, lectures, discussions and readings. The work of contemporary artists working in photography will be explored at length.

## 251. Visual \& Critical Thinking

This studio course is an introduction to a rigorous investigation of conceptual, technical, and critical skills common to diverse areas of creative production. The curriculum is interdisciplinary and designed to emphasize the development of studio fundamentals, through technical practice and conceptual thinking. Basic visual design principles are covered, while contemporary and historical examples are presented through lectures and applied to studio problems.

## 261. Intermedia_D

This studio course explores the theories and concepts of drawing from a contemporary perspective. The curriculum, while focusing on basic skills and concepts of drawing, is interdisciplinary in nature. In addition to drawing fundamentals, the course will place emphasis on connecting conceptual thinking to one's broader creative practice. Contemporary and historical examples of artists working within such a creative practice are covered through lectures and screenings.

## 271. Intermedia_P

This studio course will focus on the fundamentals of painting in form, concept and technique. The curriculum introduces the basic skills and theories as they pertain to a contemporary painting practice, while exploring interdisciplinary applications of the medium. Basic materials and processes are covered in facilitating students to move from concept to completed work, so as to form an understanding as to how painting positions itself within the world. Relevant examples of artists and their works are provided in the form of lectures, screenings, and readings.

## 281. Intermedia_S

This studio course introduces the methodologies and concerns consistent with the creation of sculptural works of art. Drawing upon the basic skills, processes, and concepts of working with three dimensional forms, the curriculum examines the expansiveness of sculpture's inherently interdisciplinary definition. In addition to sculpture fundamentals the course engages the critical and theoretical concepts as they pertain to the relationships between meaning and making. Artists whose works exemplify historical and contemporary approaches are examined through lectures, screenings, and readings.

## Art 291. Intermedia_VNM

This studio course introduces students to an interdisciplinary grounding in the techniques, concepts, and empirical experiences they will need to engage video and new media technologies in the making of art. Students develop the necessary conceptual and technical grounding to engage the creation of imagery through digital means by studying various video and computer imaging strategies. Contemporary artists working in the mediums of video and new media are examined through lectures and screenings.

## 330. Video Intensive

This studio course examines video as a medium for artistic expression and inquiry. The curriculum engages students in an exploration of the video-making process and develops technical skills associated with relevant video equipment. Methodologies for the use of video as an art-making tool are explored, while contemporary and historical examples of works within the medium are presented through screenings. Prerequisite: ART 291 or permission of the instructor.

## 335. New Media Intensive

This is an advanced studio course in the study of the intersection between art and technology. A broad interdisciplinary investigation of the skills, concepts, and applications that are necessary to develop a creative practice versed in the technologies of our time are pursued. Particular emphasis is placed on the conceptual implications of choosing such a practice, and how those implications inform each student's work. Current practitioners within the discipline are examined through lectures, readings, and screenings. Prerequisite: ART 291 or permission of the instructor.

## 340. Photography Intensive

This studio course examines the production and pertinent concepts of photographic based images. The curriculum is primarily centered on camera based work, while allowing for the exploration of other methods of photographic image creation such as scanners, cell phones, and copiers. Technical instruction and principles of composition are employed to form an understanding as to how the construction and manipulation of photographic images implicate form and meaning. Contemporary photographic based image-makers are examined through screenings, readings, and lectures. Prerequisite: ART 251, 261, 271, 281, or 291, or permission of the instructor.

## 350. Advanced Studio_D

This studio course is an interdisciplinary exploration of advanced studio techniques and conceptualization originating from a drawing perspective. Students engage projects thematically and pursue their own interests in diverse mediums and hybrid forms. Particular emphasis is placed on each student's research and development practices as it relates to the conceptualization and execution of each of their works. Contemporary and historic examples of artists working within the designated themes of the course are introduced through screenings, lectures, readings, and independent study. Prerequisite: ART 251, 261, 271, 281, or 291, or permission of the instructor.

## 360. Advanced Studio_P

This studio course is an interdisciplinary exploration of advanced studio techniques and conceptualization originating from a painting perspective. Students engage projects thematically and pursue their own interests in diverse mediums and hybrid forms. Particular emphasis is placed on each student's research and development practices as it relates to the conceptualization and execution of each of their works. Contemporary and historic examples of artists working within the designated themes of the course are introduced through screenings, lectures, readings, and independent study. Prerequisite: ART 251, 261, 271, 281, or 291, or permission of the instructor.

## 370. Advanced Studio_S

This studio course is an interdisciplinary exploration of advanced studio techniques and conceptualization originating from a sculptural perspective. Students engage projects thematically and pursue their own interests in diverse mediums and hybrid forms. Particular emphasis is placed on each student's research and development practices as it relates to the
conceptualization and execution of each of their works. Contemporary and historic examples of artists working within the designated themes of the course are introduced through screenings, lectures, readings, and independent study. Prerequisite: ART 251, 261, 271, 281, or 291, or permission of the instructor.

## 392 Junior Seminar: Contemporary Practices

Required of all majors in Studio Art, this interdisciplinary course provides a practical and theoretical framework for students to independently develop their creative practice through research and studio work. Students begin to define their individual practice by writing an artist statement and developing a professional portfolio. The course is designed to prepare each student for the rigors of the Studio Art Senior Seminar, and culminates in a formal proposal for the Senior Capstone Experience project to be produced in the student's senior year.
Prerequisite: Advanced Studio or permission of the instructor.

## 394. Post-1945 Revolutions in Art and Theory

A profound shift in what we consider art resulted from the ethical and aesthetic crisis of the post-1945 world, when artists began to wonder whether art was still possible after the Holocaust, to paraphrase Theodore Adorno's famous statement. This crisis proved to be a revolutionary force in the field of contemporary art, inspiring ideas and movements related to such cultural and social developments as Postmodernism and Feminism. This class not only examines key works and texts of the period, but also the reasons why works of art increasingly inhabit public spaces, are made from ephemeral materials, contain site-specific messages, take as their subject the body and its racial or gender identity, and eschew traditional means of commercial exchange. Prerequisite: Art 200 or permission of the instructor.

## 294, 394, 494. Special Topics

The intensive study of some selected art form, movement, or other specialized subject in studio art. See the Department of Art and Art History's website for descriptions of individual courses being offered.

## Recent Studio Art special topics courses include:

Art and Language, Art in the Anthropocene: Greener Art through Greener Chemistry, Art as Inquiry: The Artistic Laboratory, Installation and Site Specific Art, Visual Poetics, Bodies, Borders \& Shrinking Space, Kinetic Sculpture, Art for Social Change, The Performative Object, Interventions, Conceptual Art, The Art of Appropriation, Video Art and Theory.

## 290, 390, 490. Internships

## 295, 395, 495. On-campus Research

## 296, 396, 496. Off-campus Research

## 397, 497. Independent Study in Studio Art

Exceptional students in their Junior or Senior years seeking to define their own course of study,
distinct from the course offerings in the department, may submit a formal application to do so. The deadline for applications is the end of the 7th week of the preceding semester, and must consist of a 1-page written proposal for the student's course of study, a 20 image portfolio of recent work, a corresponding list of titles and materials, and an artist statement. Proposals will be reviewed and notice will be given by the department's faculty. If the student's application is accepted, notification of acceptance will be accompanied by an assigned studio advisor to facilitate the course of study during the desired semester. Prerequisite: Advanced Studio.

## 491. Studio Art Senior Seminar (Fall)

Required of all graduating seniors preparing for the Studio Senior Capstone Experience, this course instigates a concept-driven and research-supported project. Guided by a faculty advisor and other studio art faculty, the seminar is an intensive exploratory period of weekly studio work and research with feedback from peers. The curriculum prepares each student for the culminating Spring Thesis exhibition by guiding them through the process of developing a coherent body of work, including the ideas and influences driving that work, and the practical issues that need be navigated in order to fully realize each student's vision. Each student's performance in this non-credit bearing course will influence their grade earned at the completion of the Studio Senior Capstone Experience. Should be taken in the fall semester of senior year. Prerequisite: 392: Contemporary Practices.

## 492. Studio Art Senior Seminar (Spring)

Required of all graduating seniors preparing for the Studio Senior Capstone Experience, this course is a continuation of the intensive weekly studio work and research begun in Art 491 culminating in the Spring Thesis exhibition. Each student's performance in this non-credit bearing course will influence their grade earned at the completion of the Studio Senior Capstone Experience. Should be taken in the spring semester of senior year.
Prerequisite: 392: Contemporary Practices and 491: Studio Art Senior Seminar (Fall).

## SCE. Studio Senior Capstone Experience

Required of all graduating seniors within the studio concentration, this course is defined by each student's engagement with a project of active learning and integration of materials and concepts within the major. A continuation of the work initiated in the Studio Art Senior Seminar, students are guided by a faculty advisor and other studio art faculty. The Capstone is an intensive period of advanced independent studio practice with feedback from peers. Students employ their course of study from within the department to think critically, conduct research, and independently produce a substantial body of work. The culmination of this course is the Spring Thesis exhibition in the Kohl Gallery, conceived and produced by the course's participants, and the associated supporting activities. The SCE will be accorded Pass, Fail, or Honors, and, upon successfully completing it, the student will receive four credits. Prerequisite: Studio Art Senior Seminar.

## Courses Offered In The Washington College Abroad Programs

Art courses are presently offered through the following institutions: Monash University, Melbourne, Australia (art); University of Costa Rico, San José (art), Costa Rica; University of Copenhagen, Copenhagen, Denmark (art); Universidad San Francisco de Quito, Quito, Ecuador (art); Royal Holloway, University of London, London, UK (media arts); University of Hull, Hull, UK (art history); Artois University, Arras, France (art history); University of Provence, Aix-Marseille I, Marseille, France, (art); University of Tübingen, Tübingen, Germany (art); University College, Cork, Cork, Ireland (art history); Università Cattolica del Sacro Cuore, Milan, Italy; University of Siena, Siena, Italy; Leiden University, Leiden, the Netherlands (art history); Pontificia Universidad, Católica del Perú, Lima, Peru (fine arts); St. Andrews University, St. Andrews, Scotland (art history); Rhodes University, Grahamstown, South Africa (art); Semester in Granada, Spain (art); and University of Nebrija, Madrid, Spain (art).

The following is a selection of commonly taken courses:

## 150. Methods and Monuments

Painting, sculpture, and architecture studied as artistic and cultural expressions of their times. Emphasis is on selected major artists, monuments, and methods of analysis. Offered in the London program only, both fall and spring semesters. Three credits.

## 308. Modern Architecture: 1750-1900

Aesthetic and technological developments of architecture, interior design, and the planned environment: Renaissance tradition to Art Nouveau and the rise of the skyscraper. Offered in the London program only, both fall and spring semesters. Three credits.

## 312. Art in Northern Italy from the Late Gothic through the Renaissance

The course casts light on a very important period of Italian Art during which the Northern Italian cities, with their enlightened rulers, gave birth and played host to some of the most important European artists. Its goal is to examine the most relevant topics of artistic thought and practice in order to understand the peculiarities of each cultural center and of the leading artists operating there. Offered in the Milan program only. Three credits.

## 314. Art in Northern Italy from the Baroque through the Present

The course analyses a very fruitful segment in the history of Italian Art, focusing, in particular, on artists and artistic movements that developed in the northern regions. The most important topics in artistic thought and practice will be examined in order to understand the peculiarities of each period. A detailed examination of the most significant works of painters, sculptors, and architects will seek to underline the differences in their artistic "languages" and will strengthen the students ability to "read" works of art independently. Offered in the Milan program only. Three credits.

## 319. French Art of the 19th Century

This course surveys developments in art in France during the nineteenth century. The periods and movements studied are Romanticism, Realism, Impressionism, Neo-Impressionism, and Symbolism. The course includes visits to Paris museums and galleries. Offered in the Paris
program only, in the fall semester. (In English.) Three credits.

## 330. Art and Architecture of Spain

This course is a history of art and architecture in Spain, beginning with Hispanic-Moorish art during the Middle Ages and ending with the contemporary period. Included are the Renaissance, Mannerism, the Baroque, Rococo, and the modern period. The course includes visits to major artistic and architectural sites in the city of Granada. Offered in the Granada, Spain, program only, in the fall semester. (In Spanish.) Prerequisite: Hispanic Studies 202 or equivalent. Three credits.
335. Development of Space and Light in Florentine Painting, 1300-1550

This course will look at Florentine painting between 1300 and 1550 with special emphasis on the development of the illusion of space and light on a two-dimensional surface. The course will explore the sources of these forms (Greco-Roman, Early Christian, and Medieval), as well as look at the works of the major painters of the period (Giotto, Masaccio, Michelangelo). Field trips to view the art of the period are included. Offered in the Siena, Italy, program only, in the spring semester. (In English.) Three credits.

## Arts Management \& Entrepreneurship Interdisciplinary Minor

Laura Eckelman, Director

The arts industry is a diverse and multi-faceted landscape, encompassing fields from music production to entertainment law, poetry publishing to freelance choreography, and stage management to exhibition design. The interdisciplinary Arts Management \& Entrepreneurship program prepares students for careers in the arts by exposing them to this industry's breadth of professional opportunities, and by arming them with the knowledge, skills, and experiences necessary to succeed as organizational leaders and creative entrepreneurs.

The Arts Management \& Entrepreneurship program values interdisciplinary integration, self-directed education, and experiential learning.

As future artists, producers, presenters, curators, editors, marketers, fundraisers, managers, and entrepreneurs, graduates of this program are empowered to employ themselves both practically and creatively, with a humanistic perspective on what it means to contribute to society as a professional in the arts industry.

## LEARNING GOALS \& REQUIREMENTS

1) Literacy in the Arts ( 2 courses / 8 credits)

Ideally, the Arts Management \& Entrepreneurship minor should be paired with a major or minor in the arts, but the minor is open to any student who demonstrates a working familiarity with at least one artistic discipline.

Choose 2 courses or 8 credits from any combination of the following:

- ART (all courses)
- CMS (only 200, 201, 202, 401)
- DAN (all except 381)
- ENG (all courses)
- HIS (only 218,344 )
- MUS (all except 131/2, 231, 400)
- THE (all except 400)
- WLC: FRS/GRS/HPS/ILC (all courses above 302; except 375, HPS307) Courses designated as intern-/externships, field studies, on/off-campus research, departmental junior/senior seminars, and/or SCE may not be counted in this category, except with permission of the Program Director.


## 2) Arts Industries \& Organizations (1 course / 4 credits)

This requirement introduces students to the goals, operations, and responsibilities of arts organizations, both within and beyond their respective industries.

Choose 1 of the following courses:

- ART/BUS/DAN/MUS/THE 375 Arts Administration
- ENG 354 Literary Editing \& Publishing
- ANT 394 Museum Studies
- CMS 394 Creative \& Information Economies
- BUS 234 Introduction to NonProfit Management

3) Financial Resources (2 courses / 8 credits)

This requirement instructs students in how to understand and manage assets, revenue, and expenses to build sustainability, increase impact, and make decisions.

Take 2 required courses:

- ECN 112 Principles of Microeconomics
- BUS 112 Introduction to Financial Accounting

4) Marketing \& Development (1 course / 4 credits)

This requirement teaches students how to engage in research, relationship-building, and outreach to potential audiences, donors, and other stakeholders.

Take 1 required course:

- *BUS 111 Principles of Marketing


## 5) Elective (1 course / 4 credits)

This requirement allows students to broaden their knowledge of the field by exploring other subject areas related to arts management and entrepreneurship.

Choose 1 of the following courses:
Discipline-Specific Management

- *ANT/HIS 474 Historic Preservation and Cultural Resource Management
- THE 371 Stage Management
- Any course listed above under "Arts Industries \& Organizations"

Entrepreneurship \& Strategic Planning

- *BUS 320 Entrepreneurship
- EDU 394 Designing and Measuring Learning Experiences

Leadership \& Collaboration

- BUS 302 Organizational Behavior
- BUS 334 Leadership
- *PSY 323 Industrial/Organizational Psychology

Data Literacy

- BUS 109 or MAT 109 Statistics
- *BUS 212 Managerial Accounting
- *BUS 223 Marketing Research Methods
- *BUS 316 Data Analytics
- ECN 215 Data Analysis

Law, Ethics, \& Policy

- BUS 303 Legal Environment of Business
- *BUS 360 Corporate Social Responsibility
- POL 102 American Government and Politics

Diversity, Equity, \& Inclusion

- *ANT 320 Race and Ethnicity
- *ANT 420 Media and Power
- EDU 318 Cultural \& Linguistic Diversity in Education
- ENG 374 Main Divisions in American Culture: Race, Gender, Sexual Orientation, Generation, Class
- ENG 376 Culture of the Old / Cultures of the Young
- *SOC 221 Social Inequalities

Communication

- CMS 150 Public Speaking
- ENG 201 The Art of Rhetoric
- ENG 224 Introduction to Journalism

6) Experiential Learning / Fieldwork (2 or 4 credits)

This component enables students to apply and expand their understanding of arts management and entrepreneurship by completing an off-campus internship in a professional arts organization.

Complete 1 credited internship:

- AME 1/2/3/490 Internship

Notes: Internships must be approved in advance by the AME Program Director.

## Notes

*Courses marked with an asterisk have one or more prerequisites.

Special Topics, transfer courses, and other relevant coursework not listed above may count toward the minor with permission of the Program Director.

The same course may not be counted in more than one of the categories listed above.

No more than 12 credits (3 courses) from any single department may be applied to the minor.
The AME program places no restrictions on double-counting of coursework between AME and other majors/minors/concentrations-except for the required internship, which is registered within AME and may not count toward another program except with special permission of both the AME Program Director and the applicable department chair.

# Asian Studies <br> Interdisciplinary Minor 

David N.C. Hull, Director

T. Clayton Black

Jonathan McCollum
Andrew Oros
Pamela Pears
Bin Song
Over half of the world's population lives in Asia, a region of remarkable cultural, ethnic, political, and economic diversity. Asian Studies at Washington College provides an excellent complement to multiple majors, providing an interdisciplinary focus on the study of Asia though language and additional academic fields. Minors may complete up to half of their required coursework at one of Washington College's four exchange partnerships in Asia - in Beijing or Hong Kong, China; Seoul, South Korea; and/or Tokyo, Japan. At least half of the required coursework must be taken either through a Washington College faculty-led short-term abroad program in Asia or on campus with Washington College faculty.

The Asian Studies minor at Washington College is an interdisciplinary minor designed to foster a multidisciplinary understanding of Asia. In accordance with the larger College-wide mission to develop in students "habits of analytic thought and clear communication," students choosing this minor will develop capacities for critical analysis, clear writing, and effective communication in a global and cross-cultural setting. Minors will acquire basic knowledge about Asian nations, past and present - including important historical and cultural events and study of an Asian language, and are encouraged to travel abroad to Asia for a short-term summer or semester-long program.

All students intending to pursue the minor must meet with the director to design a program of study within the minor requirements. It is also expected that the student will continue to consult with the director in determining the best available courses to fulfill the minor requirements any given semester.

Asian Studies is an interdisciplinary minor of 24 credits:

One 4-credit course of an Asian language*
20 remaining credits taken in at least two different departments.

Please note, no more than 16 credits from one department will count toward the minor. 12 of these credits must be taken at Washington College or in a Washington College faculty-led short-term study abroad program. Additionally, one 4-credit course that is not solely devoted to Asia but with substantial Asian content may be included toward the minor, with permission of
the director of the minor.

* For those students whose native language is an Asian language, an appropriate 4-credit course may be used as a substitution, with permission of the director of the minor.

Courses for the Minor:
CHN 101. Elementary Chinese I
CHN 102. Elementary Chinese II
CHN 201. Intermediate Chinese I
CHN 202. Intermediate Chinese II
HIS 381. History of Modern China
HIS 383. History of Modern Japan
MUS 104. Intro to World Music \& Ethnomusicology
MUS 279. Japanese Music Ensemble (1 credit course. May be repeated up to 8 times)
MUS 314. Music of Asia
MUS 394. Special Topics: Performing Japanese Buddhism
PHL 112. Intro to Comparative Religion: Eastern
PHL 416. Philosophy of Buddhism
POL 345. Comparative Government: East Asia
POL 346. Japanese Politics and Foreign Policy
POL 347. Chinese Politics and Foreign Policy
POL 351. Politics, Religion, and Ethnicity in South Asia
POL 384. The International Relations of East Asia

Additional courses - such as special topics courses, and those taken off-campus - also may be counted with approval from the program director.

## Biochemistry and Molecular Biology

## Division of Natural Sciences and Mathematics

Biology Faculty Members

Mindy Reynolds, Biology Chair
Kathleen Verville
Jennifer Wanat
James Windelborn

## Chemistry Faculty Members

Aaron Amick, Chemistry Chair
James Lipchock

The biochemistry and molecular biology (BMB) major is a rigorous interdisciplinary program that allows students to gain a broad foundation in concepts and techniques essential for success at the interface between biology and chemistry. Students completing the BMB major will be prepared for a variety of career opportunities, including biomedical research, a range of health professions, and post-graduate education. This program is jointly administered by representatives of the Biology and Chemistry Departments.

## REQUIREMENTS FOR THE BIOCHEMISTRY AND MOLECULAR BIOLOGY MAJOR

The BMB major requires six courses in biology, six courses in chemistry, the General or College Physics sequence, Differential and Integral Calculus, and a BMB Senior Capstone Experience for a total of 70 credits.

| Course Code | Course Name | Credits |
| :--- | :--- | :---: |
| BIO 111 | General Biology I w/Lab | 4 |
| BIO 112 | General Biology II w/Lab | 4 |
| BIO 209 | Genetics w/ Lab | 4 |
| BIO 409 | Biochemistry | 4 |
| BIO 200-400 | 2 BIO electives from Category II. | 8 |
|  | At least one of these must be at <br> the 300-level or above. |  |
|  | BIO 310 Microbial Ecology and <br> BIO 350 Toxicology many not <br> be counted as an elective <br> course. |  |
|  | Bren |  |
|  |  |  |


| CHE 120 | Chemical Principles of Organic Molecules w/Lab | 4 |
| :---: | :---: | :---: |
| CHE 140 | Reactions of Organic Molecules w/Lab | 4 |
| CHE 220 | Quantitative Chemical Analysis w/Lab | 4 |
| CHE 303 | Chemistry of Biological Compounds w/Lab | 4 |
| CHE 305 ORCHE 306 | Chemical Thermodynamics \& Kinetics w/Lab OR | 4 |
|  | Quantum Chemistry \& Spectroscopy w/Lab |  |
| CHE 200-400 | CHE elective at the 200-level or above from the list below: | 4 |
|  | CHE 320 Intro Medicinal Chemistry, CHE 340 Organic Mechanisms and Synthesis w/Lab, CHE 405 Biophysical Methods, or other approved Special Topics course. |  |
| BIO 392 | Biology Junior Seminar | 0 |
| CHE 492 | Chemistry Senior Seminar | 2 |
| BMB SCE | Senior Capstone Experience | 4 |
| PHY 111/101 | General or College Physics I w/Lab | 4 |
| PHY 112/102 | General or College Physics II w/Lab | 4 |
| MAT 201 | Differential Calculus | 4 |
| MAT 202 | Integral Calculus | 4 |
|  | Total Credits: | 70 |

Based on the above academic requirements, below is a typical plan of study for students wishing to complete the BMB major in four years. Given the flexibility in the proposed curriculum, this plan can be condensed to three years to accommodate students who begin the major late, desire to graduate in three years or choose to study abroad.

| Year | Fall Semester | Spring Semester |
| :--- | :--- | :--- |
| First | General Biology I <br> Chemical Principles of Organic <br> Molecules <br> First-Year Seminar <br> Distribution | General Biology II <br> Reactions of Organic Molecules <br> Distribution <br> Distribution |
| Sophomore | BIO Elective from Category II <br> Quantitative Chemical Analysis <br> Differential Calculus <br> Distribution | Chemistry of Biological Compounds <br> Integral Calculus <br> Distribution <br> Distribution |
| Junior | Biochemistry <br> General or College Physics I <br> Distribution <br> Elective | Genetics <br> General or College Physics II <br> Distribution <br> Elective <br> Biology Junior Seminar (0 credits) |
| Senior | BIO Elective from Category II <br> CHE 305 OR CHE Elective <br> Chemistry Senior Seminar (2 <br> credits) <br> Elective <br> Elective | CHE 306 OR CHE Elective Senior <br> Capstone Experience Elective <br> Elective |

## Majoring or Minoring in Biology and Chemistry

Due to the interdisciplinary nature of the biochemistry and molecular biology major, students who major in BMB cannot double major or minor in chemistry or biology.

## Seminar Requirements

All junior BMB majors will participate in BIO 392 Biology Junior Seminar which focuses on searching the biological literature, reading of primary literature, and preparing students to be engaged in the Senior Capstone Experience. All senior BMB majors will participate in CHE 492 Chemistry Senior Seminar which focuses on (1) understanding contemporary moral/societal issues in chemistry with an emphasis on sustainability science literacy, and (2) introducing grant writing and the principles of an effective research proposal with the presentation of an
integrative research proposal being the culmination of seminar. Therefore, at the end of this course, the following " 4 Cs " will have been practiced and mastered: Critical thinking and problem solving, Communication, Collaboration, and Creativity and innovation.

## Senior Capstone Experience

For the senior capstone experience, students will either be advised by a Biology or Chemistry faculty member. Students will be able to choose from two different options to complete the SCE which includes an experimental project or a written monograph on a topic of their choosing. Senior capstone students will be assigned to a faculty advisor by the Co-Program Chairs in consultation with program faculty. Seniors present the results of their project in a poster session that is open to the College community. The program has a set of Senior Capstone Experience Guidelines that are distributed to both junior and senior BMB majors each Fall. Students must enroll in BMB SCE in their final semester to obtain credit for the Senior Capstone Experience. The Senior Capstone Experience is graded according to the Washington College grading system, which involves the use of letter grades (A-F).

## Internship and Research Opportunities

BMB majors are strongly encouraged to participate in internships during their undergraduate education. These experiences afford students the opportunity to enhance their understanding of biochemical concepts, gain additional laboratory experience, and/or network with other scientists and professionals. Internships may be located on or off-campus and may occur at any point during the academic year. Students wishing to earn course credit for an internship must gain approval from the BMB program chairs prior to beginning the internship.
A number of stipend-bearing internships and research opportunities exist for BMB majors. Summer on-campus research projects as well as summer and semester-long off-campus internships not only provide additional laboratory experience, but also allow students the opportunity to explore, in depth, areas of biochemistry and molecular biology not covered in the core curriculum. Off-campus and on-campus internships may or may not bear credit.

## Distribution Courses

Students are instructed to consult section of the catalog on Distribution Requirements to see what courses count for distribution.

## Advanced Placement Credit

Students are instructed to consult either the Biology or Chemistry Department catalog section to determine the policy on Advanced Placement or IB credit.

## Transfer Credit

Students are instructed to consult either the Biology or Chemistry Department catalog section to determine the policy on transfer credit.

## NOTE ABOUT PREREQUISITES

To enroll in any course, a student must complete and successfully pass all prerequisites that are
required.

## Course Descriptions

Descriptions of the courses required for the BMB major can be found under the biology or chemistry department catalog sections titled course description.

## Biology

Division of Natural Sciences and Mathematics

Mindy Reynolds, Chair
Aaron Krochmal, Associate Chair
Jennie Carr
Martin Connaughton
Mala Misra
Karen O'Connor
Suzanne Thuecks
Robin Van Meter
Kathleen Verville
Jennifer Wanat
James Windelborn

The Biology major is designed to help students develop a strong and broad background in biological science. Students may choose an area of emphasis while earning their B.S. in Biology that provides more in-depth coursework in one of three areas: Cell/Molecular Biology \& Infectious Disease, Ecology \& Evolution or Physiology \& Organismal Biology. If a student wishes to focus within an area of emphasis, the student's Senior Capstone Experience (SCE) must also be designed with that focus in mind.

The Biology Department also seeks to emphasize to its majors that the discipline of biology is intimately related to many disciplines outside of the sciences. As part of the major, students will gain an appreciation of the impact of biology on history, and they will appreciate the many philosophical and ethical questions that have biological underpinnings. Students are encouraged to find additional connections-to the humanities, to the social sciences, and to the other science fields-as they pursue their education.

A strong knowledge base is essential for a biologist, but it does not alone make the scientist. Therefore, the Biology major seeks to guide students to develop the skills to ensure that, for them, biology is an inquiry-based discipline. Through ample opportunities for practice, students learn to:
read, understand, and analyze biological literature;
design, perform, and analyze experiments to ask questions and test hypotheses;
use up-to-date techniques and equipment common in the discipline;
communicate their questions and findings both orally and in writing; and
work collaboratively on experimentation with fellow students and faculty who share a love of inquiry.

The combination of these three components of our mission-the strong knowledge base, the appreciation of the connections between biology and other academic areas, and the collaborative "doing" of biology-position students to become skilled biologists, lifelong independent learners, and citizen leaders.

Many careers are available to students who have majored in biology. Some of these careers can be accessed directly by those with a B.S. in Biology. Others require-or can be enhanced
by-post-graduate education. The Biology major seeks to ensure that graduates are well prepared for careers in biology and for admission to graduate programs (M.S. and Ph.D.) and programs designed to train and license the teaching or the medical professional. Among the many examples of the latter for which our students are well trained are medical school, dental school, veterinary school, pharmacy school, and nursing school, and well as programs that train the physician assistant, the physical therapist, and the occupational therapist.

The Biology Department offers classes for students enrolled in the first-year FYS program, distribution courses for nonscience majors, introductory level courses covering the breadth of the discipline at two levels (regular and Honors), and diverse upper-level courses for majors. Undergraduate research opportunities are available in departmental laboratories during both the academic year and the summer. Students can also participate in internships sponsored by off-campus laboratories through existing programs or those proposed by the student. A chapter of Beta Beta Beta, the national biological honor society, provides supplemental activities for students.

The nearby Chester River, a major tributary to the Chesapeake Bay, and Chester River Field Station afford excellent opportunities for ecological studies in a wide variety of biological subdisciplines. Another resource is the Virginia Gent Decker Arboretum, the collection of trees and shrubs on the college campus, in which students can also study a broad range of topics. Collaborative student-faculty research is an important focus of the department and the Toll Science Center boasts personal labs for each of the faculty and a number of shared research spaces including a set of microsuites (fluorescence microscopy, cell and tissue culture, and histology), the aquatic research facility, and a spacious research greenhouse.

## Requirements For The B.S. Degree

B.S in Biology<br>BIO 111, 112. General Biology with laboratory*<br>BIO 206. Ecology with laboratory<br>BIO 209. Genetics with laboratory<br>5 Advanced Biology courses<br>1 - course Category II<br>1 - course Category III<br>2 - courses Categories I, II, or III<br>1 - course Categories I, II, III, IV, or V<br>BIO 392. Junior Seminar<br>BIO 491. Senior Seminar<br>SCE. Senior Capstone Experience<br>CHE 120, 140. Chemical Principles of Organic Molecules and Reactions of Organic Molecules with laboratories<br>CHE 220, 240. Quantitative Chemical Analysis and Chemistry of the Elements with laboratories<br>MAT 201. Differential Calculus, or two semesters of Stretch Differential Calculus MAT 194/294

Recommended: An introductory course in statistics
*Students who successfully complete the Biology major typically have grades of C- or better in both semesters of General Biology (BIO 111, 112). We strongly encourage students who have grades below a C - in these classes and who plan to major in Biology to retake General Biology before enrolling in upper level biology courses.

We highly recommend that students enroll in a 200-level course in their Fall semester after completing the BIO 111, 112 General Biology sequence because one 200-level course must be completed before taking a 300- or a 400-level course.

All upper-level courses for the major must be taken at Washington College or in Washington College-approved programs although exceptions may be made by the department chair for transfer students.

Physics is a requirement for admission to medical school, many graduate programs, and some allied health programs. This requirement can be fulfilled by taking either the algebra-based physics course [College Physics I and II (PHY 101, 102)] or the calculus-based physics course [General Physics I and II (PHY 111, 112)].

Students should consult with the appropriate departmental advisor (listed on the departmental Web page at biology.washcoll.edu) early in their academic career to assist them in preparing for internships and admission to graduate schools and professional programs. Students are also encouraged to discuss options concerning research opportunities and career choices with members of the department.

## Areas of Emphasis (AOE)

To successfully complete one of three optional areas of emphasis, students must fulfill the requirements for the B.S. in Biology, design their Senior Capstone Experience with a focus on that particular AOE, and complete three of the courses as outlined below within their chosen AOE:

Biochemistry, Infectious Disease \& Molecular Biology:

- BIO 203 Microbiology
- BIO 205 Cell Biology
- BIO 302 Developmental Biology
- BIO 310 Microbial Ecology
- BIO 314 Biotechnology and Molecular Biology
- BIO 350 Toxicology
- BIO 404 Immunology
- BIO 409 Biochemistry
- BIO X94 Special Topics courses with laboratories designated for this concentration
- BIO X94 or BIO X95 Biological research on or off campus for course credit must be in the area of study (Limit of one course)

Ecology \& Evolution:

- BIO 211 Plant Biology
- BIO 309 Marine and Estuarine Biology
- BIO 310 Microbial Ecology
- BIO 313 Wetlands Ecology
- BIO 315 Ecophysiology
- BIO 328 Behavioral Ecology
- BIO 351 Evolution
- ENV 302 Conservation Wildlife Techniques
- BIO X94. Special Topics courses with laboratories designated for this concentration
- BIO X94 or BIO X95. Biological research on or off campus for course credit must be in the area of study (limit of one course)

Physiology \& Organismal Biology:

- BIO 203 Microbiology
- BIO 211 Plant Biology
- BIO 228 Ornithology
- BIO 208 General Zoology
- BIO 301 Integrative Human Anatomy
- BIO 303 Parasitology
- BIO 311 Neurobiology
- BIO 315 Ecophysiology
- BIO 336 Ichthyology
- BIO 404 Immunology
- BIO 424 Integrative Human Physiology
- BIO X94 Special Topics courses with laboratories designated for this concentration
- BIO X94 or BIO X95. Biological research on or off-campus for course credit must be in the area of study (limit of one course)


## Senior Capstone Experience (SCE)

Each student must successfully fulfill the Department's Senior Capstone Experience (SCE). Students will enroll in the four-credit SCE course during their final semester, although work on the SCE will span the entire final academic year and the related Senior Seminar (BIO 491) will be completed in the Fall. The Junior Seminar (BIO 392) introduces the SCE and the skills needed to successfully complete this project during the senior year.

The SCE for a biology major may be satisfied (1) by completing an independent laboratory or field research project or (2) by writing an in-depth scientific monograph. All SCEs are under the direction of a faculty member. Students must receive project approval from a sponsoring faculty member and the departmental chair. Guidelines for the Biology SCE, including requirements for receipt of honors, are distributed to all rising seniors and are posted on the departmental Web page.

## Requirements For The Biology Minor

The course requirements for the biology minor include General Biology (BIO 111,112) and five upper-level biology courses. By petition of the biology department, an appropriate upper-level course in chemistry, psychology, or environmental studies may be substituted for one of the required advanced biology courses. Students planning on using the biology minor as a basis for further studies in the biological sciences or for employment should seriously consider taking a year of Chemistry (CHE 120, 140). All students should note that CHE 120, 140 is a prerequisite
for some upper-level biology courses.

## Writing In The Discipline

The Biology Department emphasizes the importance of effective writing in the discipline in the design of the curriculum for the biology major. Writing appropriate to the field of biology is a key component of all majors-level courses, from the introductory General Biology sequence (BIO 111, 112) through the upper level biology courses and the Senior Capstone Experience. Some introductory and upper level courses are designed as W2 and W3, but all courses in the major emphasize the development of writing skills. Through a combination of required and elective courses, students learn how to maintain laboratory notebooks; write abstracts, lab reports and research papers; and prepare poster presentations and the written backdrop to oral presentations.

## Advanced Placement Credit

Students who earn a 4 on the biology AP exam can opt out of BIO 112, but must take BIO 111. Students who earn a 5 on the biology AP exam can opt out of both BIO 111 and 112. However, in either case, if the student plans to major in Biology the department strongly recommends taking both courses, or at the very least, BIO 111. In addition, BIO 112 is a W2 (writing intensive) course and if students do not fulfill their W2 requirement by completing BIO 112, they will need to take another W2 course.

## Transfer Credit

Biology majors cannot take biology courses that will be applied to the major off campus. The only exception being biology courses offered at Washington College sanctioned full-semester, study abroad program. These courses must be reviewed and pre-approved by the chair of the Biology Department. Other courses required for the Biology major (calculus and chemistry) can be taken off campus only if pre-approved by the chairs of the requisite department.

## Categories Of Study

## Category I: Ecology

BIO 206. Ecology with laboratory
BIO 309. Marine and Estuarine Biology with laboratory
BIO 313. Wetlands Ecology with laboratory
BIO 328. Behavioral Ecology with laboratory
BIO 351. Evolution with laboratory
BIO 194, 294, 394, 494. Special topics courses with laboratory

## Category II: Cellular Biology

BIO 203. Microbiology with laboratory
BIO 205. Cell Biology with laboratory
BIO 209. Genetics with laboratory
BIO 302. Developmental Biology with laboratory
BIO 310. Microbial Ecology with laboratory
BIO 314. Biotechnology and Molecular Biology with laboratory
BIO 350. Introduction to Toxicology with laboratory
BIO 369. Cell Signaling with laboratory

BIO 404. Immunology with laboratory
BIO 409. Biochemistry with laboratory
BIO 194, 294, 394, 495. Special topics courses with laboratory

## Category III: Organismal Biology

BIO 208. General Zoology with laboratory
BIO 211. Plant Biology with laboratory
BIO 228. Ornithology with laboratory
BIO 301. Integrative Human Anatomy with laboratory
BIO 303. Parasitology with laboratory
BIO 311. Neurobiology with laboratory
BIO 315. Ecophysiology with laboratory
BIO 317. Pathophysiology with laboratory
BIO 336. Ichthyology with laboratory
BIO 424. Integrative Human Physiology with laboratory
BIO 194, 294, 394, 495. Special topics courses with laboratory
Category IV: Seminars (excluding summer field courses)
BIO 394. Special Topics in Biology (non-laboratory bearing course)
BIO 415-90. Evolutionary Biology - Honors

## Category V: Research/ Independent Study/ Internship/Summer Field Courses

BIO 210. Community Ecology of Coastal Maine (summer field course)
BIO 221. The Bermuda Environment (summer field course)
BIO 294. Tropical Ecology (winter field course)
BIO 395. Summer Research
BIO 397. Independent Study
BIO 490. Biology Internship
BIO 495. Independent Research

## Course Descriptions

BIO 100 and 104 are distribution courses, and do not count toward the major or minor in biology.

## 100. Current Topics in Biology with laboratory

An introduction to some of the fundamental principles and concepts of modern biology with emphasis on three dominant themes: cell biology, genetics, and animal physiology. The application of biological phenomena to everyday life will be emphasized. The laboratory will explore topics introduced in lecture and expose students to investigative learning.

## 104. Ecology of the Chesapeake Bay with laboratory

A detailed exploration of the unique features and history of the Chesapeake Bay to demonstrate the dynamic interrelationships between ecology and human affairs. Topics include ecological principles, pollution, endangered species, conservation practices, and public policy. A regularly scheduled laboratory session will complement the lecture.

BIO 111, 112 are also for distribution and along with all upper-level courses (200-level and above) will count toward the major and minor in biology. Introductory courses and many
upper-level courses are offered annually, while other courses are offered on an alternate year basis. For planning purposes, information about the semester/year in which a course is to be offered is available on the departmental Web page.

## 111, 112. General Biology with laboratory

This course provides an introduction to living systems. Topics studied include biomolecules, cell structure and function, metabolism, genetics and molecular biology (111) and diversity of life, physiology of plants and animals, evolution, and ecology (112). The laboratory complements the lecture and also provides an introduction to experimentation and communication of experimental results. These courses are designed for students with a strong interest in the biological sciences and are prerequisites for upper-level biology courses. An honors section of BIO 111 and of BIO 112 is offered. Biology 111 or permission of instructor is required for Biology 112.

## 203. Microbiology with laboratory

A study of microorganisms (viruses, bacteria, fungi, and protists). Topics include microbial physiology, metabolism, growth, and genetics; infectious diseases; interaction of the microbe and host; and environmental microbiology. The laboratory portion of the course emphasizes staining techniques; culture methods; environmental, food, and medical microbiology; identification of unknown bacteria; and an independent research project.
Prerequisite: Biology 111-112.

## 205. Cell Biology with laboratory

An examination of the structure and function of cells. Topics covered will include the various chemical components and physical factors which contribute to cell structure and function. Lectures will also include surveys of cellular diversity and subcellular organization, including organelles, membranes, and the cytoskeleton. The laboratory explores these components using microscopy, tissue culture, and molecular techniques. Biology 205 provides a broad foundation for subsequent cellular, molecular, biochemical and genetics courses.
Prerequisite: Biology 111-112.

## 206. Ecology with laboratory

A study of the fundamentals of ecology. Topics include the relationship between organisms and their physical environments; population growth, regulation, and interactions; the nature and diversity of biological communities; and ecosystem structure and function. Approximately half of the weekly laboratories will involve off-campus field trips for the collection of data from various ecosystems, while the remaining half will involve processing of collected data.
Prerequisite: Biology 111-112.

## 208. General Zoology with laboratory

General Zoology topics range from taxonomy and systematics to the basic patterns of form and function that characterize the major groups of animals. Lecture and laboratory work will include functional morphology, reproduction, development, evolution, and ecology from simple protozoans through complex vertebrate taxa. Emphasis will be on the diverse adaptations of animals to the aquatic and terrestrial habitats in which they live.
Prerequisite: Biology 111-112.
209. Genetics with laboratory

A study of heredity in cells, individuals, and populations, and of the molecular expression of genes. The course emphasizes genetic analysis in both lab and lecture. Topics in the laboratory include experiments in transmission, population, cellular, and molecular genetics using a variety of organisms as models.
Prerequisite: Biology 111-112

## 210. Community Ecology of Coastal Maine

This summer course focuses on the biological communities of coastal Maine as represented by the communities within Acadia National Park on Mount Desert Island, ME. Students visit and characterize many of the diverse forest and marine communities represented on the island. The course begins with a consideration of the geological, oceanographic and climatic features of coastal Maine. Other topics considered in lecture and through data collection and observation in the field include succession, disturbance, species diversity, vertical and horizontal community structure, physical and biological stresses on communities, bottom-up and top-down regulation of community structure, and competitive and positive interactions among species.
Prerequisite: Biology 112.

## 211. Plant Biology with laboratory

An introduction to plants emphasizing their diversity, structure, function, and ecology. The laboratory includes field trips to collect local flora and explores plant cells and tissues, physiological processes and environmental influences on growth and metabolism.
Prerequisite: Biology 111-112.

## 221. The Bermuda Environment

This summer course will investigate the complex ecology of the Bermuda Islands, the impact that human habitation has had on their natural history, and current environmental concerns and means of mitigating those concerns. Major areas of study will include (but not be limited to) coral reef ecology/symbioses, mangrove community ecology and environmental relevance, architectural and military influences during colonization, fisheries practices (past, present and future) and current concerns and problems, and ecotourism and associated environmental impacts. (Also ENV 221)
Prerequisite: Environmental Studies 101, or Biology 111-112, or permission of the instructor.

## 228. Ornithology with laboratory

An in-depth study of birds with respect to their evolutionary history, structural and physiological adaptations, behavior, and ecology. The laboratory component of this course will focus on the identification of local species of birds and reinforcement of lecture topics in the field. The lab will also introduce students to research techniques used to study birds in the field and will include visits to the Chester River Field Research Station and River and Field Campus (RAFC).
Prerequisite: Biology 111-112.

## 301. Integrative Human Anatomy with laboratory

A comparative study of the major body systems of vertebrates, with emphasis placed on system structure, function, and evolutionary modification across vertebrate phylogeny. Laboratory work consists of detailed systems-level examination and comparative dissection in numerous representative vertebrates.
Prerequisite: Biology 111-112 and one 200-level biology course.

## 302. Developmental Biology with laboratory

Examines embryo development, focusing on cellular and regulatory mechanisms that guide the process. We will cover the events of development from fertilization through organogenesis in a range of animal systems including sea urchins, Drosophila, amphibians, chickens and mammals. This course will also examine the role of developmental biology in medicine including stem cells. The laboratory portion is an investigative approach to the study of animal development, emphasizing cellular and molecular techniques that will complement many of the topics covered in lecture using sea urchin and chicken animal models.
Prerequisite: Biology 111-112 and one 200-level biology course. Biology 205 recommended.

## 303. Parasitology with laboratory

An introduction to the phenomenon of parasitism, the study of parasites and their relationships to hosts. Lecture and laboratory studies emphasize the morphology, taxonomy, life history, and host-parasite relationships of protozoa, helminths, and arthropods of medical and veterinary importance.
Prerequisite: Biology 111-112 and one 200-level biology course.

## 309. Marine and Estuarine Biology with laboratory

A study of marine and estuarine ecosystems. The biological, chemical, and physical parameters influencing these ecosystems will be discussed and the natural history, physiology, and ecology of selected ecosystems, invertebrate, and vertebrate phyla will be emphasized. About one-half of the laboratory will be spent in off-campus field trips and will include a two-or three-day mandatory trip to a field station. There will be some extra expense to the student, probably not more than $\$ 80$.
Prerequisite: Biology 111-112 and one 200-level biology course.

## 310. Microbial Ecology with laboratory

A study of microbes, particularly the bacteria, fungi, and protists, and their relationship to the natural environment. Specific topics include microbes in terrestrial and aquatic habitats; microbial interactions with other microbes, plants, and animals; microbial enumeration and activity determination; and biogeochemical cycling. These topics will be explored with emphasis on microbial physiology, metabolism, and adaptation. The laboratory portion of the course will focus on the Chesapeake Bay region and will include an independent research project. Prerequisite: Biology 111-112 and one 200-level biology course. Biology 203 recommended.

## 311. Neurobiology with laboratory

_This course will present an overview of the field of neurobiology. We will discuss the structure and components of the nervous system, the development of the nervous system including early events that specify neuronal cells and processes required for neuronal migration and function. In addition, we will examine the methods of communication within the nervous system and include and overview of some of the sensory systems that relay environmental cues for processing in the CNS. We will explore the general maintenance and repair within the nervous system. As well as explore topics of neurological diseases/disorders via student presentations. The purpose of this laboratory is for you to become familiar with the neuroanatomy as well as experimental techniques used in the field of neuroscience both by hands on experience and reading/presenting journal articles. The laboratory is designed to help you to develop your skills in carrying out experiments and analyzing/presenting experimental data.

Prerequisite: Biology 111-112 and one 200-level biology course.

## 313. Wetlands Ecology with laboratory

Wetlands Ecology provides an in-depth examination of the function and types of wetlands with an emphasis on ecosystem services, biodiversity and conservation. Lecture will include a broad overview of the role wetlands play in larger ecosystems as well as the hydrology, geology, chemistry, trophic interactions and species common to these unique aquatic systems. Laboratories will include a large field-based component where students will learn to identify wetlands and their associated flora and fauna.
Prerequisite: BIO 111-112, and BIO 206 or ENV 294 Applied Ecology

## 314. Biotechnology and Molecular Biology with laboratory

This course introduces the tools and techniques of biotechnology. While the discipline of biotechnology is founded in molecular biology, its tools can be applied to tackle problems in all branches of biology from cell biology to evolution. This course provides the conceptual background for understanding the basis of biotechnology and emphasizes laboratory activities related to DNA and DNA-RNA-protein interconnections. Students will learn standard techniques in DNA analysis and cloning.
Prerequisite: Biology 111-112. and two upper-level biology courses or permission of the instructor.
Corequisite: Chemistry 112 or 140.

## 315. Ecophysiology with laboratory

This course will examine how organisms' physiological responses have evolved in response to ecological challenges, such as fluctuating or extreme conditions in their environment. Discussions of physiological adaptations will integrate topics from a variety of fields, including behavior, ecology, and molecular biology. A particular emphasis will be given to interactions between vertebrate animals and their biotic and abiotic environments. The laboratory component of the course will include both in-lab and field activities.
Prerequisite: Biology 111-112 and one 200-level biology course.

## 317. Pathophysiology w/ Lab

This course introduces the physiological basis of common human diseases through laboratory, lecture, clinical case study, and analysis of primary scientific literature. Topics include diseases of the nervous, cardiovascular, renal, immune, and endocrine systems. Laboratories will expose students to techniques commonly used in clinical settings. Three hours of lecture and three hours of lab each week.

## 328. Behavioral Ecology with laboratory

This course addresses how animal behavior has evolved in response to ecological pressures in the environment. Topics covered in the course include competition, sexual selection, parent-offspring conflict, social interactions, and game theory. Laboratory work will include discussions of primary literature, activities in the classroom, and field excursions.
Prerequisite: Biology 111-112 for all enrolled, BIO 206 for BIO majors, ENV 294 for ESI/EST majors, or permission of instructor.

## 336. Ichthyology with laboratory

Ichthyology encompasses the study of fishes. Topics will include the systematics, physiology,
behavior, ecology, and evolution of this diverse group. Identification of specimens during a weekly lab will familiarize students with the major fishes of the Chesapeake region. A multi-week independent project will familiarize students with the scientific method and with aspects of fish behavior. Field trips to the fish collection at the Smithsonian Museum of Natural History, the largest in the world, and to the National Aquarium in Baltimore will broaden the perspective of the course. There may be some additional cost to the students for these trips, though not more than \$50.
Prerequisite: Biology 111-112 and one 200-level biology course.

## 350. Introduction to Toxicology with laboratory

This course introduces basic concepts of toxicology that pertain to human health and the environment. Topics include principles underlying dose-response relationships, absorption, distribution, metabolism and elimination. Many of these concepts are reinforced through the use of a case-study approach where a pertinent environmental issue is incorporated into the ongoing lecture and laboratory.
Prerequisite: Biology 111 and Chemistry 201 or 120 and 140, or permission by the instructor

## 351. Evolution with laboratory

An in-depth examination of various components of evolutionary biology. Topics covered in the course will include (but are not limited to) evolutionary mechanisms, genetics, speciation, adaptation, extinction, evolutionary history, and analysis of evolutionary relationships.
Laboratory exercises will emphasize the discussion and analysis of primary literature articles supplemented by laboratory- and field-based observations.
Prerequisite: Biology 111-112 and one 200-level biology course.

## 369. Cell Signaling w/ Lab

An examination of how cells communicate with themselves and their environments. Common cellular principles connecting diseases such as stroke and cancer to physiological processes such as vision will be explored via frequent discussions of primary scientific literature. Laboratories include cellular and molecular techniques such as microscopy and cell culture. Three hours of lecture and three hours of lab each week.

## 392. Biology Junior Seminar

Biology majors participate with faculty in the department's weekly Biology Seminar in the spring semester of the junior year. Instruction focuses on searching the biological literature, reading of primary literature, and preparing students to be engaged in the Senior Capstone Experience. Biology Junior Seminar is a non-credit bearing course.

## 404. Immunology with laboratory

An examination of the specific defense system of mammals. Topics include leukocyte characteristics and their responses to antigen; antigen characteristics; antibody structure, diversity, function, genetics, and synthesis; the major histocompatibility complex; vaccines; and disorders of the immune system. The laboratory focuses on animal handling, antibody purification, and detection of antigen-antibody interactions.
Prerequisite: Biology 111-112 and one 200-level biology course.
Corequisite: Chemistry 112 or 140
409. Biochemistry with laboratory (CHE 309)

An examination of living systems at the chemical level. Topics will include structure and function of macromolecules, cellular energetics, cellular respiration, with a particular focus on protein structure and enzyme function. A laboratory will be conducted weekly to introduce students to experimental techniques and molecular modeling.
Prerequisite: Biology 111 and Chemistry 202 or Chemistry 120, 140, 220, and 240

## 415. Evolutionary Biology - Honors

Evolutionary Biology is a seminar-style class revolving around discussion of readings from popular literature and scientific papers drawn from the primary literature. Topics of consideration will include natural selection, sexual selection, speciation, the co-evolution of man and disease, the selfish gene, and battle of the sexes as it is fought on the molecular level. The course will include a number of short writing assignments. Periodic Friday recitation sessions will be used for debates, oral presentations, videos, and other activities.
Prerequisite: Biology 111-112 and two 200-level biology courses, college GPA of 3.4 or higher.
424. Integrative Human Physiology with laboratory

A comparative study of physiological processes in animals. Topics will include gas exchange, circulation, water and ion balance, and excitable cells. As a comparative study, we will examine a variety of animals that are adapted to function in diverse environments. A weekly laboratory illustrates physiological principles.
Prerequisite: Biology 111-112 and two 200-level biology courses.

## 491. Biology Senior Seminar

Biology majors participate with faculty in the department's weekly Biology Seminar in the Fall semester of the senior year. Instruction focuses on searching the biological literature, reading of primary literature, and writing appropriate to the discipline. Students discuss readings and make oral and poster presentations. Biology senior seminar is a non-credit bearing course.

## Special Courses

190, 290, 390, 490. Biology Internship
An internship developed by a faculty mentor and student in close consultation with the supervisor at the internship site. A learning contract will be developed prior to enrollment in the course. Evaluation of student performance will be completed by the faculty mentor based on fulfillment of the contract terms and written evaluation by the internship site supervisor. Not offered as Pass/Fail.
Prerequisite: Permission of faculty mentor.

## 194, 294, 394, 494. Special Topics in Biology

The study of areas in biology that are not regularly offered in the curriculum. Courses may be interdisciplinary, seminar or winter/summer field-type courses and will be designated as Category 1,2 or 3 if they have a laboratory component.
Prerequisite: Biology 111-112, or permission of instructor.
195, 295, 395, 495. On-campus Research
A ten-week on-campus summer research project to be guided by a faculty mentor. Based on
mutual interests, the student and faculty mentor will develop a research project, supported by a reading list and involving theoretical, laboratory, or field investigations. Participants will produce a final report detailing the findings of their research. Selection of students will depend on academic background, scholastic achievement, and the results of a personal interview with the faculty mentor. Not offered as Pass/Fail.
Prerequisite: Permission of faculty mentor.

## 196, 296, 396, 496. Off-campus Research

The course consists of an individual research project chosen by the student in consultation with a faculty mentor. The project involves the design and performance of an experiment or experimental series and submission of a written report. Not offered as Pass/Fail.
Prerequisite: Permission of faculty mentor, academic advisor, and biology department chair.

## 197, 297, 397, 497. Independent Study

The in-depth study of an area of particular interest to a student and faculty mentor not covered by the regular curriculum. Not offered as Pass/Fail.
Prerequisite: Permission of faculty mentor, academic advisor, and biology department chair.

## SCE. Senior Capstone Experience

Each student must successfully fulfill the Department's Senior Capstone Experience (SCE). Students will enroll in the four-credit SCE course during their final semester, although work on the SCE spans the entire final academic year and the related Senior Seminar (BIO 491) is completed in the Fall semester.

# Black Studies <br> Interdisciplinary Minor 

Elena Deanda, Director<br>Lisa Daniels<br>Rachel Durso<br>Alisha Knight<br>Carrie Reiling<br>Kenneth Schweitzer<br>Tahir Shad<br>Christine Wade<br>Carol Wilson

Black Studies is the interdisciplinary study of the multifaceted history, culture, and lives of people of African descent. Unlike African-American and African Studies, Black Studies is not limited to a single nation or continent; rather, it encompasses all locales where black people have voluntarily or involuntarily been dispersed throughout history. The Black Studies minor offers students of all backgrounds the opportunity to explore and research various aspects of black culture from a local, national, and global perspective. Students who earn a minor in Black Studies will increase their knowledge of the impact people of African descent have had and continue to have on world cultures and human history.

This interdisciplinary minor consists of six courses ( 24 credits). Two Humanities courses, three Social Sciences courses and one additional course in any discipline are required. At least two of these six courses must pertain to black culture outside of the United States, and students are encouraged to take three of these courses.

Pre-approved Study Abroad courses may also count toward the minor (e.g., ECN 238 South African Economy offered at Rhodes University, South Africa). One-credit music ensembles may count toward the minor only if the student takes four semesters of the same ensemble.

Students may request that a special topics course or a course not cross-listed with Black Studies be applied toward the minor. Credit for such courses may be granted only with the program director's approval and upon the completion of specific course requirements. Students planning to complete the Black Studies minor should notify the director of their intentions and consult with the director when selecting courses for the minor.

## Senior Capstone Experience

Students who complete a Senior Capstone Experience project that focuses on a Black Studies topic may request to have their SCE credits applied toward the Black Studies minor. A student must first receive approval for the SCE according to the requirements stipulated by the major department. A copy of the approved SCE proposal must be submitted to the Black Studies
program director in order to be considered for Black Studies course credit. If approved by the program director, the student would receive credit for one four-credit course within the Black Studies minor upon successful completion of the SCE.

## Social Sciences Courses That Count Toward the Black Studies Minor

ANT 320. Race and Ethnicity
ECN 218. Economic Development
HIS 319. African American History to 1865
HIS 371. History of South Africa
HIS 414. Comparative Cultural Encounters
POL 341. Politics of Development
POL 356. Civil War and Violence In Africa
POL 348. Latin American Politics
SOC 221. Social Inequalities
SOC 240. Criminology
SOC 340. Victimology

## Humanities Courses That Count Toward the Black Studies Minor

ENG 213, 214. Introduction to African American Literature \& Culture I, II
ENG 345. The African American Novel
ENG 370. The Harlem Renaissance
ENG 377. 2PACalypse Now!
ENG 470. Toni Morrison
FRS 312. The Contemporary Francophone World
FRS 419. Studies in Francophone Literature and Culture
GRS 315. Minorities in Germany: Reading at the Margins
HPS 494. SpTp: Afro (Latin) America
MUS 106. Rock, Pop, and American Culture
MUS 206. Jazz History
MUS 303. American Music
MUS 313. Music of Latin America
One credit music ensembles:
Jazz Ensemble
Jazz Combo
Afro-Cuban Ensemble
Afro-Cuban Song
Steel Pan Ensemble

# Business Management <br> Division of Social Sciences 

Susan A. Vowels, Chair<br>R. Stewart Barroll<br>Joseph Bauer<br>Richard Bookbinder<br>Rylynn S. Brown<br>Michael Cuches<br>Michael Harvey

Kurt Landgraf<br>Maria Magdalena Vich Llompart<br>Robyn Moore<br>Caddie Putnam Rankin<br>Hui-Ju Tsai<br>S. Lansing Williams

Acquire fundamental business knowledge and acumen...add focus with minors in accounting, finance, international business, and marketing . . . gain experience with internships in town and around the world . . . study abroad in London, Paris, or other business capitals . . . expand your digital knowledge through interdisciplinary minors in data analytics and information systems. . . invest in your future with the Brown Advisory student-managed investment fund. At Washington College, business management is an active liberal art.

Our quantitative orientation teaches you how to think with numbers. Our small course size sharpens your discussion skills and lets you work closely with faculty. Our team projects let you experience the challenges and rewards of collaborative work. Our senior capstone-a rigorous, senior-year individual project-polishes your research, analytic, and writing skills. And most importantly, our ethics-centered curriculum will help you illuminate the practice of business with purpose. All in all, our program challenges you to link the College's enduring liberal-arts values of critical thinking, effective communication, and moral courage with cutting-edge business leadership skills.

Business Management at Washington College: The power of people, the power of questions, the power of tools.

## The Major

The Business Management major consists of two economics introductory courses, eight 4-credit required courses, one 4-credit elective course at the 200-level or above, a Global Learning requirement, and the Senior Capstone Experience.

ECN 111. Principles of Macroeconomics
ECN 112. Principles of Microeconomics
BUS 109. Managerial Statistics (or alternative--see details under Quantitative Requirement)
BUS 111. Principles of Marketing
BUS 112. Introduction to Financial Accounting

BUS 209. Financial Analysis
BUS 210. Management Information Systems
BUS 302. Organizational Behavior
BUS 303. Legal Environment of Business (or BUS 360 Corporate Social Responsibility or a PHL ethics course)
BUS 401. Strategic Management (counts for W3; must be taken at Washington College)
BUS elective at the 200-level or above
Global learning requirement (see details below)
BUS SCE. Senior Capstone Experience

All required courses are offered every semester. Elective courses are offered on a rotating basis; please check with the department chair or your advisor for details. All of these courses (except for the Senior Capstone Experience and BUS 401 Strategic Management) may be taken at our study-abroad partners (not all courses are offered by all study abroad partners).

## Global Learning Requirement

Since business is global, the Business Management major includes a global learning requirement. (International students are exempt but are welcome and encouraged to take advantage of visiting another country through study abroad.) It may be fulfilled in one of three ways: (1) participating in any study-abroad or away-from-campus experience that earns Washington College credit; (2) studying a foreign language through the 202-level; or (3) taking two global-focus courses. One of these must be a Business Management course (BUS 310 International Business, BUS 311 Global Business Strategy, BUS 356 Multinational Financial Management, or an approved elective course). The other may be chosen from any course listed as part of the International Studies Program offered by any other department (excluding ECN 111).

The department encourages students to fulfill their global learning requirement by studying abroad. Study abroad gives you first-hand experience with other ways of life; you'll get a deeper understanding of how culture affects markets, firms, and strategy. And study abroad, by offering you a new perspective on your native culture, will challenge you and stimulate your creativity and critical thinking. To facilitate study abroad, we've identified nine outstanding partner business programs (all taught in English):

Royal Holloway, University of London (England)
American Business School Paris (France)
Bond University (Gold Coast, Australia)
Lingnan University (Hong Kong, China)
AI Akhawayn University (Ifrane, Morocco)
Meiji Gakuin University (Yokohama, Japan)
Bogazici University (Istanbul, Turkey)
University College Cork (Cork, Ireland)

Including those listed above, there are a total of 30 semester-long study abroad programs available; only four do not offer business or management classes for their international students (please see the Global Education Office for details). Students interested in study abroad are encouraged to share their interest with their academic advisors and visit with the Global Education Office at their earliest convenience.

## Quantitative Requirement

BUS majors are required to complete a two-course quantitative sequence: BUS 109 Managerial Statistics and BUS 209 Financial Analysis. Students may replace BUS 109 with MAT 109 Statistics, ECN 215 Data Analysis, or PSY 209 Statistics and Research Design I for the Business Management major. Please note that BUS 209 also requires BUS 112 Introduction to Financial Accounting as a prerequisite course.

## Internships

Most majors and many minors in Business Management gain valuable experience by participating in for-credit internships during the fall, spring, or summer after completing Marketing and Introduction to Financial Accounting (see the course descriptions below for BUS 390 and BUS 490). The Business Management department works closely with the Center for Career Development to prepare our students to vie for internships and flourish during their experience. Students may gain academic credit for both paid and unpaid internships.

Recent local, national and international internships garnered by our students include the following:

Bank of America Headquarters (Charlotte, NC)
Cloudflare (San Francisco, CA)
Corbin Advisors (Farmington, CT)
Deloitte (McLean, VA)
Dixon Valve and Coupling Headquarters (Chestertown, MD)
Doha Bank (Qatar)
Equirus Capital Private Limited (Mumbai, India)
Li \& Fung Headquarters (Hong Kong)
RETHINK Water (Ellicott City, Maryland)
Social Security Administration (Woodlawn, MD)

## The Business Management Minor

A Business Management minor adds value to your résumé regardless of your major. You'll learn the language of business, the concepts of organizations, and lay the foundation for infusing your vision with these valuable tools whether you plan to pursue a career in the arts, humanities, social sciences, mathematics or natural sciences. The five-course minor consists of three required courses (BUS 111, 112, and 302) and two BUS electives, which may be drawn from any upper-level (200-level or higher) BUS course. BUS 109 Managerial Statistics is not required for the Business Management minor but is highly recommended. Please note that ECN

112 is a prerequisite for BUS 111.

## The Accounting Minor

The Accounting Minor covers knowledge of the accounting principles and practices fundamental to the capture and analysis of financial information about the firm, the use of accounting information to plan and control activities, accounting theory, and practical application of accounting in the areas such as taxation and auditing. This study also includes ethical and legal guidelines necessary in gathering and reporting information and in their internal and external activities. Details can be found in the separate catalog listing for the Accounting Minor.

## The Finance Minor

Students pursuing the Finance Minor learn how to make the financial decisions critical to the sustainability of corporations. The acquisition of foundational knowledge related to the financial analysis of firms as well as an understanding of risk and return allows students to pursue advanced finance concepts both from the internal view of the corporation informing the study of financial policies and the external evaluation and assessment of firms needed for making meaningful investment decisions. Throughout, students will examine business ethics as it particularly pertains to the field of finance. Details can be found in the separate catalog listing for the Finance Minor.

## The International Business Minor

The International Business Minor offers students an opportunity to learn about and analyze the forces impacting decisions necessary for conducting business around the world, including the evaluation of international organizational models and an understanding of the impact of country differences, particularly the roles culture and ethics play. Students also gain insight into how trade affects profitability, the nature of international monetary systems, and how to configure international business functions. Details can be found in the separate catalog listing for the International Business Minor.

## The Marketing Minor

Students pursuing the Marketing Minor learn that marketing is a creative problem-solving process that begins with recognition of consumers' needs and desires, culminates in the development or improvement of products and services in response, and repeats cyclically to refine consumption outcomes. The range of demands thus placed on the marketing professional necessitates a combination of strong quantitative and analytical proficiencies, along with robust creative and communication skills. The Concentration also underscores the ethical demands placed on marketing professionals. Details can be found in the separate catalog listing for the Marketing Minor.

## The Data Analytics Minor

Data Analytics is an interdisciplinary minor that draws from Business Management, Computer Science, and other majors to provide knowledge and skills in data collection and analysis for supporting decision-making within organizations. Essentially, students learn the discipline of
examining an organizational problem specified in human terms, analyzing it, designing a solution, simulating that solution using mathematics and computers, reflecting and reworking the results of the simulation, and finally, communicating the new knowledge in a concise and clear way. Details can be found in the separate catalog listing for the Data Analytics Minor.

## The Information Systems Minor

Information Systems is the interdisciplinary study of the ways in which computer technology can foster organizational excellence. Drawing from both Business Management and Computer Science, the Information Systems Minor stresses strong analytical skills, the facility to find imaginative solutions to difficult problems, and the application of ethical principles. Details can be found in the separate catalog listing for the Information Systems Minor.

## STUDENT OPPORTUNITIES

## Honor Societies

The Washington College chapter of Sigma Beta Delta, the national business honor society, recognizes Business Management majors and minors in the top $20 \%$ of their class who aspire toward personal and professional improvement and a life distinguished by service to humankind. Alpha Mu Alpha, the national marketing honorary, recognizes qualified undergraduate students for their outstanding scholastic achievement in the area of marketing.

In addition, business management students may aspire to membership in other honor societies, including Omicron Delta Kappa, the national leadership honor society, and Phi Beta Kappa, the nation's oldest academic honor society. Membership in Phi Beta Kappa is by invitation only, and eligibility is based on the totality of a student's academic achievement and character. Students interested in Phi Beta Kappa are advised to take a broad range of courses and should plan a program that includes at least 96 credits in "liberal studies" courses. The following business management courses count towards the liberal studies requirement:

## BUS 109 Managerial Statistics

BUS 302 Organizational Behavior
BUS 303 Legal Environment of Business
BUS 310 International Business
BUS 330 International Business Experience
BUS 334 Leadership
BUS 360 Corporate Social Responsibility
BUS senior capstone

Students should also note that intermediate language skills are required by Phi Beta Kappa (i.e. study through the 202 level). Native speakers of languages other than English automatically meet this criterion. Interested students are encouraged to review information about Phi Beta Kappa available online at https://www.washcoll.edu/academics/phi-beta-kappa/.

## American Marketing Association Student Chapter

Students declaring the Marketing minor are invited to participate in the student chapter of the American Marketing Association (AMA), which provides a variety of opportunities and experiences, including speakers, networking, real-life case-based competitions and more.

## Brown Advisory Student-Managed Investment Fund Program

Students from any major can participate in the Brown Advisory Student-Managed Investment Fund Program and help manage an equity fund valued at hundreds of thousands of dollars. Under the mentorship of Richard Bookbinder P‘10, founder and manager of TerraVerde Capital Management and Bookbinder Capital Management, LLC, you'll learn to analyze and report on stocks, and then execute trades worth tens of thousands of dollars. The program includes career preparation, talks by visiting business leaders, and intensive work over the semester that will help prepare you for a career in the investment field. Networking events and special opportunities such as attendance at shareholder meetings allow students to acquire valuable real-world knowledge. Students are invited to apply for admission to this program by contacting Dr. Hui-Ju Tsai, Faculty Advisor.

## SAP Student Recognition Award

Washington College, a member of the SAP University Alliances Program, has been authorized by SAP to award students meeting the following criteria with the SAP Student Recognition
Award. In order to earn this highly valued non-transcript resume-building recognition, students must successfully complete BUS 210, BUS 315 and BUS 316, reflecting a breadth of experience and familiarity with the SAP software products that are used to support pedagogy in these three classes. BUS 210 is offered every semester but BUS 315 and BUS 316 are offered on a rotating basis so students interested in pursuing this award should work with their advisors to plan accordingly.

## Washington College Enactus

Enactus is an international organization that develops students into leaders through hands-on experience in designing and implementing entrepreneurial-based projects that empower people to engage in real, sustainable progress for themselves and their communities. Guided by academic advisors and business experts, students not only transform lives, they also develop the talent and perspective essential to leadership in an ever more complex and challenging world. Current projects of the Washington College Enactus team include developing an all electric vehicle ride-sharing program for rural communities, and an "ecotourism" project on the Chester River. Students participate in both regional and national competitions and have access to job fairs, internships and employment opportunities. Membership in the Washington College Enactus team is open to students of all majors. Enactus: ENtrepreneurial ACTion for others creates a better world for US all.

## Course Descriptions

## 109. Managerial Statistics

Managerial statistics focuses on the use of statistical analysis to make fact-based decisions for business firms and other organizations. Topics taught include descriptive statistics, normal distributions, probabilities, sampling distributions, hypothesis testing, ANOVA, and simple and multiple linear regression analysis. Data analysis techniques using Microsoft Excel are included.

## 111. Principles of Marketing

A critical approach to the study of the marketing concept including policies and principles. Emphasis is placed on the identification of variables involved in marketing decision-making (including ethical considerations), and the process by which marketing decisions are made. Pre/corequisite: ECN 112

## 112. Introduction to Financial Accounting

An introduction to the accounting principles and procedures used for collecting, recording, summarizing, and interpreting financial information. Students will learn to read and interpret financial statements. Special emphasis is placed upon the concepts of internal control over resources and transactions. Computerized spreadsheets are integrated into the course.

## 200. Introduction to the Business Management Discipline

Students will acquire a broad view of the discipline, learn how the requirements for the major fit together and be introduced to contemporary issues in business. They will also acquire proficiency in skills necessary for success in the Business Management major including Microsoft Excel, Word, and PowerPoint skills related to the major, presentation skills, and the ability to speak in a public forum, and participation as team members and team leaders. Strategies for applying critical thinking skills and personal ethical frameworks in the context of business management will also be included. Classes meet once weekly for half of the semester. Grading is pass-fail. By permission of department chair. One credit.

## 209. Financial Analysis

This course introduces students to the fundamental concepts of finance and equips students with the ability to make meaningful financial decisions. This course addresses topics including the analysis of financial statements, the operation of financial markets, and the valuation of financial instruments, such as stocks and bonds. After taking this course, students should be able to (1) conduct financial ratio analysis, (2) understand the time value of money and apply the discounted cash flow (DCF) method to value assets, (3) understand the concept of risk and return, and (4) understand the importance of business ethics to the operation of financial markets. Prerequisite: BUS 109 (or other statistics course) and BUS 112.

## 210. Management Information Systems

Management Information Systems (MIS) is the ethical use of information systems to achieve corporate goals and objectives. Students learn how to use MIS in solving business problems,
finding new opportunities for organizational improvement, and supporting enterprise strategic, operational, and analytical objectives as well as how to apply ethical models to the process of design and deployment of information systems. Microsoft Access, SAP S/4HANA ERP software, and Tableau visualization software are used to illustrate database, transactional and analytical concepts. Prerequisite: BUS 112 or permission of instructor.

## 212. Managerial Accounting

Study of the use of accounting information to plan for, evaluate, and control activities. The course will explore various product and service costing procedures. Other topics include responsibility accounting, budgets, financial analysis, costs control, and the time value of money. Emphasis will be placed upon the use of information for management decisions. Prerequisite: BUS 112.

## 223. Marketing Research Methods

This course examines the role of marketing research in the formulation and solution of marketing problems, and the development of the student's basic skills in conducting and evaluating marketing research projects. Special emphasis is placed on problem formulation, research design, alternative methods of data collection (including data collection instruments, sampling, and field operations), and data analysis techniques using IBM SPSS. Applications of modern marketing research procedures to a variety of marketing problems are explored. Prerequisite: BUS 111 and BUS 109 (or equivalent).

## 224. Digital Marketing

This course introduces the practice of using social media and other digital communication channels, including Internet and mobile-based tools and platforms, to reach consumers and advance marketing strategies. Digital media can be used to build brands, create and maintain relationships, launch promotions, advertise products and services and more. While this course will aim to offer theoretical underpinnings needed to launch, manage, and measure digital marketing efforts, it will also attempt to teach students to creatively engage with digital marketing tools and to stay abreast of the latest developments in the fast-growing world of digital marketing. Prerequisite: BUS 111

## 234. Introduction to Nonprofit Management

In this course we explore the foundations of nonprofit management in our society. We focus on how nonprofits contribute to the health and wellbeing of our communities. We will investigate the unique challenges of nonprofits and how to manage them to promote success and longevity. We will also discuss and debate how to maximize their social impact. The course will focus on case studies of high impact nonprofits and nonprofit failures from a thematic standpoint in order to critically examine the future of the sector.

## 302. Organizational Behavior

A research-based exploration of how organizations function. Topics include the division of labor, career management, culture, bureaucracy, teams, motivation, emotional intelligence, power,
communication, gender, diversity, leadership, and ethics. Students read and discuss key scholarship, conduct primary research, and collaboratively lead a class.

## 303. Legal Environment of Business

This course looks at how American law has evolved from English common law to today's statutory and regulatory legal environment. The course explores recent statutes such as Sarbanes-Oxley and Dodd-Frank and how they have impacted the way businesses operate. The course also investigates legal and ethical issues facing businesses today, different types of business associations, and liability issues faced by businesses under current tort law, contract law, and property law.

## 310. International Business

Introduction to the study of international business, including the dynamics of conducting business across national boundaries. Focuses on the critical roles that environment, culture, technology, politics, economics, communication, and ethics play in successfully conducting business on an international level.

## 311. Global Business Strategy

An interactive course designed for future leaders to understand and experience the challenges associated with business at the global level. The course focuses on long term strategy, short term tactical options, the active management of functional areas within global operations, corporate structure, and supply chain management from raw material procurement to sales, marketing, and distribution of finished products. The course includes lectures, cases, guest speakers, and actively operating a competitive global business simulation.

## 315. Enterprise Resource Planning Systems

This course introduces students to software essential to the functioning of the firm -Enterprise Resource Planning (ERP) software. Using SAP S/4HANA ERP software, students learn the information flows for distribution and manufacturing business processes and learn how ERP systems support these business processes in an integrated fashion. The course includes an introduction to system configuration, in which organizational structure, policy rules and other corporate information are analyzed and then mapped to the ERP system. Ethical consideration of impacted stakeholders is integrated throughout. Guest speakers and field trips provide real-world context. Prerequisite: BUS 210 or permission of the instructor.

## 316. Data Analytics

Introduction to theory and practice encompassing tools used to perform descriptive, predictive, and prescriptive analytics in business and other social science settings. Topics include visualization, big data, and methods to approach both structured and unstructured data. Students develop actionable information from databases and spreadsheets using SAP, Tableau, and other software products. Prerequisite: BUS 210 or permission of the instructor.

## 320. Entrepreneurship

A study of entrepreneurs and entrepreneurship, the process of identifying opportunities, the marshaling and management of resources, and strategic planning and development of a business plan. An examination of the management process through growth and change, including reasons for the successes and failures of specific companies. Prerequisite: BUS 111 or permission of the instructor.

## 323. Consumer Behavior

This course is concerned with how and why people behave as consumers. Its goals are to: (1) provide conceptual understanding of consumer behavior; (2) provide experience in the application of buyer behavior concepts to marketing management decisions and social policy decision-making; and (3) to develop analytical capability in using behavioral research. Prerequisite: BUS 111 or permission of the instructor.

## 327, 328, 329.

An integrated three-course unit for students spending a semester at the Washington Center. Students receive 16 elective credits in Business Management. (Details below.)

## 327. Washington Center Internship

A full-time, semester-long internship in Washington, DC, with a federal agency, non-profit organization, or private firm. Depending upon interest and internship placement, students may attend hearings, conduct policy research, draft correspondence, monitor legislation, lobby members of Congress, or write analytical reports. Students will create an in-depth portfolio of their internship experience. 12 credits. Prerequisite: BUS 111, 2.8 cumulative GPA, permission of an instructor, and successful application to The Washington Center for Internships and Academic Seminars. This course is normally open only to juniors and seniors.

## 328. Washington Center Seminar

Washington Center Interns participate in an evening seminar selected from a variety of topics offered during the semester. Students engage in class discussion and may also research seminar topics, prepare written assignments, and take examinations. Required of and limited to students enrolled in BUS 327. Three credits.

## 329. Washington Center Forum

Washington Center Interns participate in lectures, site visits, small group discussions, briefings, and other required events designed to help them understand the connection between their academic and professional goals and the special educational opportunities available through living and working in Washington, DC. Evaluations of these experiences are included in the student portfolio. Required of and limited to students enrolled in BUS 327. One credit.

## 330. International Business Experience

This summer course, taught by a Washington College Business Management faculty member, takes students abroad for up to two weeks of intensive study and experiential learning in international business. The itinerary is intense. Students visit two businesses each weekday for
facilities tours and/or presentations by managers on their firms' international strategy. Cultural activities are scheduled in the evenings and on weekends. On-campus sessions prior to travel round out the academic component of the course, and ensure that students get the most out of their experiences abroad.

## 334. Leadership

What do leaders do? Are they born or made? Why are some leaders effective, and others ineffective? What role do followers play? This seminar explores these and other questions by focusing on leadership in organizations. Topics include vision, power, trust, ethics, communication, gender, and change. Not open to first- or second-year students.

## 340. Intermediate Accounting I

The study of current and emerging financial accounting theory and techniques. Emphasizes financial statement presentation and the underlying treatment of cash, investments, receivables, inventory, long-lived assets, and intangible assets. Prerequisite: BUS 112.

## 341. Income Tax Accounting

Federal taxation of individuals focusing on income, exclusions, deductions, depreciation, credits, and capital transactions. Property coverage includes the tax consequences of sales and dispositions of investment and business assets. Both tax planning and tax compliance issues are covered. Prerequisite: BUS 112.

## 342. Auditing

Auditing consists of a set of practical conceptual tools that help a person to find, organize, and evaluate evidence about the assertions of another party. This course will focus on those analytical and logical skills necessary to evaluate the relevance and reliability of systems and processes. Critical thinking and communications skills are developed through a variety of means including case analyses, presentations, discussion, preparation of group and individual case papers, and research of professional and scholarly literature. Recognizing that ethics is an integral part of the entire accounting-related profession and a significant topic in all the College's accounting courses, this course will contain a section reviewing audit ethics, and will cover lapses of ethical behavior by both auditors and audited firms. Prerequisite: BUS 112.

## 343. Intermediate Accounting II

Continuation of Intermediate Accounting I. Continued emphasis on generation and presentation of financial statements. Special attention to inventory valuation, analysis of long-term debt instruments, asset impairment, share-based compensation, and the importance of ethical behavior in the business and reporting environment. Emphasis on comprehension, critical thinking, and problem solving. Prerequisite: BUS 340.

## 351. Advertising

Overview of the advertising industry from client and agency sides. Advertising is placed within the marketing context of consumer behavior and market segmentation. Included is media
strategy and selection, creative strategy, print and broadcast advertising from concept through production, advertising research, and international advertising strategy. Prerequisite: BUS 111.

## 355. Corporate Finance

This course provides an in-depth analysis on the financial policies of corporations. Students learn how to use and analyze financial data to make sound managerial decisions. Topics covered include capital budgeting, capital structure, dividends and payout policies, working capital management, real options, and mergers and acquisitions. In addition, to help students develop an ethical sensitivity in business, topic about ethics in corporate finance will be included. Prerequisite: BUS 209.

## 356. Multinational Financial Management

Today's firms are directly or indirectly exposed to an increasingly competitive global environment which presents significant implications for their financial strategies. This course provides students with a conceptual framework within which the key financial decisions of the multinational firms can be analyzed. It focuses on decision-making in an international context and on the use of financial analysis in solving international financial challenges, risks and threats as well as opportunities faced by international firms. Topics addressed include exchange rate determination and global risk management as well as financing and investment options for corporations in an international context. Prerequisite: BUS 209.

## 360. Corporate Social Responsibility

This course offers an introduction to corporate social responsibility and a discussion of business ethics. Students will examine and debate the minimal social expectations for organizations embodied in ethical theories, legal doctrines, and community principles. We then explore and critique broader corporate social responsibilities by drawing upon theories that discuss an organization's role in maintaining a vibrant civil society. Finally, we will analyze how corporate responsibilities can promote strategic and competitive advantages for the firm. Prerequisite: BUS 302.

## 390. Internship

For-credit internships combine work experience (at least 140 hours for two credits) and faculty supervision. Internships (paid or unpaid) may be taken for credit during the fall, spring, or summer. Grading is pass-fail. Prerequisite: BUS 111 and 112 and minimum 2.5 GPA, or approval by the department.

## 401. Strategic Management

Culmination of the study of business management, covering strategic analysis and implementation. The case study method is used, requiring oral and written presentations. All separate functional areas are integrated in the strategy process in relation to the firm's social responsibilities with regard to society, employees, and the larger environment. Prerequisites: BUS 111, 209, and 302. Fulfills W3 writing requirement. Must be taken at Washington College; cannot be transferred from study abroad or other institution.

## 440. Investments

This course provides students with the essential concepts in investment and enables them to make meaningful investment decisions. To reach this goal, it will talk about current investment theories and the associated empirical evidence found in academic research. Topics addressed include the operation of financial markets, financial assets and their valuation, and the construction of optimal investment portfolios. After taking this course, students should be able to (1) understand the operation of financial market, (2) be familiar with various financial instruments and investment strategies, (3) apply the discounted cash flow method to determine the value of financial assets, (4) conduct financial analysis to make investment decisions, and (5) understand the importance of business ethics to investment professionals. Prerequisite: BUS 209.

## 455. Financial Derivatives

This course introduces financial derivatives and the operation of derivatives market. Coverage includes options, forward contracts, commodity and financial futures, and swaps. Students also learn how to use analytical models to determine the proper value of these financial products. Since the existence of a well-functioning financial market depends on the integrity of its participants, especially the investment professionals, cases regarding financial crisis and business ethics will be provided and discussed. These case studies also allow students to strengthen their oral as well as written communication skills. Prerequisite: BUS 209.

## 490. Internship

Students taking a second for-credit internship are enrolled in BUS 490. For-credit internships combine work experience (at least 140 hours for two credits) and faculty supervision. Internships (paid or unpaid) may be taken for credit during the fall, spring, or summer. Grading is pass-fail. Prerequisite: Completion of BUS 390 and approval by the department.

## 194, 294, 394, 494. Special Topics

Topics not regularly offered in the department's normal course offerings.

## 195, 295, 395, 495. On-campus Research

Consists of an individual research project chosen by the student in consultation with a faculty member, involving both design and implementation. Submission of a written report is required. Open only to upper-level business management majors and minors who have acquired a strong foundation in business management, and who have received project approval from a sponsoring faculty member and permission of the department chair.

## 196, 296, 396, 496. Off-campus Research

197, 297, 397, 497. Independent Study

## SCE. Senior Capstone Experience

The Senior Capstone Experience is an intensive research project on a topic chosen by the student and guided by a faculty mentor. It hones research, analytic, and writing skills developed during four years of study. Students complete the Capstone while enrolled in the four-credit Senior Capstone Experience (SCE) course, usually in the spring of their senior year; however, planning for the SCE begins in the spring of their junior year with the submission of an SCE application during advising week. The Capstone receives a mark of Pass, Fail, or Honors. In order to pass, students must participate in an SCE poster presentation. Full details on the capstone are available on the department website. Prerequisite: BUS 401.

# Chemistry <br> Division of Natural Sciences and Mathematics 

Aaron Amick, Chair<br>Sarah Arradondo<br>Dana Chatellier<br>James Lipchock<br>Anne Marteel-Parrish<br>Betsy Moyer-Taylor<br>Leslie Sherman<br>Anna Smith

The mission of the Chemistry Department at Washington College is to provide outstanding undergraduate education in the chemical sciences by integrating classroom instruction with laboratory experimentation, faculty-student collaborative research, and service opportunities. Our goal is to inspire students to become liberally educated scientists. Our program is approved by the American Chemical Society. The program is designed to prepare students for graduate work in pure chemistry, for professional work in other scientific fields such as environmental science, engineering, medicine, dentistry, nursing, pharmacy, neuroscience and veterinary science, for teaching at the secondary school level, and for work in industrial or governmental laboratories. Chemistry graduates have established diverse career paths that range from a dedication to pure or applied scientific research, to management of scientific and business concerns, to consultantships with industries and governments on scientific, environmental, legal, and business issues, and to service as medical personnel and elected public officials.

Students who have an interest in majoring in chemistry or double majoring in chemistry and another subject are advised to take CHE 120 and CHE 140 during their first year. Premedical students and students interested in the 3:4 pharmacy program are advised to take CHE 120, 140 and BIO 111, 112 during their first year. Students intending to teach at the secondary school level should consult with the Chair of the Department of Education and the Chair of the Department of Chemistry about planning a full-course schedule as early as possible in their college career. Such students need to be aware that NASDTEC Certification in Chemistry requires BIO 111, 112 and at least one course in computer science.

## Programs In Chemistry

The Department offers two programs leading to the Bachelor of Science degree in Chemistry: a non-ACS Certified Chemistry major and an ACS Certified Chemistry major. In addition, students may elect to specialize their chemistry major by focusing their elective coursework and Senior Capstone Experience in one of the four areas of emphasis offered by the department (described below). Successful completion of one of these optional areas of emphasis will be noted on a student's transcript after graduation.

## REQUIREMENTS FOR THE CHEMISTRY MAJOR

The table below summarizes the REQUIRED courses for both tracks in chemistry as well as for students who have declared a major in chemistry late (Spring of sophomore year or Fall of junior year).

| Non-ACS certified degree | ACS certified degree in | Chemistry major <br> in chemistry |
| :--- | :--- | :--- |
| chemistry |  |  |

First CHE 120, CHE 140
CHE 120, CHE 140
year BIO 111*
BIO 111*
MAT 201, MAT 202
MAT 201, MAT 202

Second CHE 220, CHE 240 CHE 220, CHE 240 CHE 120, CHE 140
year PHY 111, PHY 112 or PHY PHY 111, PHY 112
MAT 201, MAT 202

Third CHE 305 or CHE 306
year CHE 340
Elective \#1 and Elective \#2
CHE 392

| CHE 305 and CHE 306 | CHE 220, CHE 240 |
| :--- | :--- |
| CHE 340 | PHY 111, PHY 112 or |
| CHE 392 | PHY 101, PHY 102 |
| CHE Elective \#1 and CHE | CHE 340 |
| Elective \#2 | CHE 392 |
|  | Elective \#1 and |
|  | Elective \#2 |

Fourth Elective \#3
year CHE 492
CHE SCE

CHE 303 or 309
CHE Elective \#3
CHE 492
CHE SCE

CHE 305 or CHE 306
Elective \#3
CHE 492
CHE SCE
*Students on the pre-med track must take CHE 309 and therefore BIO 111 (BIO 111 is a prerequisite for BIO 409/CHE 309).

Elective courses are courses at the 200-level or above. One of the three elective courses for the non-ACS certified degree can be BIO or PHY courses not counted towards that major. The three elective courses for the ACS certified degree in chemistry must be CHE courses such as: CHE 210, CHE 310, CHE 314, CHE 320, CHE 403, CHE 405, CHE 410, CHE 395, 495, CHE 396, 496 or CHE 394, 494.

## Areas of Emphasis

In addition to the major offerings listed above, students wishing to specialize within a subdiscipline of chemistry or a chemistry-related cross-disciplinary or multidisciplinary area have the option to complete an area of emphasis within the ACS certified or non-ACS certified chemistry majors. As outlined below, each area of emphasis requires students to complete their SCE in the selected area, as well as three additional 4-credit courses. For students who do not wish to pursue a B.S. in Chemistry with an area of emphasis, they have the option to complete their SCE with any professor of their choice on any topic of their interest.

Successful completion of an area of emphasis will be noted on a student's transcript after graduation. Given that the SCE must be completed in the selected area of emphasis, a student may only complete one area of emphasis. The chemistry department offers the following areas of emphasis:

## 1. Organic and Medicinal Chemistry

This area of emphasis is designed for students interested in pursuing graduate study or careers in organic chemistry, medicinal chemistry or pharmacology. Students will gain a strong foundation in organic synthesis and mechanisms, while broadening their knowledge in areas such as drug discovery and pharmacology.

Requirements:
SCE specialization in Organic or Medicinal Chemistry, plus three of the following:

- CHE 403. Advanced Organic Chemistry
- CHE 320. Introduction to Medicinal Chemistry
- CHE 303 OR CHE 309. Chemistry of Biological Compounds OR Biochemistry
- PSY 205 OR PSY 305. Drugs and Behavior OR Psychopharmacology
- Approved special topics course


## 2. Greener Materials Science

This area of emphasis is designed for students interested in receiving a thorough grounding in the basic sciences and engineering of all materials while being exposed to environmentally friendly chemical processes (Green Chemistry). Students will be prepared for graduate study or bench research dealing with the production, structure, characterization, properties, and utilization of metals, ceramics, polymers, composites, nano- and bio-compatible and electronic materials. Additionally future chemists and engineers will be provided the tools required to minimize the environmental impact of materials production.

Requirements:
SCE specialization in Greener Materials Science, plus the following three courses:

- CHE 310. Greener and Sustainable Chemistry
- CHE 410. Fundamentals of Materials Science
- CHE 314. Instrumental Methods of Analysis

Approved special topics such as CHE 294 Greener Art Through Greener Chemistry

## 3. Physical and Instrumental Chemistry

This area of emphasis is designed for students with an interest in the more physical aspects of chemistry or instrumental design and data analysis. Students will be prepared for graduate school or careers that require a stronger foundation in theoretical or analytical areas of chemistry.

Requirements:
SCE specialization in Physical or Instrumental Chemistry, plus three of the following:

- CHE 305 AND CHE 306. Chemical Thermodynamics and Chemical Dynamics AND Quantum Chemistry and Spectroscopy
- CHE 314. Instrumental Methods of Analysis
- CHE 405. Biophysical Methods
- Approved PHY elective at the 200-level or above
- MAT 203 OR MAT 345. Multivariable Calculus OR Differential Equations
- Approved special topics course


## 4. Biophysics and Biological Chemistry

This area of emphasis is designed for students interested in pursuing graduate study or a career in biophysics, biological chemistry, chemical biology, pharmacology or related fields. Students will gain a strong background in biomolecular structure and dynamics, techniques utilized in biophysical and biochemical characterization of biomolecules, and principles of effective drug design.

## Requirements:

SCE specialization in Biophysics or Biological Chemistry, plus three of the following:

- CHE 303. Chemistry of Biological Compounds
- CHE 309. Biochemistry
- CHE 405. Biophysical Methods
- CHE 320. Introduction to Medicinal Chemistry
- CHE 305 AND CHE 306. Chemical Thermodynamics and Chemical Dynamics AND Quantum Chemistry and Spectroscopy
- BIO category II elective at 200-level or above
- Approved special topics course.


## Requirements For The Chemistry Minor

Students intending to minor in Chemistry should meet with the Department Chair early in their career to insure that they are able to complete the following courses and to get their minor declaration card signed.

Six chemistry courses are required for the chemistry minor.

CHE 120, 140. Chemical Principles of Organic Molecules and Reactions of Organic Molecules CHE 220, 240. Quantitative Chemical Analysis and Chemistry of the Elements Two courses at the 200 level or above.

## Chemistry Seminar

All junior and senior majors participate in two two-credit Chemistry Seminar courses offered in the spring semester of the junior year and the fall semester of the senior year. These courses prepare our chemistry majors to become citizens of the 21st century by exposing them to research ethics, sustainable science literacy, societal and moral issues in chemistry, and the writing and presentation of an integrative research proposal. Professional preparation (exposure to career options, resume building, job searching and mock interview) as well as improvement of communication skills (oral (debate, discussions, final presentation), written (ethics case study, abstract) and visual (poster, website) are the main outcomes of these seminar courses.

## Senior Capstone Experience

Chemistry majors fulfill the Senior Capstone Experience by conducting a yearlong research project either based on a laboratory project or an in-depth literature review in collaboration with a chemistry faculty member. Many research projects involve synthetic and preparative procedures and include the use of the department's research grade analytical instrumentation. The results of this research are presented in the department's annual research symposium and are included in a written, thesis-quality report. Many projects involve synthetic and preparative procedures and include the use of the department's research-grade UV-VIS, FTIR, AA, NMR, GC, HPLC, GC-MS, ICP-MS, LC-MS, electrochemical analyzer, and polarimeter. Students pursuing the ACS-certified degree in Chemistry must perform a laboratory-based research project for their SCE to meet the number of laboratory hours required by the ACS. This requirement could be waived if ACS-certified majors have already performed research for credit during the academic year or during the summer. Seniors present the results of their project in a poster session that is open to the College community. The department has a set of Senior Capstone Experience Guidelines that are distributed to both junior and senior chemistry majors each Fall. For those students meeting the College-wide standards of eligibility for departmental honors at graduation, the capstone experience also forms the basis of an oral examination given at the end of the students' final semester. Students must enroll in CHE SCE in their final semester to obtain credit for the Senior Capstone Experience. The Senior Capstone Experience is graded according to the Washington College grading system, which involves the use of letter grades (A-F) that may be modified by a minus or a plus.

## Internship and Research Opportunities

A number of stipend-bearing internships and research opportunities exist for chemistry majors and minors. Summer on-campus research projects as well as summer and semester-long off-campus internships not only provide additional laboratory experience, but also allow students the opportunity to explore, in depth, areas of chemistry not covered in the core curriculum. Off-campus internships may or may not bear credit. On-campus summer internships are credit bearing.

## Distribution Courses

For distribution credit in Natural Sciences, the Chemistry department offers CHE 120 Chemical Principles of Organic Molecules, CHE 140 Reactions of Organic Molecules, CHE 220 Quantitative Chemical Analysis, and CHE 110 Chemistry of the Environment.

## Advanced Placement Credit

AP, IB, or transfer credits for General Chemistry will be accepted as CHE 111 and CHE 112, but will not fulfill requirements for a major or minor in chemistry. If a transfer student has taken Organic Chemistry at another institution, the department will accept Organic Chemistry I as CHE 120 Chemical Principles of Organic Molecules, and Organic Chemistry II as CHE 140 Reactions of Organic Molecules.

## Transfer Credit

It is not recommended for Chemistry majors to take any chemistry course off campus. It is not encouraged for any other major to take the introductory chemistry courses off campus. If absolutely necessary, it is the responsibility of the students to provide the Chair of the Chemistry Department the appropriate documentation for transfer credit.

## NOTE ABOUT PREREQUISITE

Having the correct prerequisite for a course also means that the students successfully pass the prerequisite course.

## Course Descriptions

## 110. (ENV 110) Chemistry of the Environment

This introductory course focuses on the chemical dimensions of current environmental problems such as global warming, ozone depletion, water and soil contamination, and energy production. Fundamental principles of chemical bonding, reactions, and energy are studied as they arise in connection with each environmental issue. Interdisciplinary aspects are explored to further understand the multiple dimensions of the problems. Intended for students planning to major outside the sciences. Three hours of lecture and two hours of laboratory each week. (Offered annually)

## 120. Chemical Principles of Organic Molecules

This one-semester course provides a foundation in the fundamental principles of chemical structure and reactivity of organic molecules. Key topics include atomic and molecular structure, intramolecular and intermolecular forces, organic functional groups, thermochemistry, acid/base equilibria, kinetics, and basic organic reaction mechanisms. Laboratory work is designed to complement lecture material. Three hours of lecture and three hours of laboratory each week. (Offered every semester)

## 140. Reactions of Organic Molecules

Reactions of Organic Molecules (CHE 140) builds upon the fundamental principles discussed in CHE 120 Chemical Principles of Organic Molecules. This course will focus on the reactivity of organic molecules, including aliphatic and aromatic hydrocarbons, their halogenated derivatives, and molecules containing heteroatoms such as oxygen, nitrogen, and sulfur, alone or those incorporated in biologically relevant molecules. Particular emphasis is placed on the structure and function of organic molecules important in biological systems as well as the discussion of reaction mechanisms. Students will also be exposed to chemical synthesis and the use of modern spectroscopic techniques for the determination of molecular structure. This course will meet for three hours of lecture and three hours of lab per week. Prerequisites. Chemistry 120. (Offered annually: Spring)

## 210. (ENV 210) Environmental Chemistry

The cycling of natural chemical species and pollutants in the water, soil and air of our earth system is a major component of our complex ecosystem. In this environmental chemistry course, students will develop an understanding of the transport and reactions controlling natural chemical species in our environment, as well as the cycling of pollutants. Students will study current issues of water, soil and air pollution, and how society is working towards reducing the movement of pollutants through our environment. In the laboratory portion of the class, students will investigate the water quality of local water bodies, including the Chester River, as well as conduct hands-on experiments related to the environmental topics studied in class. Three hours of lecture and three hours of laboratory each. Prerequisites. Chemistry 120 and 220. (Offered annually: Fall)

## 220. Quantitative Chemical Analysis

This one-semester course is intended to provide an introduction to analytical methods utilized in chemistry. Both classical and instrumental methods of analysis are considered. A detailed treatment of simple and complex chemical equilibria with particular emphasis on acid-base, oxidation-reduction, and precipitation equilibria is presented as a basis for the classical gravimetric and titrimetric methods. The instrumental techniques include electroanalytical, UV-visible molecular spectroscopy, atomic spectroscopy, and chromatography. Other topics include a review of intermolecular forces and states of matter. Three hours of lecture and three hours of laboratory each week. Offered every semester. Prerequisite: Chemistry 120. (Offered every semester)

## 240. Chemistry of the Elements

Chemistry of the Elements is a one-semester course that builds on knowledge acquired in Chemical Principles of Organic Molecules and Quantitative Chemical Analysis. This course covers the properties of all groups of elements in the periodic table with the exception of organic carbon chemistry. It also helps students discover the relationships between elements in different groups and understand the chemical reactions they undergo. The course focuses on the properties and reactions of selected important, essential, but also unusual elements and compounds such as transition metals and organometallic complexes. The course goal is to demonstrate that the study of elements other than carbon is not an isolated branch of chemistry
but is relevant in our everyday life as well as to many scientific fields such as pharmacy, medicine, biology, geology, environmental science, and materials science. An essential component of the course is a three-hour laboratory session which introduces students to how inorganic elements, not commonly covered in a regular general chemistry course, are used in their environmental, biochemical, and industrial contexts. An introduction of green chemistry principles to inorganic compounds is also presented in the lab portion of this newly designed course. This course is required for Chemistry majors (ACS and non-ACS track) as well as for students on the pre-health professions track. It serves as an elective for Chemistry minors and meets the requirement for the ACS certification as a foundation course in Inorganic Chemistry. Prerequisite: Chemistry 120 and Chemistry 220 (Offered annually)

## 303. Chemistry of Biological Compounds

This course is designed to provide a comprehensive introduction to the structure and function of biological molecules at the molecular level. Using post-translational modification of proteins as a guide, we will explore intermolecular interactions, biomolecular structure (proteins, nucleic acids, carbohydrates and lipids) and fundamental concepts in mechanistic enzymology. Students will learn to interpret biochemical data, predict the impact of mutations associated with disease and visualize biomolecular structures with the aid of computer software commonly utilized in the field. Additional topics include: RNA transcription, protein translation, enzyme engineering and more. Three hours of lecture and three hours of laboratory each week. Prerequisite. Chemistry 202 or Chemistry 140 and Chemistry 220. (Offered annually: Spring)

## 305. Chemical Thermodynamics and Chemical Dynamics

Thermodynamics is the study of the behavior of matter and the transformation between different forms of energy on a macroscopic scale. Chemical dynamics is the study of the rate at which the macroscopic properties and composition of matter change. These changes can involve either transport properties, such as thermal conductivity, viscosity, and diffusion or chemical kinetics. Some of the chemical kinetics topics covered are rate laws, temperature effects on reaction rates, reaction rate theories, reaction mechanisms, and enzyme catalysis. Applications of chemical thermodynamics and chemical dynamics are drawn from environmental chemistry and biochemistry. Laboratory exercises include determination of thermodynamic properties and kinetics experiments. Three hours of lecture and three hours of laboratory each week. Prerequisite: Chemistry 112 and Mathematics 202 or Chemistry 220, and Mathematics 202. Co-requisite: Physics 111 or Physics 101. (Offered annually: Fall)

## 306. Quantum Chemistry and Spectroscopy

Quantum chemistry is the application of quantum mechanics to the field of chemistry. Topics included in the discussion of quantum chemistry are the early development of quantum mechanics, quantum mechanical models for molecular vibrations and rotations, and electronic structure of atoms and molecules. Spectroscopy is the study of the interactions of electromagnetic radiation with matter, and is the principal experimental tool used to investigate the predictions made using quantum mechanics. The laboratory exercises include spectroscopy experiments and the use of molecular modeling programs. Three hours of lecture and three
hours of laboratory each week. Prerequisite: Chemistry 112 and Mathematics 202 or Chemistry 220 and Mathematics 202. Co-requisite: Physics 112 or Physics 102. (Offered annually: Spring)

## 309. (BIO 409) Biochemistry

An examination of living systems at the chemical level. Topics will include structure and function of macromolecules, cellular energetics, cellular respiration, and photosynthesis. A laboratory will be conducted weekly to introduce students to experimental techniques. Prerequisite: Biology 111 and Chemistry 202 or Biology 111, Chemistry 140, and Chemistry 220. (Offered annually: Fall)

## 310. Greener and Sustainable Chemistry

Environmentally friendly scientists are increasingly conscious about the need to make chemistry "greener." The goal of this course is to present a different perspective regarding chemistry and its applications in academia and industry worldwide. This course will cover both the theoretical and practical aspects of green and sustainable chemistry. The introduction will include the foundations of green chemistry and sustainability as well as a description of the tools and principles it employs. There will be an in-depth study concerning the evaluation of methods and tools in designing environmentally benign reactions and chemicals. Real-world examples will be used to illustrate the goals of green chemistry. Throughout the semester students will have the opportunity to enhance their writing and oral presentation skills and improve their communication and discussion abilities. Three hours of lecture each week. Prerequisite or co-requisite: Chemistry 140. (Offered biennially)

## 314. Instrumental Methods of Analysis

This course examines instrumental methods based on their selectivity, sensitivity, and detection limits. Instrumental systems are analyzed in terms of electronics, computers, and optics. The following topics are included: Molecular and atomic spectroscopy, electroanalytical techniques, and separation techniques. Applications of the techniques to inorganic, organic, biochemical and environmental analysis are covered in the lecture and lab components of the course. The laboratory emphasizes the critical evaluation of data. Three hours of lecture and three hours of laboratory each week. Prerequisite: Ghemistry 120,Chemistry 140 and Chemistry 220. (Offered biennially: Spring, in rotation with Chemistry 405)

## 320. Introduction to Medicinal Chemistry

This course is an introduction to the field of Medicinal Chemistry and will focus heavily on the chemistry of pharmacological agents as well as their synthesis. Attention will also be placed on enzyme mechanisms and how bioactive molecules affect their activity. This course meets three hours each week. Prerequisite. Chemistry 202 or Chemistry 140 and Chemistry 220. (Offered biennially: Spring)

## 340. Synthesis of Organic Molecules

Organic Mechanisms and Synthesis delves deeper into the concepts from Reactions of Organic Molecules (CHE 140). In this course, students will learn about modern organic reactions, their
mechanisms, and the application of these reactions in organic synthesis. Students will also be exposed to polymer and supramolecular chemistry, with a focus on the synthesis and properties of these compounds and their applications. The laboratory component of this course will provide students the opportunity to learn techniques that are required for the synthesis and characterization of organic, inorganic, and organometallic compounds, as well as, teach students how to think strategically about the chemical reactions needed to complete a chemical synthesis. This course will meet for three hours of lecture and three hours of lab per week.
Prerequisite. Chemistry 140. Co-requisite: Chemistry 220 (Offered annually: Fall)

## 403. Advanced Organic Chemistry

This course expands upon the topics discussed previously in the two semesters of organic chemistry. Topics that are covered are: Frontier Molecular Orbital (FMO) Theory and how this can be applied to chemical reactivity, Pericyclic Reactions, Linear Free-Energy Relationships, Molecular Rearrangements, Heterocyclic Chemistry, and Organometallic Chemistry. Heavy emphasis will be on reaction mechanisms and synthesis. Prerequisite: Chemistry 140 and Chemistry 220. (Offered biennially: Spring)

## 405. Biophysical Methods

This course explores experimental methods used to characterize the structure and dynamics of biological molecules. An emphasis will be placed on the theory behind the techniques and the data obtained, in addition to the biological interpretation of the results. Topics include: biomolecule synthesis and purification, NMR spectroscopy, x-ray crystallography, fluorescence spectroscopy, and more. Three hours of lecture each week. Prerequisites: Mathematics 202 and Chemistry 303 or 309. (Offered biennially: Spring, in rotation with Chemistry 314)

## 410. Fundamentals of Materials Science

Our lives are influenced by all types of materials in transportation, housing, clothing, communication, recreation, and food production. The development and advancement of societies have been dependent on the ability to use existing materials, produce, manipulate, and select new materials suitable in many technologies that make our existence more comfortable. This course depicts relationships between the processing of a material, its structure, and finally its performance based on its properties in terms of the design, production, and utilization of the material. The overall goal of this course is to become familiar with the selection process that scientists and engineers use when designing a suitable material at a reasonable cost with minimal environmental impact. Three hours of lecture each week. Prerequisite or co-requisite: Chemistry 305 or Chemistry 306 or permission of the instructor (Offered biennially)

## 392. Chemistry Junior Seminar

This seminar course attempts to prepare our Chemistry majors for their future professional career so they become successful professionals and experts in the Chemistry field. This junior seminar course introduces students to professional preparation, scientific literacy proficiency,
and research ethics. It is expected that at the end of this course, our majors will 1) understand the variety of career options available to chemists, 2) become proficient at literature searching, reading, and interpreting, and 3) realize the importance of the scientific code of conduct. Prerequisite: chemistry major and junior status. (Offered in the Spring)

## 491. Chemistry Senior Seminar

This senior seminar course builds on the skills developed in CHE 392 and focuses on 1) understanding contemporary moral/societal issues in chemistry with an emphasis on sustainability science literacy, and on 2 ) introducing grant writing and the principles of an effective research proposal with the presentation of an integrative research proposal being the culmination of seminar. Therefore, at the end of this course, the following "4 Cs" will have been practiced and mastered: Critical thinking and problem solving, Communication, Collaboration, and Creativity and innovation.
Prerequisite: chemistry major and senior status. (Offered in the Fall)

## 194, 294, 394, 494. Special Topics in Chemistry

A detailed study of an advanced topic or topics in chemistry chosen on the basis of current student interest and faculty expertise.

## 195, 295, 395, 495. On-Campus Research

This course is comprised of a ten-week summer research project guided by a faculty mentor. The student and faculty mentor develop a research project supported by a reading list and involving theoretical, laboratory, or field investigations supervised by the faculty mentor. Participants will produce a final report detailing the findings of their research. Students may earn four credits per summer for a maximum of eight credits. Not offered as Pass/Fail. Prerequisite: Permission of the mentor.

## 196, 296, 396, 496. Off-campus Research

This course consists of an individual research project chosen by the student in consultation with a faculty mentor. The student will, with the help of the mentor, design a project to be implemented during a one- or two-semester period or during the summer. The student will conduct an appropriate literature search, carry out the research, and submit a written report by the end of each semester. Students may earn two credits per semester or four credits for summer research for a maximum of eight credits. Not offered as Pass/Fail. Prerequisite: Permission of the mentor.

## 190, 290, 390, 490. Internship

An internship is based on an opportunity for students to work with industries, governmental laboratories and institutes, and outside non-research based institutions. Students will be able to work closely with an on-site supervisor to discover the numerous aspects of the working world. Participants will produce a final report detailing the findings of their research. Students may earn two or four credits per semester for a maximum of four credits. Not offered as Pass/Fail.

Prerequisite: Permission of the mentor.

## 197, 297, 397, 497. Independent Study

This course provides an opportunity for students to work with a professor of their choice on a research project or on an in-depth literature review project during the academic year. Students may earn one or two credits per semester. Not offered as Pass/Fail. Prerequisite: Permission of the mentor.

## SCE. Senior Capstone Experience

Chemistry majors fulfill the Senior Capstone Experience by conducting a yearlong research project in collaboration with a chemistry faculty member and writing a thesis-quality report. Many projects involve synthetic and preparative procedures and include the use of the department's research-grade UV-VIS, FTIR, AA, NMR, GC, HPLC, GC-MS, ICP-MS, LC-MS, electrochemical analyzer, and polarimeter. Students pursuing the ACS-certified degree in Chemistry must perform a laboratory-based research project for their SCE to meet the number of laboratory hours required by the ACS. This requirement could be waived if ACS-certified majors have already performed research for credit during the academic year or during the summer. Seniors present the results of their project in a poster session that is open to the College community. The Senior Capstone Experience is graded according to the Washington College grading system, which involves the use of letter grades (A-F) that may be modified by a minus or a plus. (Offered annually)

# Chesapeake Regional Studies Minor Interdisciplinary Minor 

John L. Seidel, Director

Students can complete the minor in one of two ways. Either completion of the Chesapeake Semester and one other course chosen from those listed below, or completion of BIO 104 and four additional courses chosen from at least two academic divisions listed below. Special topics, internships, or other courses focused on the Chesapeake region may be considered with the approval of the Director.

## Division of Humanities and Fine Arts

ART 322. The Arts in America
PHL 102. Contemporary Moral Issues

## Division of Natural Sciences and Mathematics

BIO 206. Ecology or ENV 294 Applied Ecology
BIO 309. Marine and Estuarine Biology
ENV 313. Wetlands Ecology

## Division of Social Sciences

HIS 313. 17th- and 18th-Century America
ENV 117. Introduction to Environmental and Natural Resource Economics
ANT 305. Doing Anthropology

## Chesapeake Semester Courses

CRS 240. The Natural Science of an Estuary
CRS 242. The Social Science of an Estuary
CRS 244. A Humanities Perspective on the Chesapeake
CRS 246. Interdisciplinary Study of an Estuary: Integration and Action

## Chesapeake Semester Courses

## CRS 240. The Natural Science of an Estuary

This course is one of four courses that make up the Chesapeake Semester. Here students explore topics such as geology, coastal morphology and the formation of the Chesapeake Bay, physical, chemical and biological estuarine oceanography, estuarine productivity and community structure, zonation in marine habitats, salt marshes and mud flats, oyster bars and sea grass beds, forest ecology, and the science and impacts of climate change. Some lecturers
are on campus, while others are delivered while traveling. The course includes class, home, and field lab exercises designed to reinforce course content, introduces scientific thinking and training in data collection and analysis. It is designed to foster cross-disciplinary thinking with the Humanities and Social Science courses of the Chesapeake Semester. A substantial amount of learning will take place in the field with particular design and focus around the second Journey, "Ridge to Ocean: Ecology and Geology of the Chesapeake."

## CRS 242. The Social Science of an Estuary

The focus of this piece of the semester is to explore the social aspects of the Chesapeake Bay and its watershed, including its people, history, and their complex relationships with one another and the environment. Students will cover a wide range of topics, drawing on the disciplines of anthropology and archaeology, economics, geographic information systems, history, political science and sociology. Students also will explore the ways in which these approaches may be informed by other disciplines, such as those in the humanities and natural sciences. Intersections between disciplines and integrating different kinds of knowledge are essential. A substantial amount of learning will take place in the field, with particular design and focus around the first Journey "Around the Chesapeake: A Sense of Place and History."

## CRS 244. A Humanities Perspective on the Chesapeake

This section of the Chesapeake Semester offers a humanistic perspective on the Chesapeake Bay. One way to think about this part of the course would be the most familiar: just as you will be exploring the organic life of the Bay from the perspective of the natural and social sciences, so too you will encounter, in both readings, discussions, and your various field experiences, cultural artifacts of the Bay in terms of music, philosophy, the visual arts, and writing. However, it will also be emphasized that to develop any understanding of the Bay, be it scientific or poetic or philosophical or anthropological, the student must learn to see and hear and think and write, as Thoreau puts it, with deeper references. Writing and thinking and creating are also organic endeavors. In this sense, our course is an exploration not just of the humanities of the Bay-arts, ethics, literature, writing-but of the humanistic understanding that you will bring to all the components of the Chesapeake Semester, that you will demonstrate (the expectation) in your final project, and that you will translate (the hope) into your future studies and endeavors beyond this course and the college.

## CRS 246. Interdisciplinary Study of an Estuary: Integration and Action

The Chesapeake Semester is a novel design of integrated experiential learning rooted in Washington College's strong traditions in liberal learning, coupled with its rich historical heritage and natural setting. This course builds upon three additional courses: CRS 242, CRS 240, and CRS 244 and helps to deliver elements of each course curricula in the field, dissolving disciplinary boundaries and making trans-disciplinary connections. Environmental policy and natural resource management are key topics, as students explore the rules and regulations that govern society's use of our most precious resources. Food production and food systems are
analyzed as a key but often controversial linkage between environment and society. An additional area of focus for this course is the global nature of the problems that we face in the Chesapeake, using our experiences in Central America as a means to compare and contrast coastal environments around the world. Students will use interdisciplinary tools like the "Chesapeake Semester Intersections" to help frame these concepts. A substantial amount of learning will take place in the field with particular design and focus around "Journey 4:
Resources and Regulations of the Chesapeake." Finally, this course will explore the ways in which a fuller understanding of place and people can be used to construct visions for the future, empowering people to take an active role in positively influencing society's impact on the natural world. In doing so, students will learn the elements of becoming "student-citizen-leaders," taking on the evolving role as they explore the Chesapeake area's rich culture and environment.

## Communication and Media Studies

## Interdisciplinary Major

Alicia Kozma, chair
Dale Daigle
Heather Harvey
Meghan Grosse

## Program Overview

In an increasingly media saturated, diverse, and complex global environment, the Communication and Media Studies (CMS) major focuses on preparing students to become discerning media consumers, critical thinkers, confident speakers, skilled writers, and creative storytellers. Communication and Media Studies contributes to the intellectual emancipation of its majors by practicing the values of liberal learning: analytical thought, clear communication, aesthetic insight, ethical sensitivity, and civic responsibility. The major builds upon a foundation of communication and media theory and draws from multiple disciplines to enable students to study a wide range of topics and develop the quantitative, qualitative and interpretive skills necessary to engage in original research.

CMS is an interdisciplinary, versatile, and flexible major that pushes students to expand their understanding of human communication, culture, and social institutions. The knowledge, understanding, and skills that students acquire in the CMS major help transform them into a highly valued asset-from grassroots organizations, to global media companies, to politics, and everything in-between. Importantly, communications and media studies in a liberal arts environment allows students to wield their knowledge to produce civically responsible and ethical change. Communication and media are the relational and collaborative forces that construct our social world, and a CMS degree gives students a unique edge to impact that world.

## Major Requirements

The requirements for majors in Communication and Media Studies are as follows:

- Four Core CMS classes
- CMS 101 Introduction to Communication \& Media Studies
- CMS 250 Intermediate Communication \& Media Theory
- CMS 301 Research Methods in Communication \& Media Studies
- CMS 494 Senior Seminar
- Seven additional courses in the chosen concentration, at least four at the 300-400 level
- Senior Capstone Experience

CMS majors may count twelve credits taken toward non-CMS major or minor requirements as hours earned toward their CMS major.

## Core CMS Courses

Three core CMS courses make up the foundation of the CMS major. Introduction to Communications and Media Studies gives students an overview of the field, Intermediate Communication \& Media Theory steeps them in CMS thought, and Research Methods teaches them how to conduct their own research, and Senior Seminar synthesizes these skills into cutting-edge, student generated research. Importantly, these courses are built upon cumulative knowledge. This requires students to take these core classes sequentially. Core courses cannot be taken simultaneously or out of sequential order. Classes are offered on the semester schedule:

- Introduction to Communication \& Media Studies is offered every fall semester;
- Intermediate Communication \& Media Theory is offered every spring semester;
- Research Methods in Communication \& Media Studies is offered every fall semester;
- CMS Senior Seminar is offered every fall semester.


## Program Concentrations

There are four major concentrations within CMS. Students are required to choose one concentration and complete seven courses within it, including at least four courses at the 300-400 level. The available concentrations are:

Arts + Production [humanities and fine arts based]
Business and Organizational Communication [social science based]
Identity \& Culture [hybrid humanities and social science basis]
Film Studies [humanities based]

Courses applicable to each concentration can be found in the Course Listings section below. Other courses applied to concentration hours must be approved by the CMS program.

## Senior Capstone Experience (SCE)

The Senior Capstone Experience is an intensive research project on a topic chosen by the student and guided by a faculty mentor. It hones research, analytic, and writing skills developed during four years of study. Students usually complete the Capstone in the spring of their senior year. However, planning for the SCE begins in the spring of their junior year with the submission of an SCE application during advising week. The Capstone receives a mark of Pass, Fail, or Honors.

## Course Listings

## CMS-specific courses

CMS 101 Introduction to Communication \& Media Studies. This course introduces core issues in communication and media studies, ranging from theories and models of communication, the relationship between media and society, and history/technology/trends in newspapers, radio, television, film, electronic and digital technologies, \& advertising. Key
problems and paradigms are explored through materials drawn from academic scholarship, popular press, and multimedia.

CMS 150 Public Speaking. Class presentations, job interviews, internships-pubic speaking is part of our everyday life. This course teaches students the main principles of public speaking; practice in composition, delivery, and criticism of informative, persuasive, and entertaining speeches. Particular attention is paid to speaking with media and public speaking in a digital world. Everyone needs to know how to do it and the sooner you learn the better!

CMS 194 Video Production I. (2 credit practicum) An introduction to the fundamentals of equipment, lighting, sound, cinematography, and editing (Final Cut Pro and After Effects) for video production. Student will produce their own videographic work over the course of the semester.

CMS 200 World Cinema I. Understanding contemporary moving image culture and media-from Youtube, to Snapchat, to IMAX-requires a working understanding visual analysis. The history of cinema provides the best way to comprehend and contextualize the moving image in popular culture. This course is a history of world cinema to from film dawn to post WWII cinema (roughly 1895-1960) which present the films of this era in a way that understands them as integral works within an historical visual landscape. This course emphasizes understanding filmmaking form (how to watch a movie), aesthetics, and filmmaking techniques, and analyzing content/narrative. Lab required for film screenings.

CMS 201 Contemporary Popular Film \& Television. This course teaches students to develop a critical understanding of the role of popular movies and television in their own lives and in U.S. culture. The course looks at issues of the relationship of media to social violence, gender identities, sexual identities, technology, minority cultures, and the role of the U.S. media globally.

CMS 202 World Cinema II. A continuation of World Cinema I, this course looks at film history roughly from 1960-present, presenting various modes of international cinema production and its contemporary evolution as closely interconnected. Covering the US, the UK, Italy, Czech, Senegal, Algeria, Japan, India, and France, we place an emphasis on hybrids of all these 'national' styles, as well as challenging the politically charged notion of national cinema itself. Secondly, we will explore how changes in global contemporary filmmaking evolved the US film industry and helped to challenge Hollywood's global dominance. Thirdly, we will trace how new industrial channels exposed regional and 'minor' film industries to global audiences. Required lab is for film screenings.

CMS 250 Intermediate Communication \& Media Theory. Theory may seem like a scary word, but theory helps us to make sense of our world. Theories shape how we understand reality, relationships, and the media around us, and helps us to create media of our own. Theory tells us more about how we communicate, aids in holistic comprehension of our media landscape,
and prepares us for lives consciously lived. This course exposes students to the major theories of communication and media studies, their application to the academic and professional inquiry in the field, and their importance in everyday life. The course also teaches students to write in and across the field, and prepares them for upper level critical, analytical, and theoretical based communication and media studies thinking and research. Students who take this class must have taken CMS 101 or have explicit permission from the professor to enroll.

CMS 294 Persuasion. What makes a good app? How does Spotify communicate with you? What is a book cover trying to tell you? Why do you remember that one commercial? This course examines these questions and more by examining persuasion as a communicative strategy. Students will examine online, visual, oral, aural, and technological persuasive experiences.

CMS 301 Research Methods in Communication \& Media Studies. This course is designed to introduce students to the quantitative and qualitative research methods used to study communication and media. We will focus on critical analysis, evaluation, study design, research ethics, the application of research to everyday decision-making, and what communication and media research can tell us about phenomena in the world around us. This course treats students as CMS practitioners, which means they are expected to participate in the recursive process of scholarly inquiry and apply their skills to formulate research questions, study design, and research implementation. Students who take this class must have taken CMS 101 and CMS 250 or have explicit permission from the professor to enroll.

CMS 394 Creative and Information Economies. This course is designed to give students an introduction to the political economy of the media in the United States with a particular focus on creative economies and entertainment industries. Starting with foundational texts and moving through contemporary theoretical positions, students will develop a core understanding of how media systems operates, and with what effects, in a capitalist society. Particular attention will be paid to commercialization, corporate concentration, regulation and policy, globalization, labor, digital worlds and social networking, and the construction of shared culture.

CMS 401 Film Theory. This course engages with, uses, and challenges various theoretical ideas and approaches to film. Throughout the semester, we will address questions such as: What is cinema, and what are film studies? How do we relate to and interact with films? What are the relationships among film and the larger global society? We will discuss the historical and cultural context in which particular theories emerged and learn the language of idea-inflected film criticism. Additionally, we will look at how film studies has used influenced and theoretical lines of thought such as Marxism, semiotics, formalism, psychoanalysis, poststructuralism, feminism, critical race theory, sexuality studies, queer theory, and critiques of neocolonialism. Class includes screening time. Prerequisite: Some film class(es); sophomore and higher only

## Arts + Production Concentration

Please see departmental pages for course descriptions.

Two of the following courses:
ENG 103 Introduction to Creative Writing
MUS 106 Rock, Pop, \& American Culture
CMS 201 Contemporary Popular Film and Television
ENG 201 The Art of Rhetoric
ANT 215 Sex, Gender, and Culture
BUS 234 Introduction to Nonprofit Management
ART 251 Visual and Critical Thinking
SOC 262 Self and Society
POL 334 Media and Politics
ANT 354 Visual Anthropology
ANT 420 Media and Power

Two of the following theory/history/genre courses:
ART 320 Twentieth Century Art
ART 324 Photography’s First Century
CHN/ILC 394 Chinese Cinema
HIS 218 Historical Film Genres
HIS 344 Hollywood Films in the Depression and WWII
ILC 305 European Cinema
ILC 413 The Film in Spain and Latin America
ART 425 Women Artists and Feminist Art History
THE 415 Theories of Acting
GRS 316/317 German Cinema

Three of the following applied courses (at least two at the 300 or 400 level):
ENG 224 Introduction to Journalism
ART 231 Creative Process
THE 241 Introduction to Theatrical Design
ART 291 Intermedia_VNM
ART 330 Video Intensive
MUS 332 Music Production \& Recording
ART 335 New Media Intensive
ART 340 Photography Intensive

Business and Organizational Concentration
Please see departmental pages for course descriptions.

Two required courses:
CMS 150 Public Speaking
BUS 302 Organizational Behavior
Three of the following courses:
BUS 111 Principles of Marketing
BUS 223 Marketing Research
BUS 224 Digital Marketing
PHL 300 Business Ethics
BUS 323 Consumer Behavior
BUS 451 Advertising
Two of the following courses
CMS 394 Creative and Information Economies
SOC 221 Social Inequalities
POL 334 Media and Politics
ANT 420 Media and Power
Identity \& Culture Concentration
Please see departmental pages for course descriptions.
1 of the following courses:
SOC 101 Introduction to Sociology
ANT 200 Introduction to Linguistics
PHL 226 Global Ethics
1 of the following courses:
ENG 201 The Art of Rhetoric
ANT 305 Ethnographic Method
SOC 306 Research Methods in Sociology
5 of the following courses:
CMS 201 Contemporary Popular Film and Television
ENG 209 Introduction to American Literature and Culture I
ENG 210 Introduction to American Literature and Culture II
ENG 213 Introduction to African American Literature and Culture I
ENG 214 Introduction to African American Literature and Culture II
ENG 370 Harlem Renaissance
SOC 213 Sociology of Gender
ANT 215 Sex, Gender, and Culture
SOC 221 Social Inequalities
SOC 262 Self and Society
ANT 320 Race \& Ethnicity
POL 334 Media and Politics
ANT 420 Media and Power
CMS 294 Feminist Media Studies

CMS 294 Media and Identity
CMS 394 Media and Censorship

## Film Studies Concentration

Please see departmental pages for course descriptions.

3 required courses:<br>CMS 200 History of World Cinema I<br>CMS 202 History of World Cinema II<br>CMS 401 Film Theory<br>1 of the following courses:<br>ENG 201 The Art of Rhetoric<br>ART 231 Creative Process<br>THE 241 Introduction to Theatrical Design<br>ART 291 Intermedia_VNM<br>ART 330 Video Intensive<br>3 of the following courses:<br>CMS 201 Contemporary Popular Film and Television<br>ART 251 Visual and Critical Thinking<br>HIS 218 Historical Film Genres<br>HIS 344 Hollywood Films in the Depression and WWII<br>ILC 305 European Cinema<br>ILC 413 The Film in Spain and Latin America<br>GRS 316/217 German Cinema

## Creative Writing

## Minor, Division of Humanities and Fine Arts

Sean Meehan, Director<br>Sufiya Abdur-Rahman<br>Kimberly Andrews<br>James Allen Hall<br>Roy Kesey<br>Robert Mooney<br>Michele Volansky

Budding writers find the creative writing community at Washington College inviting and full of opportunities to practice their craft. The minor in creative writing offers a carefully planned curriculum designed to foster the young writer's creative expression-guidance that is significantly enhanced by exposure to the voices and visions of some of the finest poets and fiction writers in the country. Each year, thanks to the endowment of the Sophie Kerr Fund, the College brings to campus a succession of distinguished writers, editors, and literary scholars. Billy Collins, Junot Díaz, Nick Flynn, Jonathan Franzen, Neil Gaiman, Lauren Groff, Ted Kooser, Li-Young Lee, Colum McCann, Azar Nafisi, Maggie Nelson, Joyce Carol Oates, Claudia Rankine, Jane Smiley, Natasha Trethewey, Colson Whitehead, and Jacqueline Woodson and are just some of the writers and literary scholars who have come to campus in the last decade to teach, lecture, and conduct writing workshops.

The Sophie Kerr fund also supports the justly famous Sophie Kerr Prize (at $\$ 63,912$ in 2019, the largest undergraduate literary prize in the country), as well as student scholarships, library collection development, and professional development for English Department faculty. The Literary House supervises about 50 learning opportunities and internships for students, as well as provides a space where students can explore the letterpress and bookmaking in the print studio.

## For student who matriculate fall 2018 and after:

The Creative Writing Minor can be achieved through the successful completion of six (6) courses and attendance of six (6) literary events:

Gateway: 2 courses ( 8 credits)
ENG 103: Introduction to Creative Writing (required) plus one (1) other course chosen from:
ENG 220: Introduction to Fiction
ENG 221: Introduction to Nonfiction
ENG 222: Introduction to Poetry
ENG 223: Introduction to Drama

Workshops: 3 courses (12 credits). Complete either Option A or Option B.

Option A: Three (3) upper-level workshops chosen from those indicated below, as well as additional "special topics" courses. (Recent "special topics" courses have included The Screenplay, Poetry and Book Arts, The Art of Biography, and Travel Writing.):

ENG 351/THE 351: Introduction to Playwriting
ENG 452: Creative Writing Workshop: Fiction
ENG 453: Creative Writing Workshop: Nonfiction
ENG 454: Creative Writing Workshop: Poetry
ENG 394/494: Special Topic Creative Writing Workshop
or

Option B: Two (2) upper-level workshops plus either one 4-credit course that focuses primarily on editing/publishing skills (including ENG 354 Literary Editing and Publishing), or 4 internship credits (one 4-credit internship, or two 2-credit internships).

Literature: 1 course ( 4 credits): One course in literature offered by the English Department at the 300/400 level

Events: Attendance at 6 literary events. Students are required to sign the official attendance form at the event in order to be credited with attendance.

NOTE: Students minoring and/or majoring in another English program (including the English major and the Journalism, Editing \& Publishing minor) may only double-count two courses (up to 8 credits) total.

## For students who matriculated previous to fall 2018:

The minor in creative writing can be achieved through the successful completion of five courses-ENG 103 Introduction to Creative Writing plus any combination of four 300/400-level creative writing courses including those indicated below, as well as additional "special topics" courses.

## ENG 103. Introduction to Creative Writing

A workshop introducing new writers to several forms of creative writing, including poetry, fiction, and nonfiction. Students will use classic and contemporary literature as models for their own efforts. In the fall semester, this course is only open to first-year students. In the spring semester, beginning writers from all years may enroll in ENG 103.

ENG/THE 351. Introduction to Playwriting

Analysis and practical application of techniques and styles employed in writing for the stage.

## ENG 353. Contemporary American Literature: Living Writers

This course focuses on the study of American poetry, fiction, and nonfiction from 1945 to the present. (The course alternates among the genres of poetry, fiction, and nonfiction.) Emphasis includes an examination of the work of major American writers of the last half-century. The course is structured in a way similar to a traditional offering in literature with this difference: some of the writers whose work is studied in class will at some time during the semester come to campus to visit the class, discuss their work with participants, and give a public reading.

## ENG 354. Literary Editing and Publishing

The Rose O'Neill Literary House is home to Cherry Tree, a professional literary journal featuring poets, fiction writers, and nonfiction writers of national reputation and staffed by Washington College students. In this course, students receive hands-on training in the process of editing and publishing a top-tier literary journal. They analyze literary markets even as they steward into print work from the nation's most prestigious emerging and established writers. This class includes extensive research and discussion of nationally recognized literary magazines and covers topics such as a publication's mission statement, its aesthetic vision, and its editorial practices. All students who wish to join the editorial staff and be included on the masthead of Cherry Tree must complete one semester of ENG 354: Literary Editing \& Publishing.

## ENG 452. Creative Writing Workshop: Fiction

This workshop offers guided practice in the writing short fiction. Using established writers as models, considerable effort is put toward the objective of learning to read as writers and, in the process, becoming better critics of the student's own work and the work of others in the group. By offering a more intimate familiarity with the elements of fiction, students write and revise prodigiously and, in the process, learn and practice a repertoire of literary strategies in preparation and in support of short stories of their own composition. Prerequisite: ENG 103 Introduction to Creative Writing.

## ENG 453. Creative Writing Workshop: Poetry

This course builds upon student's previous training in the workshop, asking them to hone their skills not only as writers but also as readers and critics of poetry. Using recently released, debut collections as role models, students will address concepts of diction, the line and line break, figurative language, imagery, rhyme, meter, and narrative. Assignments will include drafting new poems, performing close readings of published texts, and facilitating class discussions. Prerequisite: ENG 103 Introduction to Creative Writing.

## ENG 454. Creative Writing Workshop: Nonfiction

This course will use a workshop approach for students who are interested in developing their skills in a kind of writing which combines elements of journalism, such as the feature article, with elements of the literary, such as the personal essay. In addition, students will also develop their essay skills in the form of the personal narrative and travel writing. In essence this course treats
the various forms of the essay with a special emphasis on the creative ways the genre can be interpreted and rewritten. Readings of representative essays will be included. Prerequisite: ENG 103 Introduction to Creative Writing.

# Data Analytics Interdisciplinary Minor 

Susan A. Vowels, Director

Data Analytics, a subfield of Data Science, provides knowledge and skills in data collection and analysis for supporting decision-making within organizations. The guiding principles of this inquiry-based minor are consistent with the principles of a liberal education and it will provide students with the tools and concepts needed to function effectively in an increasingly data-driven world. The coursework is multidisciplinary and covers statistics, visualization techniques, data mining techniques, and other types of data modeling techniques. Data analytics orients the student towards the application of such skills and knowledge to organizational issues. Essentially, students learn the discipline of examining an organizational problem specified in human terms, analyzing it, designing a solution, simulating that solution using mathematics and computers, reflecting and reworking the results of the simulation, and finally, communicating the new knowledge in a concise and clear way. A key theme underlying this minor is the ethical use of data.

Required Courses (key skills noted in parenthesis):

BUS 109 Managerial Statistics, or MAT 109, PSY 209, ECN 215 (Statistical foundation and Excel)
CSI 100 Introduction to Computer Science (Python and Scripting)
CSI 360 Database Systems (Database concepts using Access, MySQL and SQL)
BUS 210 Management Information Systems (organizational setting and basis for ethical use of data, connection of skills and knowledge to operations, decision-making, and strategy)
BUS 316 Data Analytics (Visualization, Big Data, Text Analytics, Machine Learning, Tableau, SAP Lumira and Predictive Analytics, BigML, introduction to $R$ algorithms)

Elective Course (one chosen from the following list):

ANT 210 Intermediate Geographic Information Systems
BUS 315 Enterprise Resource Planning Systems
BUS 223 Marketing Research Methods
BUS 455 Financial Derivatives
ECN 320 Econometrics
PHY 252/MAT 252 Scientific Modeling and Data Analysis
POL 401 Empirical Political Research
PSY 309 Statistics and Research Design II with Lab
SOC 306 Research Methods in Sociology
Special topic courses (subject to approval by Director)

## Advising Notes

The Data Analytics minor is intended to complement major courses of study by providing additional tools for critical thinking and analysis of knowledge comprised in the student's major and so each elective course in this program requires prerequisites that are not listed here and would be taken in pursuit of the student's major. For instance, students majoring in Business Management would take ECN 112 Principles of Microeconomics and BUS 111 Principles of Marketing as prerequisites to BUS 223 Marketing Research Methods; students majoring in Economics would take the introductory economics courses necessary to enroll in ECN 320 Econometrics.

Several departments (MAT, PSY, ECN) offer introductory statistics courses which can be used for this minor; however, BUS 109 Managerial Statistics is recommended because students learn to integrate descriptive and inferential statistics with the use of the Statistical ToolPak add-in for Microsoft Excel. Excel is the software of choice in real-world provisioning of analytics software as well as a powerful analytical tool in its own right.

The following rules govern double-counting:

- Students pursuing both the Information Systems minor and the Data Analytics minor may count only BUS 210 and CSI 360 towards both minors. The elective chosen for the Information Systems minor will not count towards the Data Analytics minor and vice versa.
- Students majoring in Computer Science may count only CSI 360 toward the Data Analytics minor.
- Students majoring in Business Management may count only BUS 109 (or equivalent) and BUS 210 towards the minor. The elective chosen for the Business Management major will not count towards the Data Analytics minor and vice versa.

BUS 112 Introduction to Financial Accounting is recommended as a prerequisite to BUS 210 Management Information Systems for non-BUS majors but is not required. It is required for Business Management majors.

## Economics

## Division of Social Sciences

Adalbert Mayer, Chair

Lisa Daniels
Tanushree Jhunjhunwala
Robert Lynch
Brian Scott

At its heart, economics is a social science that seeks to explain human behavior. Far from being limited to questions of the demand and supply for goods and services, economics seeks to answer questions spanning a wide range of issues. These include poverty, discrimination, crime, pollution, education, international trade, taxation, natural resource management, and many other areas. Unlike the study of business management which focuses on improvements for a single firm or industry, economics takes a societal view that examines the impact of decisions or policies on individuals, households, businesses, taxpayers, the environment, and the country or the world as a whole.

In order to examine the impacts of policies from a societal view, economic analysis relies on a highly quantitative analytical method that requires knowledge of microeconomic and macroeconomic theory, mathematical modeling, statistics and logic. Graduates who have mastered the "economic way of thinking" are prepared to move on into successful careers. Our majors have gone on to careers in law, business, finance, foreign service, government, consulting, education, and research. For those wishing to pursue graduate school, Economics majors tend to score very well on entrance exams. Nationwide, Economics graduates tend to score better than majors from business management, political science, international studies, psychology and virtually every other field of study on the Graduate Record Examination (GRE), Law School Admission Test (LSAT), and the Graduate Management Admission Test (GMAT). Many of our majors have successfully completed graduate school in these areas.

## Major Requirements

Students planning to major in Economics must take ECN 111, 112, 211, 212, 215, and five additional Economics courses at the 200-level or above. Students will fulfill the Writing in the Major requirement (W3) by taking ECN 215.

In addition to the required courses, students must complete the Senior Capstone Experience, which is fulfilled by writing a thesis or passing comprehensive exams.

## Minor Requirements

Students who wish to minor in Economics must complete ECN 111, 112, and four economics courses at the 200-level or above.

## Social Science Distribution Requirements

Students who elect to use Economics to fulfill their Social Science distribution requirement with only one course from Economics can choose from ECN 111, 112, or ENV 117. If students want to fulfill their Social Science distribution requirement with two courses from Economics, they may take ECN 111 and 112, or they may take either ECN 111 or 112 and any one of the following courses (some of which require 111 or 112 -- see individual course descriptions for prerequisites):
ENV 117 Introduction to Environmental and Natural Resource Economics
ECN 218 Economic Development
ECN 219 Labor Economics
ECN 312 Public Finance
ECN 317 Environmental Economics
ECN 318 Natural Resource Economics
ECN 416 Law and Economics

## Internships through The Washington Center

Students who major or minor in Economics have the opportunity to undertake an internship in Washington, D.C. through The Washington Center (see www.twc.edu). During this semester-long program, students may attend hearings, conduct policy research, draft correspondence, monitor legislation, lobby members of Congress, or write analytical reports depending upon their placement. In addition, students attend an evening seminar selected from a variety of topics offered during the semester. Finally, students participate in lectures, site visits, small group discussions, briefings, and other required events designed to help them understand the connection between their academic and professional goals and the special educational opportunities available through living and working in Washington, D.C. Students earn 16 credits for this internship during the semester (eight toward upper-level Economics electives and eight toward general electives). If students undertake an internship during the ten-week summer program, they earn eight credits (four toward upper-level Economics electives).

In addition, the department encourages activities outside the classroom by helping interested individuals find suitable projects and programs, including independent studies, study abroad, and internships outside of the Washington Center program. In some cases, upper-level academic credit may be earned.

## Course Descriptions

## 111. Principles of Macroeconomics

An introduction to principles of economic analysis, economic institutions, and issues of economic policy. The course examines factors determining national income, price, and employment levels as well as the international position in the U.S. economy.

## 112. Principles of Microeconomics

An introduction to the principles of economic analysis, economic institutions, and issues of
economic policy. Principal topics covered include commodity and factor price determination under various market structures, and resource allocation and income distribution through a pricing system.

## 211. Intermediate Macroeconomics

The course reviews the measurement of national income and examines modern and classical theories explaining the determination of national income, employment, price, and growth levels. Prerequisite: Economics 111.

## 212. Intermediate Microeconomics

The course examines modern and classical theories of demand and supply, and analyzes market equilibrium, general equilibrium, and criteria for welfare maximization. Prerequisite: Economics 112.

## 215. Data Analysis

An introduction to research design, applied statistical methods, and writing in the discipline. Students study questionnaire design, sample selection, descriptive statistics, and hypothesis testing using a statistical software package, Stata. They also work in groups to design their own online survey and analyze the results. Finally, they learn about communicating and writing their results for both lay audiences and academic journals. Students are encouraged, though not required, to take MAT 109 or BUS 109 prior to taking ECN 215.

## 218. Economic Development

This course introduces students to issues related to economic development and growth among poor countries. The topics include measurement of development, poverty, inequality, population growth, the role of markets and government, population, trade, and the role of institutions. Students will also compare the success or failure of poverty alleviation strategies in different countries. Prerequisite: Economics 111 or 112.

## 219. Labor Economics

This course combines theoretical modeling and basic empirical analysis to study the market for labor. We use models of labor supply and labor demand in different market settings to examine differences in earnings, labor-force participation, and unemployment. We study the effects of education, technological change, information, immigration, and government policies on earnings and employment.
Prerequisite: Economics 112, and Math 109 or Economics 215.

## 312. Public Finance

An examination of the role of government in a competitive market economy and the effects of tax and expenditure policies at the federal, state, and local levels on the allocation of resources and the distribution of income and wealth. Prerequisite: Economics 111 or 112.

## 314. Money and Banking

An examination of banking institutions, techniques of money management, theories of the demand for money, and the influence of money on economic activity. Prerequisite: Economics 211.

## 316. Regional and Urban Economics

An examination of the economic factors influencing the growth of urban concentrations, their size, and their functions. The course studies the problems of transportation, housing, segregation and discrimination; poverty; crime; the various ecological factors affecting cities, including pollution, congestion, and urban decay; and the financing and provision of public services, including planning, zoning, and the special problems of inner cities. Prerequisite: Economics 212.

## 317. Environmental Economics

This course is a survey of the application of economic analysis to environmental problems. Analysis will focus on: policy options available to lawmakers and citizens, methods for assigning value to the environment, and air and water pollution and the laws meant to control these problems. Prerequisite: Economics 112.

## 318. Natural Resource Economics

This course surveys the economic theory behind, and the management of, renewable and non-renewable resources including fisheries, minerals, timber, water, and biodiversity. Analysis of management options is at the local, regional, and national levels. Analysis includes trade-offs of policies and the effect of property rights regime on resource use. Prerequisite: Economics 112.

## 320. Econometrics

This course introduces the statistical tools that economists use to test and quantify their theories. Regression analysis is used to evaluate relationships between economic variables. The results are interpreted with the help of concepts like causality and significance.
Prerequisite: Economics 111 or 112, and Math 109 or Economics 215.

## 327, 328, 329.

An integrated three-course unit for students spending a semester at the Washington Center. Students receive 8 elective credits in Economics and 8 general elective credits.

## 327. Washington Center Internship

A full-time, semester-long internship in Washington, DC, with a federal agency, non-profit organization, or private firm. Depending upon interest and internship placement, students may attend hearings, conduct policy research, draft correspondence, monitor legislation, lobby members of Congress, or write analytical reports. Students will create an in-depth portfolio of their internship experience. 12 credits. This course is normally open only to juniors and seniors.

## 328. Washington Center Seminar

Washington Center Interns participate in an evening seminar selected from a variety of topics offered during the semester. Students engage in class discussion and may also research seminar topics, prepare written assignments, and take examinations. Required of and limited to students enrolled in Economics 327. Three credits.

## 329. Washington Center Forum

Washington Center Interns participate in lectures, site visits, small group discussions, briefings, and other required events designed to help them understand the connection between their academic and professional goals and the special educational opportunities available through living and working in Washington, DC. Evaluations of these experiences are included in the student portfolio. Required of and limited to students enrolled in Economics 327. One credit.

## 394. Behavioral Economics

This course provides a survey of topics in microeconomics through the lens of experimental and behavioral economics. While learning about important economic phenomena (such as the effects of incentives, institutions, and behavior on economic outcomes) students discover experimental evidence that suggests several violations of the standard model of rational decision making. They then explore some newer models that have evolved to account for these violations. Topics include: decision making under certainty and uncertainty, risk and time preferences, fairness and reciprocity, charitable giving, reference dependence, bounded rationality, and neuroeconomics, among others.

## 410. International Trade

The principles that govern world trade and investment and the factors that determine the direction of international trade will be discussed. The gains from trade, the basis for trade, and the arguments for and against protection will be examined. The effects of various policies that obstruct the free flow of trade will be analyzed. The influence of international trade on economic development will also be studied within the contexts of both developed and developing economies. In addition, the regional and international organizations that are designed to influence or promote the orderly functioning of the international trading system will be described. Prerequisite: Economics 111 and 112.

## 411. International Finance

The course examines foreign exchange markets, the concept of the balance of payments, and exchange rate determination. The cases for fixed and flexible exchange rates are presented. The various mechanisms for achieving domestic and international equilibrium and stability, in terms of employment, prices, and growth, are discussed. The evolution of the international monetary system and current international economic problems are analyzed. Prerequisite: Economics 111 and 112.

## 416. Law and Economics

This course describes how rules, e.g. property rights or contract law, should be designed to encourage economic efficiency. The human response to the prices imposed by laws on different kinds of behavior is analyzed. Applications to land use legislation, consumer products liability, the criminal justice system, and medical malpractice are included. Prerequisite: Economics 112.

## 194, 294, 394, 494. Selected Topics in Economics

The topics covered by this course vary from term to term as dictated by student and faculty interest. Course topics have included Health Economics, Mathematical Economics, Economics of Information, Behavioral Economics, and other topics not specifically covered in other Economics courses. Prerequisites vary.

## 190, 290, 390, 490. Internship

## 197, 297, 397, 497. Independent Study in Economics

The topics covered through independent study vary as dictated by student and faculty interest.

## SCE. Senior Capstone Experience

All students are required to complete the Senior Capstone Experience. This can take the form of a senior thesis or comprehensive exams. In the case of the thesis, students are required to begin their research and submit a proposal in the spring semester of their junior year. Students who choose to take the comprehensive exams instead must pass the microeconomics, macroeconomics, and field exams.

## Education

## Division of Social Sciences

Bridget Bunten, Chair, Elementary Coordinator

Sara Clarke-Vivier
Erin Counihan, Secondary Coordinator
L. Michelle Johnson

The Education Department is characterized by a highly nurturing and personalized environment, intellectual rigor, and a performance milieu within a liberal arts context. Education is not a subject major; the Department offers an interdisciplinary major in Human Development and a minor in Secondary Education Studies in addition to two teacher certification programs. As the department is a member of the Social Sciences Division, the foundational sequence courses (Principles of Education and Educational Psychology) can fulfill distribution requirements in the social sciences.

## DEPARTMENT MISSION

Together, faculty and students in the Department of Education engage in interdisciplinary inquiry of the processes and institutions by which societies enculturate, socialize, and educate their youth, an inquiry that is grounded in the liberal arts and enables students to become citizen leaders and lifelong learners.

## Learning Goals (Our students will be able to...)

1. Demonstrate an understanding of social, cultural, psychological, philosophical, and historical foundations of education (and their applications to practice)
2. Integrate and apply knowledge of human development across the fields of anthropology, education, psychology, and sociology
3. Use content knowledge to design, evaluate, and interpret field experiences
4. Communicate effectively in a variety of formats and media
5. Display global consciousness and cultural sensitivity as emerging leaders

The Education Department offers teacher certification programs in Elementary and Secondary Education. Program requirements are in alignment with the Maryland Redesign of Teacher Education and standards of assessment are based on The Maryland Essential Dimensions of Teaching. The Department has established eleven Professional Development School (PDS) partnerships in three local counties; this facilitates implementation of state requirements that each teacher candidate complete 100 days of an extended internship in a PDS in two consecutive semesters, including the student teaching experience. The Maryland State Department of Education (MSDE) has reciprocal certification agreements with 47 other states.

## ENTRY REQUIREMENTS FOR CERTIFICATION PROGRAMS

Entry criteria for the Teacher Certification Program are as follows:

- cumulative GPA of 3.0 (and a GPA of 3.0 in the teaching field for secondary certification);
- recommendation from a professor in the student's major field of study (secondary only);
- a Maryland passing score on one of the following exams: Praxis Core (reading, writing and math), SAT-composite score (math and reading) of 1100, ACT-composite score of 24, or GRE-composite score of 1000 (if taken before $9 / 1 / 2011$ ) or 297 (as of $9 / 1 / 2011$ )
- a passing score on: Praxis II 5001 (reading \& language arts, mathematics, social studies, and science) (elementary only)
- approval of the Education Department following a formal interview with the Chair and departmental colleagues. The following are some of the personal and professional attributes that are considered for approval: maturity, oral and written communication skills, professional attitude, flexibility, initiative, collaboration, and overall potential to be successful in a teaching internship. (Please note: An interview for the Elementary Education Program will only be granted to students who meet ALL entry requirements.)

Applicants for the Teacher Certification Programs should realize that Education Department faculty may use any and all prior interactions, within the Department and in PDS field experiences, as input for program entry.

Admission to the elementary and secondary programs generally occurs during the fall semester of the junior year. (Where possible, the Department will make accommodations for "late deciders"). Students should be aware that the Maryland State Department of Education requires a grade of " $C$ " or better in all courses applied toward certification.

It should be noted that Washington College Teacher Certification Program requirements may be modified because of evolving state requirements for approved programs in teacher education.

## Program Completion

Students will be recommended for Maryland Approved Program teacher certification when they successfully 1) earn an academic degree with a cumulative GPA of 3.0 (and a GPA of 3.0 in their major for secondary certification); 2) complete the Washington College Teacher Certification Program; 3) complete national examinations according to Maryland standards, 4) complete an exit interview with the program Certification Administrator; and 5) earn a grade of "B-" or better in EDU 405 or EDU 413 and 414.

## I. ELEMENTARY EDUCATION

The Elementary Certification Program (grades 1-6) is made up of three required components: 1) completion of selected core courses in Humanities, Social Sciences, and Mathematics-Natural Sciences; 2) an academic major, usually in Human Development; and 3) a required sequence of Education courses and field experiences. Consultation with the Coordinator of Elementary

Education should be held during the first semester of the freshman year to insure proper scheduling and selection of courses.

The required education courses for students who wish to become certified as elementary teachers are listed under the Human Development major.

## The Human Development Major

Students selecting the Human Development major will study the individual in community and the world of schooling. The major provides a comprehensive preparation for prospective elementary school teachers, and an interdisciplinary program for students who wish to examine human development in the context of theory and practice in education but who do not wish to seek teacher certification.

The Human Development major is designed to help students answer the question, "How do children develop into fully mature, autonomous and self-aware human beings who are capable of both intimate and public communal relationships?" These studies will facilitate an understanding of the development of children in our multifaceted society within the comprehensive liberal arts foundation of the Washington College experience. The Human Development major provides the opportunity for enlarging our understanding of the development of school-aged youth. This is a particularly appropriate foundation for individuals wishing to become elementary school teachers.

The academic program includes sequenced study in educational foundations (the history, philosophy, and psychology of education), a developmental progression of study in pedagogical theory and practice, a demonstrated knowledge of content in selected liberal arts disciplines, and multi-disciplinary courses from the departments of anthropology, sociology, and psychology.

Field experiences and research are an essential component for the major. The major study for the teacher candidate requires a 100-day internship in a Professional Development School; for the non-teacher candidate, the major study includes field experiences in schools or other educational and social agencies.

Washington College places singular emphasis on the completion of a significant independent project as the culminating activity in a major program. The teacher candidate will develop and present a professional portfolio which includes an action research project; the Maryland Essential Dimensions of Teaching standards will provide guidance and evaluative criteria. The non-certification major will develop and present an approved interdisciplinary thesis that includes field research.

## Course Requirement for Human Development Majors

HDV Major - Option 1: Course sequence for Human Development majors with professional
courses required for Maryland Approved Program Elementary Certification. Students should be aware that the MSDE requires a grade of " $C$ " or better in all courses applied toward certification.

EDU 211-214. Clinical Experiences/practica
EDU 251. Principles of Education
EDU 252. Educational Psychology
EDU 305. Qualitative Inquiry in Education
EDU 330. Diversity and Inclusion
EDU 351. Processes and Acquisition of Reading
EDU 352. Reading Instruction and Assessment
EDU 354./ ENG 342. Children’s \& Young Adult Literature
EDU 411. Curriculum and Instruction: Mathematics and Natural Science
EDU 412. Curriculum and Instruction: Language Arts and Social Studies
EDU 413. Teaching Internship (part-time)
EDU 414. Teaching Internship (full-time)
EDU SCE. Senior Capstone Experience
PSY 202. Lifespan Developmental Psychology

An additional two courses (from two different disciplines) will be selected, in consultation with the advisor, from the following:

## Anthropology

ANT 215. Sex, Gender, and Culture
ANT 280. Traditional Ecological Knowledge
ANT 300. Language and Culture
ANT 305. Ethnographic Methods
ANT 320. Race and Ethnicity

Psychology
PSY 221. Social Psychology
PSY 231. Personality
PSY 234. Psychopathology II
PSY 302. Advanced Developmental Psychology with Lab
PSY 304. Theories \& Processes of Counseling
PSY 309. Statistics and Research Design II with Lab
PSY 313. Learning \& ABA with Lab
PSY 316. Cognitive Neuroscience with Lab
PSY 403. Behavior Modification with Lab
PSY 433. Child Assessment with Lab

## Sociology

SOC 212. Sociology of the Family
SOC 213. Sociology of Gender

SOC 221. Social Inequalities
SOC 262. Self and Society
SOC 306. Research Methods in Sociology
SOC 341. Variant Behavior

In completing the General Education requirements of the College, certification students will choose from the following list of courses in the distribution sequences:

## Four Year Writing Requirement

W1 - First Year Seminar (any FYS course)
W2 - Process of Writing (EDU 251)
W3 - Writing in the Discipline (EDU 305)
W4 - Senior Capstone Experience (EDU SCE)

## Natural Science - Two Courses

Students will take two courses in the natural sciences. The courses must have a laboratory component, and can be courses for non-majors or majors.

Students may complete any combination of the following courses:
BIO 100. Current Topics in Biology
BIO 104. Ecology of the Chesapeake Bay
CHE/ENV 110. Chemistry of the Environment
CHE 120. Chemical Principles of Organic Molecules
CHE 140. Reactions of Organic Molecules
ENV 140. Exploring the Solid Earth
ENV 141. Atmosphere, Ocean, and Environment
PHY 100. Concepts in Contemporary Physics
PHY 105. Astronomy

Two-course sequences are:
BIO 111, 112. General Biology I, II
PHY 101, 102. College Physics I, II
PHY 111, 112. General Physics I, II
Students pursuing a minor in a natural science or psychology should take one of the preferred two-course sequences.

## Quantitative - Two Courses

Students will take two math courses and may choose from MAT 109 Statistics, MAT 135 Finite Mathematics, MAT 221 Communication, Patterns and Invention in Mathematics, PSY 209 Statistics and Research Design I with Lab (for Psychology minors/double majors only), BUS 109 Managerial Statistics (for Business Management minors only), or any other mathematics course.

## Humanities - Two Courses

Students will fulfill the Humanities requirement by taking any two of the following courses:
ENG 207. Introduction to British Literature \& Culture I*
ENG 208. Introduction to British Literature \& Culture II*
ENG 209. Introduction to American Literature \& Culture I
ENG 210. Introduction to American Literature \& Culture II
ENG 213. Introduction to African American Literature \& Culture I
ENG 214. Introduction to African American Literature \& Culture II
*This requirement cannot be fulfilled with ENG 207 AND 208. If you take 207 or 208, your second ENG literature course must be one of the other ENG courses listed above.

Fine Arts - One course in art, theatre, music, or dance that will fulfill distribution in the Fine Arts.

## Social Science - Three Courses

EDU 251. Principles of Education
EDU 252. Educational Psychology
HIS 201 or 202. History of the U.S.

HDV Major - Option 2: Course sequence for Human Development majors without teacher certification

## Required Foundation Courses

EDU 251. Principles of Education (satisfies social sciences distribution)
EDU 252. Educational Psychology (satisfies social sciences distribution)
EDU 305. Qualitative Inquiry in Education (must be taken spring of junior year)
EDU SCE. Senior Capstone Experience
PSY 202. Lifespan Developmental Psychology

Introductory Courses (Choose two)
ANT 105. Introduction to Anthropology
SOC 101. Introduction to Sociology
PSY 111, 112. General Psychology

## Experiential Field Course (Choose two)

Students must complete two one-credit experiential learning components, i.e. EDU 218 and EDU 219. (Clinical Field Experiences) or EDU 494. Special Topics: Individualized Internships/Experiential Learning.

Eight courses (in addition to those listed previously) will be selected from at least two areas as listed. Two of these courses may be at the introductory (200) level; six of these courses must be at the upper $(300 / 400)$ level. Substitution of up to two courses is possible with the approval of your advisor.

Area 1: Anthropology<br>ANT 215. Sex, Gender, and Culture<br>ANT 280. Traditional Ecological Knowledge<br>ANT 300. Language and Culture<br>ANT 305. Ethnographic Methods<br>ANT 320. Race and Ethnicity<br>Area 2: Education<br>EDU 311. Human Geography<br>EDU 315. Traditional and Modern Grammar<br>EDU 318. Cultural \& Linguistic Diversity in Education<br>EDU 330. Diversity and Inclusion<br>EDU 351. Processes and Acquisition of Reading<br>EDU 354./ ENG 342. Children’s \& Young Adult Literature<br>EDU 406. Seminar in Peer Tutoring

Area 3: Psychology<br>PSY 221. Social Psychology<br>PSY 231. Personality<br>PSY 234. Psychopathology II<br>PSY. 302. Advanced Developmental Psychology with Lab<br>PSY 304. Theories \& Processes of Counseling<br>PSY 309. Statistics and Research Design II with Lab<br>PSY 313. Learning \& ABA with Lab<br>PSY 316. Cognitive Neuroscience with Lab<br>PSY 403. Behavior Modification with Lab<br>PSY 433. Child Assessment with Lab

Area 4: Sociology
SOC 212. Sociology of the Family
SOC 213. Sociology of Gender
SOC 221. Social Inequalities
SOC 240. Criminology
SOC 262. Self and Society
SOC 306. Research Methods in Sociology
SOC 341. Variant Behavior

## II. SECONDARY EDUCATION

## CERTIFICATION PROGRAM

Washington College has fourteen Maryland Approved Secondary Certification Programs: biology, business education, chemistry, English, environmental science, mathematics, physics, social studies, and theatre (grades 7-12); and art, French, German, music, and Spanish (PreK-12). The number and specificity of courses required for certification in these subject areas vary, with social studies and English having more extensive state requirements.

The following education courses are required for students who wish to become certified as secondary teachers:
EDU 216, 217. Clinical Field Experience (each 1 credit)
EDU 251. Principles of Education
EDU 252. Educational Psychology
EDU 307. Literacy in the Content Field
EDU 330. Diversity and Inclusion
EDU 401. Principles of Teaching: Secondary
EDU 403. Special Methods in the Teaching Area*
EDU 404. Secondary Teaching Internship (2 credits)
EDU 405. Secondary Education Internship (double credit)

EDU 401, 403, and 405 make up the "Education Block" taken in the fall semester of the senior year or the fall semester after graduation.
*Students in EDU 403 choose the section that is appropriate for their area of certification: art, biology, business education, chemistry, English, environmental science, French, German, mathematics, music, physics, social studies, Spanish, or theater.

EDU 307 meets Maryland Literacy I and II Secondary Requirements (together with 401 \& 404).

Students wishing to be certified in English must take EDU 315. Traditional and Modern Grammar (offered Spring odd years only) and EDU 354 / ENG 342. Children's \& Young Adult Literature.

Students majoring in economics, political science, psychology, sociology, international studies, and American studies may apply for certification in social studies and do their student teaching in social studies. They must plan their programs carefully in order to fulfill all requirements. Social studies certification includes the following core courses: ECN 111. Introduction to Macroeconomics, POL 102. American Government and Politics, EDU 311. Human Geography (offered Spring even years only), and one 200-level or higher course in each of the following:

- Pre-1869 U.S. History
- Post-1860 U.S. History
- Early European History
- Modern European History
- African American History

Students who major in environmental science may apply for certification in biology, chemistry or environmental science. Students are encouraged to work with department and major advisors, as they must plan their programs carefully in order to fulfill all course requirements.

## SECONDARY EDUCATION STUDIES MINOR

The Secondary Education Studies Minor requires a minimum of seven courses, five required foundation courses and two additional courses.

## Required Foundation Courses

The Clinical Field Experience and at least two of the four other foundation courses must be taken at Washington College. (Exceptions can be made at the discretion of the Department Chair and Coordinator of Secondary Education).

EDU 216. Clinical Field Experience (one credit)
EDU 251. Principles of Education
EDU 252. Educational Psychology
EDU 307. Literacy in the Content Field
EDU 330. Diversity and Inclusion

## Additional Courses

EDU 303. Comparative Education
EDU 305. Qualitative Inquiry in Education
EDU 311. Human Geography (offered Spring even years only)
EDU 315. Traditional and Modern Grammar (offered Spring odd years only)
EDU 318. Cultural \& Linguistic Diversity in Education
EDU 354./ ENG 342. Children's and Young Adult Literature
PSY 202. Lifespan Developmental Psychology
ANT 300. Language and Culture
SOC 221. Social Inequalities
EDU 401. Principles of Teaching (by application only)
EDU 403. Special Methods in Teaching (by application only)
EDU 406. Seminar in Peer Tutoring (by application only)
EDU Special Topics courses
An approved research design course
Related courses approved by Department Chair and Coordinator of Secondary Education

Students planning on pursuing teacher certification should note that this minor on its own is not
sufficient for certification. Students who wish to teach are encouraged to consider applying for the Secondary Teacher Certification Program.

Human Development majors are not eligible for a minor in Secondary Education Studies.

## Course Descriptions

## 211-219. Clinical Field Experiences

Field work consists of off-campus supervised experiences. For teacher candidates, four separate one-credit experiences will take place in Professional Development Schools and include experiences with special needs students. Field work opportunities for Human Development majors may also include international teaching experiences or alternative experiences studying related school personnel.

## 211, 212, 213, 214. Clinical Field Experiences - Elementary

This four-part course consists of off-campus supervised field experiences, including experience with special needs students. For teacher candidates, these will take place in a Professional Development School. (1 credit each)

## 215. Clinical Field Experience - Alternative

This course is designed for Human Development majors and students in Education Certification programs who participate in the international teaching experience. Students are responsible for planning, implementing, and assessing lessons as well as participating in the school community. (2 credits)

## 216, 217. Clinical Field Experience - Secondary

This two-part course consists of off-campus supervised field experiences, including experiences with special needs students. For teacher candidates, these will take place in a Professional Development School. (1 credit each)

## 218, 219. Clinical Field Experience - Human Development

This two-part course consists of off-campus supervised field experiences. Field work opportunities may also include alternative experiences studying related educational personnel. (1 credit each)

## 251. Principles of Education

A general summary of the field of education. The historical, philosophical, and sociological foundations of education will be surveyed; contemporary education in the United States will be examined.

## 252. Educational Psychology

A general summary of theories of educational psychology. Aspects of evaluation, individual differences, and psychological adjustments that are relevant to education and applicable to classroom practices will be examined.

## 303. Comparative Education

A study of the educational systems of various nations. Social, political, and economic influences upon educational practice and theory will be considered.

## 305. Qualitative Inquiry in Education

This course offers an overview of qualitative research methods and an introduction to action research within the field of education. Course participants will be asked to develop their epistemological framing of a research project, cultivate an understanding of researcher positionality and ethics, and further their engagement in critical inquiry through a qualitative lens. The class will develop students' abilities to conduct participant observations and interviews; write a literature review; carry out qualitative data analyses; and write and present from a research study. Prerequisites: EDU 251 and 252, or permission of the instructor.

## 307. Literacy in the Content Area

Literacy in the Content Area is designed to prepare pre-service educators to develop in diverse students the literacy skills and concepts necessary for learning across content areas.
Discussions of best-practice research and theory are intended to provide future educators with the knowledge, skills, and dispositions to identify learners' literacy needs and teach to a variety of needs. This is an MSDE-approved literacy course. Prerequisites: Education 251 and 252 or permission of the instructor.

## 311. Human Geography

The course examines the relationships between the physical environment, population, and culture in the evolution of global regions.

## 315. Traditional and Modern Grammar

The course reviews traditional grammar and introduces generative/transformational grammar. It promotes confidence and competence in a student's ability to recognize and manipulate grammatical elements of English.

## 318. Cultural \& Linguistic Diversity in Education

This course is an examination of contemporary cultural and linguistic diversity within the United States educational environments. Special attention is given to cultural problems and issues that influence opportunities and performance in educational institutions. The basic premise of the course is that teachers play an important role in creating a positive classroom learning environment and bringing school success, especially for English language learners. Students will develop understandings of the impact of culture, cultural diversity, immigration, migration, colonialism, and power on language policy and on students currently learning English as a second language.

## 330. Diversity and Inclusion

Students will learn: a) to understand the nature and range of special needs among pupils in
today's public schools; b) to differentiate instruction to meet the special needs of students in our multicultural society; c) to interpret and implement an Individualized Educational Program; and d) to use a range of support services available to students and teachers. Prerequisites: EDU 251 and 252.

## 351. Processes and Acquisition of Reading

An investigation of research explaining the relationship between language acquisition and reading development, the interactive nature of the reading process, and the interrelationship of reading and writing. Topics include assessing the stages of literacy development from emergent literacy through fluency in the language arts processes of speaking, listening, reading, and writing and applying corresponding instructional strategies. This is an MSDE-approved reading course. Prerequisites: EDU 251 and 252.

## 352. Reading Instruction and Assessment

Students will demonstrate mastery of instructional strategies used to make educational decisions in a balanced literacy program including developmentally appropriate word recognition and comprehension strategies. Students will evaluate, use, and interpret a variety of assessment techniques and processes, local, state, and national instruments. The co-requisite clinical field experience will require the student to plan, implement, and evaluate developmentally appropriate reading and language arts instruction and evaluation in a Professional Development School classroom. This is an MSDE-approved reading course. Prerequisites: EDU 351 and passing score of Praxis Core and Praxis 5001, or permission of the instructor.

## 354. Children's \& Young Adult Literature

This course involves the reading and study of literary texts by notable authors, with children and young adults as the major audience. We will explore literary elements, evaluation criteria, fiction, non-fiction, poetry, literature response in print media and the arts, classics, and contemporary works. This course provides opportunities to examine various forms of communication and interpretation, implementation of technology, and divergent thinking in order to assist those interested in children's and young adult literature to become more reflective and effective communicators. This is an MSDE-approved reading course.

## 401. 402. Principles of Teaching I \& II: Secondary

An exploration of the art and science of teaching and a study of curriculum. Course content, teaching methods, planning, instructional technology, as well as observation and performance of varied teaching techniques are combined to prepare prospective teachers for their student teaching. EDU 401 and 404 in combination comprise an MSDE-approved reading course. Corequisite: EDU 405.

## 403. Special Methods in the Teaching Field

A course concentrating upon the specific teaching field of the student. Examines objectives and the nature and place of the academic discipline in the secondary school, with emphasis placed
on methods and materials for teaching that discipline in light of the changing demands of 21st century education. Corequisite: EDU 405.

## 404. Secondary Teaching Internship

The first of a two-semester internship, EDU 404 requires the teacher candidate to begin to show proficiency in a Professional Development School classroom. Teacher candidates also participate in evening seminars that supplement their PDS classroom experiences. Two credits. Prerequisites: EDU 251 and 252 or permission of the instructor.

## 405. Secondary Teaching Internship

The second of a two-semester internship, EDU 405 represents the culmination of the professional development of the teacher candidate. The teacher candidate is required to demonstrate increasing responsibility for planning, assessing, and evaluating instructional effectiveness in a Professional Development Classroom. Teacher candidates will also participate in weekly seminars held on campus. 8 credits. Laboratory fee. Prerequisite: EDU 404.

## 406. Seminar in Peer Tutoring

This seminar explores current research and theory on the writing process and prepares students for potential work as Peer Consultants in the college Writing Center. Over the semester, students will develop rhetorical knowledge and critical strategies for working with other writers and their texts. To be considered for the seminar, students must submit faculty recommendations and a writing sample and complete an interview with the Director of the Writing Center. Students from all disciplines may apply.

## 411. Curriculum and Instruction: Mathematics and Natural Science

This course examines the mathematics and science concepts, curriculum, methods and materials used for effective instruction in mathematics and science in the elementary school. The focus will be on the development of strategies for active learning that will help children construct a meaningful understanding of mathematics and science. Prerequisites: EDU 351 and 352. Corequisite: EDU 413.

## 412. Curriculum and Instruction: Language Arts and Social Studies

Teachers of social studies should possess the knowledge, capabilities and dispositions to organize and provide instruction at the appropriate school level for the study of the ten social studies content themes as identified by the National Council for the Social Studies. This course provides the teacher candidate with some of the organizational tools and instructional strategies needed to conduct classroom instruction in social studies and in the language arts, primarily writing. Prerequisites: EDU 351 and 352. Corequisite: EDU 413.

## 413. Elementary Teaching Internship

The first of a two-semester internship, EDU 413 requires the teacher candidate to begin to show proficiency in a Professional Development School classroom. Teacher candidates will also
participate in weekly seminars held on campus. Prerequisites: EDU 351 and 352.

## 414. Elementary Teaching Internship

The second of a two-semester internship, EDU 414 represents the culmination of the professional development of the teacher candidate. The teacher candidate is required to demonstrate increasing responsibility for assessing, planning, and evaluating instructional effectiveness in a Professional Development School classroom. Teacher candidates will also participate in weekly seminars held on campus. 12 credits. Laboratory fee. Prerequisites: EDU 413.

## 190, 290, 390. Internships

## 194, 294, 394, 494. Special Topics of Education

Advanced study in a selected area under departmental guidance.

## 195, 295, 395, 495. On-campus Research

## 196, 296, 396, 496. Off-campus Research

197, 297, 397, 497. Independent Study

## EDU SCE. Senior Capstone Experience

The Senior Capstone Experience for Human Development majors seeking teacher certification will include the preparation and public presentation of a professional teaching portfolio, including an independent action research project. Human Development majors selecting the non-certification route will complete and present an interdisciplinary, independent research study based on field work, which will generally be in the form of a thesis. Prerequisite: EDU 305.

## Engineering

## A Dual Degree Program

Austin A. Lobo, Program Advisor

Washington College is an affiliate of Columbia University's Combined Plan Program. This affiliation makes it possible for qualified undergraduate students to earn baccalaureate degrees from both Washington College and the Fu Foundation School of Engineering at Columbia University in as little as five years. A significant benefit of the program at Washington College is the opportunity for students with an interest in engineering to complete their pre-engineering course requirements in a liberal arts environment at a small college.

Students who complete the pre-engineering core course sequence required by Columbia, earn the grade of $B$ or above on the first attempt in each of those courses, have a minimum grade point average of 3.3 across all science and mathematics prerequisite courses, and have a minimum overall grade point average of 3.3 , receive priority in admission review at Columbia University. Students who complete the core courses but do not meet the minimum grade point requirements are still eligible to apply to Columbia.

A student in the Columbia Combined Plan Program will typically attend Washington College for three academic years and the Fu Foundation School of Engineering and Applied Science at Columbia University for two years. Students earn a B.S. or B.A. degree in their major at Washington College and a B.S. degree in one of the engineering disciplines from Columbia University. The program is sometimes referred to as a dual degree program, since the successful graduate of the program receives two undergraduate degrees from two institutions. Graduation from Washington College is deferred until the student completes the program at Columbia University. The decision to apply to Columbia is typically made in the third year, although application in the fourth year is also permissible.

Students who complete the Combined Plan Program's prerequisite coursework are wellprepared to apply competitively to graduate engineering programs at major universities including Columbia University. This is an increasingly popular option for Washington College students pursuing careers in engineering. Students pursuing this alternative path graduate from Washington College with a B.S. or B.A. degree in their discipline, and join a university where they may earn an M.S., or an M.S. and PhD in an engineering discipline.

Washington College faculty in physics, mathematics and computer science advise students in this program to ensure that they complete all of the Washington College courses required for admission to Columbia University in a timely manner.

Dual degree candidates from Washington College may major in any of the following areas at Columbia University:

## Applied Mathematics, or Applied Physics

Biomedical Engineering
Chemical Engineering
Civil Engineering
Computer Engineering
Computer Science
Earth and Environmental Engineering
Electrical Engineering
Engineering Mechanics
Materials Science and Engineering
Mechanical Engineering

Requirements For Dual Degree Students While Attending Washington College:

- Completion of the College General Education and Writing requirements
- Completion of the College Distribution Requirements
- Completion of the following foundational courses required for all engineering majors:

CHE 120. Chemical Principles of Organic Molecules
ECN 112. Principles of Microeconomics
FYS 101. First Year Writing Seminar
MAT 201. Differential Calculus
MAT 202. Integral Calculus
MAT 203. Multivariable Calculus
MAT 325. Vector Spaces
MAT 345. Differential Equations
PHY 111, 112. General Physics I, II
PHY 252. Scientific Modeling and Data Analysis or CSI 201 Computer Science I

- Additional coursework required for the Washington College major
- Additional prerequisite coursework required for the intended Engineering major

Students are encouraged to select these courses in consultation with the designated Program Advisor at Washington College.

During the third year at Washington College students will formally apply for transfer admission to the Fu Foundation School of Engineering and Applied Science. A letter of recommendation from the Dual Degree Engineering Program Advisor at Washington College will be necessary to assist qualified students applying for transfer admission.

## English

# Division of Humanities and Fine Arts 

Sean Meehan, Chair<br>Courtney Rydel, Associate Chair<br>Sufiya Abdur-Rahman<br>Kimberly Andrews<br>Katherine Charles<br>Richard DeProspo<br>Richard Gillin<br>James Allen Hall<br>Roy Kesey<br>Alisha Knight<br>Robert Mooney<br>Elizabeth O'Connor

From classes in literature and creative writing to the welcoming environment of the Rose O'Neill Literary House, writers and students of literature alike will find Washington College home to a vibrant literary community. Each year, thanks to the endowment of the Sophie Kerr Fund, the College brings to campus a succession of distinguished writers, editors, and literary scholars. Billy Collins, Junot Díaz, Nick Flynn, Jonathan Franzen, Neil Gaiman, Lauren Groff, Ted Kooser, Li-Young Lee, Colum McCann, Azar Nafisi, Maggie Nelson, Joyce Carol Oates, Claudia Rankine, Jane Smiley, Natasha Trethewey, Colson Whitehead, and Jacqueline Woodson and are just some of the writers and literary scholars who have come to campus in the last decade to teach, lecture, and conduct writing workshops.

The Sophie Kerr Fund also supports the justly famous Sophie Kerr Prize (at \$63,912 in 2019, the largest undergraduate literary prize in the country), as well as various student publications that spring from the imaginations of students who find a welcoming and creative environment in the Rose O'Neill Literary House.

To read, to think, to write, to communicate: these habits of interpretation and expression are fundamental to a liberal arts education, to the mission of Washington College, and to the study of English. The mission of the English Department is to develop students who can read the variety of literature in English broadly, think through ideas critically, analyze texts closely, gather and communicate information effectively, and write clearly, creatively, and articulately.

## The English Major

The major in English is the study of the arts of literature. Although the emphasis is on the critical analysis of great works, students are expected to attain a general knowledge of the historical development of English and American literature by the end of the senior year.

A student majoring in English must complete a total of twelve courses plus the SCE in the English Department in the following areas:

Intro-level:
Any three 200-Level Courses (or ENG 101 plus two 200-level courses), excluding ENG 205/206 Shakespeare I and II. (Note: ENG 101 will not count for students who took the course prior to fall 2016 in order to fulfill the first-year writing requirement.)

## 300/400-level:

Three courses in pre-1800 literature (ENG 205/206 Shakespeare I \& II will also count here) Three courses in post-1800 literature
Three electives (Beginning fall of 2019, all juniors will be required to take the Junior Seminar as one of the elective courses.)

Note: Students who both major in English and minor in Creative Writing or Journalism, Editing \& Publishing (JEP) may "double count" no more than two courses.

## Senior Capstone Experience (SCE)

The Senior Capstone Experience (SCE) requires students to demonstrate the ability to think critically and to engage in a project of active learning in their major field of studies. In the SCE, required of all graduating seniors, students integrate acquired knowledge and skills in a senior project demonstrating mastery of a body of knowledge and intellectual accomplishment that goes significantly beyond classroom learning. Upon successful completion of her/his SCE, a student will receive a grade and four academic credits. These four credits will count toward the total needed to graduate from the College.

The SCE in the English department allows students the opportunity to pursue a substantive research project while working closely with a faculty advisor. English majors will bring their research and interpretive abilities, their writing skills, and their understanding of the literary tradition to bear on a long-term, independent project in the form of an annotated bibliography and an essay that will serve as the culmination of their literary studies at Washington College. The SCE for English majors exemplifies each student's accumulated knowledge and mastery of literary analysis.

## The English minor for students who matriculate fall 2019 and after:

Gateway: 2 courses ( 8 credits) at the lower-level in English.

All courses in English at the 200 level will count for as lower-level courses for the minor (excepting ENG 205/206). 1 course at the 100 level, either English 101 or English 103, can count for the minor.

Upper-Level Courses: 4 courses ( 16 credits) at the 300/400 level in English
All courses in English literature at the 300/400 level will count as upper-level courses, as will ENG

205/206.

4 credits of internships or practicum taken in the English department can count.
1 upper-level Creative Writing workshop at the 300/400 level can count.

Minors may take the English junior seminar in the fall of their junior year, but are not required to do so.

Total Required Courses: 6 courses ( 24 credits).

## The English Minor for students who matriculated previous to fall 2019:

Any five courses at the 300/400-level, including those labeled as "special topics," are required for a minor in English. ENG 205/206 Shakespeare I \& II will also count for the minor.

## The Creative Writing Minor for students who matriculate fall 2018 and after:

The Creative Writing Minor can be achieved through the successful completion of six (6) courses and attendance of six (6) literary events:

Gateway: 2 courses ( 8 credits)

ENG 103: Introduction to Creative Writing (required) plus one (1) other course chosen from:
ENG 220: Introduction to Fiction
ENG 221: Introduction to Nonfiction
ENG 222: Introduction to Poetry
ENG 223: Introduction to Drama

Workshops: 3 courses ( 12 credits). Complete either Option A or Option B.
Option A: Three (3) upper-level workshops chosen from those indicated below, as well as additional "special topics" courses. (Recent "special topics" courses have included The Screenplay, Poetry and Book Arts, The Art of Biography, and Travel Writing.):

ENG 351/THE 351: Introduction to Playwriting
ENG 452: Creative Writing Workshop: Fiction
ENG 453: Creative Writing Workshop: Nonfiction
ENG 454: Creative Writing Workshop: Poetry
ENG 394/494: Special Topic Creative Writing Workshop
or

Option B: Two (2) upper-level workshops plus either one 4-credit course that focuses primarily on editing/publishing skills (including ENG 354 Literary Editing and Publishing), or 4 internship credits (one 4-credit internship, or two 2-credit internships).

Literature: 1 course ( 4 credits): One course in literature offered by the English Department at the 300/400 level

Events: Attendance at 6 literary events. Students are required to sign the official attendance form at the event in order to be credited with attendance.

NOTE: Students minoring and/or majoring in another English program (including the Creative Writing minor and the Journalism, Editing \& Publishing minor) may only double-count two courses (up to 8 credits) total.

The Creative Writing Minor for students who matriculated previous to fall 2018:
The minor in creative writing can be achieved through the successful completion of five courses- ENG 103 Introduction to Creative Writing and then any combination of four 300/400-level creative writing courses including those indicated below, as well as additional "special topics" courses. Recent "special topics" courses have included Poetry and Book Arts, The Art of Biography, and Travel Writing.

ENG/THE 351. Introduction to Playwriting
ENG 353. Contemporary American Literature: Living Writers
ENG 354. Literary Editing and Publishing
ENG/THE 451. Advanced Playwriting
ENG 452. Creative Writing Workshop: Fiction
ENG 453. Creative Writing Workshop: Poetry
ENG 454. Creative Writing Workshop: Nonfiction

Note: Students may count up to two courses (8 credits) toward multiple programs in the English department (i.e., toward the English major, Creative Writing minor, and/or Journalism, Editing \& Publishing minor).

## Distribution Credit in English

Students who wish to fulfill the Humanities Distribution Requirement with one Humanities course may do so by taking any course listed below. Students who choose to take two courses in English to fulfill the Humanities Distribution Requirement are not required to take a sequence; they may take any two of the following:
ENG 101. Literature and Composition
ENG 201. The Art of Rhetoric
ENG 205. Shakespeare I
ENG 206. Shakespeare II
ENG 207. History of English Literature I
ENG 208. History of English Literature II
ENG 209. Introduction to American Literature I
ENG 210. Introduction to American Literature II
ENG 211. Introduction to American Culture I

ENG 212. Introduction to American Culture II
ENG 213. Introduction to African American Literature
ENG 214. Introduction to African American Literature II
ENG 215. Bible as Literature
ENG 216. Classical Literature
ENG 220. Introduction to Fiction
ENG 221. Introduction to Nonfiction
ENG 222. Introduction to Poetry
ENG 223. Introduction to Drama
ENG 224. Introduction to Journalism

## Course Descriptions

## 101. Literature and Composition

This course develops the student's capacity for intelligent reading, critical analysis, and writing through the study of literature. There are frequent writing assignments, as well as individual conferences on the student's writing.

## 103. Introduction to Creative Writing

A workshop introducing new writers to several forms of creative writing, including poetry, fiction, and nonfiction. Students will use classic and contemporary literature as models for their own efforts. In the fall semester, this course is only open to first-year students. In the spring semester, beginning writers from all years may enroll in ENG 103.

## 201. The Art of Rhetoric

Students will study and develop the rhetorical knowledge readers and writers use to generate persuasive critical analysis and compelling expository prose in any discipline or field of inquiry. Topics chosen by the instructor (for example: the rhetoric of documentary, the rhetoric of science, the rhetoric of identity) explore the ways writers, artists, and thinkers use rhetoric to communicate in a range of circumstances and texts, both print and multimedia, literary and multidisciplinary. Guided by readings in classical elements of rhetorical study (the 5 canons of rhetoric, rhetorical tropes and figures) students will develop knowledge of writing process and effective style; attention will also be given to the oratorical delivery of composition in the form of speech and/or multimedia presentation. The guiding principle of the course is emulative: while students read and critique various models of rhetorical knowledge evident in the course texts, they will also apply that knowledge to the texts they generate as writers.

## 205. Shakespeare I

This course examines some of Shakespeare's best known earlier plays (those written before the death of Queen Elizabeth in 1603) both in the context of early modern English culture and as play scripts/performances. Using films and live productions (when available) it considers the plays as they have been and could be interpreted for performance.

## 206. Shakespeare II

This course examines some of Shakespeare's best known later plays (those written after the death of Queen Elizabeth in 1603) both in the context of early modern English culture and as play scripts/performances. Using films and live productions (when available) it considers the plays as they have been and could be interpreted for performance.

## 207, 208. Introduction to British Literature and Culture I and II

A survey of the development of English literature from Anglo-Saxon times to the present with attention to the historical background, the continuity of essential traditions, and the characteristic temper of successive periods. The second semester begins approximately with the Restoration in 1660.

## 209 (AMS 209). Introduction to American Literature and Culture I

Taught in the fall semester, the course is concerned with the establishment of American Literature as a school subject. Texts that have achieved the status of classics of American Literature, such as Hawthorne's The Scarlet Letter, Thoreau's Walden, and Mark Twain's The Adventures of Huckleberry Finn, will be read in the context of the history and politics of their achieving this status. Texts traditionally excluded from the canon of American literature, in particular early Hispano- and Franco-American texts, will be considered in the context of their relative marginality to the project of establishing American Literature as worthy of being taught and studied in the American academy. Other-than-written materials, such as modern cinematic representations of the period of exploration and colonization of North America, as well as British colonial portraits and history paintings, will be studied for how they reflect on claims for the cultural independence of early America. Other-than-American materials, such as late medieval and early Renaissance Flemish and Hispanic still lifes, as well as the works of nineteenth-century European romantic poets and prose writers, will be sampled for how they reflect on claims for the exceptional character of American culture.

## 210 (AMS 210). Introduction to American Literature II

Taught in the spring semester, the course is concerned with the establishment of American Studies as a curriculum in post-World War II American colleges and universities. Readings will include a variety of written texts, including those not traditionally considered literary, as well as a variety of other-than-written materials, including popular cultural ones, in accordance with the original commitment of American Studies to curricular innovation. Introductions to the modern phenomena of race, gender, sexual orientation, generation, and class in U.S. culture will be included. A comparatist perspective on the influence of American culture internationally and a review of the international American Studies movement in foreign universities will also be introduced.

## 213. Introduction to African American Literature and Culture I

This course is a survey of African American literature produced from the late 1700s to the Present. It is designed to introduce students to the key writers, texts, themes, conventions and tropes that have shaped the African American literary tradition. Authors studied may include

Frederick Douglass, Zora Neale Hurston, Ralph Ellison, Gwendolyn Brooks, Toni Morrison and Walter Mosley.

## 214. Introduction to African American Literature II

This course surveys African American authors from the Harlem Renaissance to the present. It is designed to expose students to the writers, texts, themes, and literary conventions that have shaped the African American literary canon since the Harlem Renaissance. Authors studied in this course include Zora Neale Hurston, Richard Wright, Ralph Ellison, Gwendolyn Brooks, James Baldwin, and Toni Morrison.

## 215. Bible as Literature

We will read and analyze the Bible as literature, covering as much of the Hebrew and Christian scriptures as a semester allows. Our focus will be in gaining familiarity with the major stories, characters, images, and diverse genres of biblical literature, with some attention to the historical and cultural context in which these texts were composed. This course will provide you with the background to appreciate later literary and artistic works that assume biblical knowledge, as well as understanding the Bible itself as a unique and influential literary work.

## 216. Classical Literature

This course will survey representative texts of ancient Greece and Rome, focusing on the genres of epic poetry, the dramatic play, lyric poetry, and the philosophical fragment. It will explore aspects of classical mythology, civilization, and history, and it will trace how ancient Greece and Rome maintain a dynamic presence in post-classical art, literature, and culture. Authors to be studied may include Homer, Aeschylus, Euripides, Sappho, Herakleitos, Catullus, Virgil, and Ovid.

## 220. Introduction to Fiction

This course will survey the rich tradition of prose fiction largely, but not exclusively, in English. Emphasis will be placed on the enduring features of this genre as it evolved throughout the centuries as well as to the innovations introduced by individual writers. The literary works selected for this course will draw upon a variety of fictional forms and styles. Class discussions will include, along with close readings of the works themselves, an appreciation of the historical and cultural contexts out of which they arose and to which they gave a fictional rewriting.

## 221. Introduction to Nonfiction

This course will offer students a selective overview of the "fourth genre" of nonfiction prose. Readings will be drawn from some of the principal subdivisions of this field, which includes autobiography and biography, documentary, the essay, literary journalism, memoir, and writing in new media.

## 222. Introduction to Poetry

This course will provide an introduction to the study of various styles and forms of poetry. By reading a wide range of poetic styles from a number of aesthetic schools, students will consider
the ways in which poetry has become a conversation across centuries, how the genre may act simultaneously as a personal and a political voice, and how it may be interpreted not only as intimate confession but also as "supreme fiction."

## 223. Introduction to Drama

This course will examine plays as literary texts, as play scripts, and as performances. It will investigate theatre/drama from a variety of styles and themes across several centuries (from ancient Greece to renaissance England to contemporary USA) to understand dramatic conventions and assumptions. The course will consider how writers from across the globe in various time periods consider, rework, and comment upon similar subjects and themes.

## 224. Introduction to Journalism

This course will cover the foundations of reporting, writing, fact checking, and editing. Students will write a range of news and feature stories, including an obituary, an event, and a profile. We will also discuss journalistic ethics and the way the field has been transformed by the Internet.

## 300. Medieval Literature

In this course, we will focus on medieval texts and writers that shaped expressions of authority in two key ways: through their exploration of political authority and their formulation of literary authorship. After familiarizing ourselves with key political theories of the Middle Ages, we will acquaint ourselves with some well-known medieval figures-King Arthur, Lancelot and Guinevere, and Robin Hood-to explore the theories of kingship, fealty, treachery, law, country and outlawry they came to embody. We will also read major representative writers from the period, including Geoffrey of Monmouth, Marie de France, Dante Alighieri, the Pearl Poet, Geoffrey Chaucer and Christine de Pizan. The course concludes with an in-depth look at a single popular genre, which will rotate among religious dramas, medieval romance, and debate poetry, depending on the year the course is offered.

## 301. Chaucer

Chaucer's fellow poets hailed him as "the father of English poetry" for his ability to transform diverse genres and sources into a living tradition of English poetry that continues to this day. This course will focus on The Canterbury Tales, Geoffrey Chaucer's most popular and beloved work, and its creation of fictional and real communities. We will become comfortable with Chaucer's poetry in the original Middle English, and acquaint ourselves with current scholarly debates and the historical and literary context of the Canterbury Tales, observing how he transforms genres as diverse as Latin epics and philosophy, Italian novelle, French love poetry and fabliaux.

## 302. Arthurian Literature

This class will examine the development of the Arthurian romance in the medieval literary tradition and its many genres, as well as gain as well as some insight into the longer trajectory of Arthuriana that continues in present day popular adaptations. The class is primarily structured around Sir Thomas Malory's "Le Morte D'Arthur," for this fifteenth-century text unifies
the stories about King Arthur, Guinevere, the knights of the Round Table, and their associates into an overarching narrative that has dominated retellings ever since. Alongside the Morte D'Arthur, we will read Malory's sources and analogues to see their contrasting perspectives on these characters. As we study how these authors and texts reinterpret each other, we will read literary criticism and engage in scholarly research to produce presentations and essays.

## 303. Women Writers to 1800

Early women's writing, much of it highly popular in its contemporary moment and compulsively readable today, has a history of being forgotten. In this class, we will explore texts authored by women in the Euroamerican tradition before 1800, venturing from the continent into the "New World." These gifted women lived lives as exciting as their texts: runaway bride Christina of Markyate, widowed traveller Margery Kempe, professional novelist and playwright Aphra Behn, and poet Phillis Wheatley, among others. The texts covered in this course represent only a small sampling of the female-authored works that have survived from this time, but our readings provide ample material for exploring how women and men have collaborated to create literature, the role of gender in authorial identity, and the contributions of women to the Western literary world.

## 310. The Renaissance

The literature and culture of the Tudor period focusing on the age of Elizabeth. Poetry, prose and drama including Kyd, Shakespeare, Marlowe, Sidney, Spencer, More, and Whitney.

## 311. The Seventeenth Century

A study of the literature and culture of the Jacobean period through the Restoration. Poetry, prose and drama including Shakespeare, Jonson, Webster, Middleton, Donne, Herbert, Marvell, Lanyer, Cavendish, Philips, and Milton.

## 312. Renaissance Drama

This course examines early modern English drama, exclusive of Shakespeare, from the 1580s through the 1630s in its unique cultural, historical, and theatrical context. It explores plays by prominent dramatists including Thomas Kyd, Christopher Marlowe, John Lyly, Thomas Dekker, Thomas Heywood, Ben Jonson, Thomas Middleton, William Rowley, John Webster and John Ford. Key issues will include the following: playing conditions (theatres and theatre companies), the relationship of the stage to the monarchy, the importance of the city (London), the relationship of the stage to dominant religious beliefs and practices, the impact of Puritanism and anti-theatricality, the effect of censorship and licensing, the role of gender and cross-dressing in theatrical representation and the staging of desire.

## 320. The Eighteenth Century

Aladdin. Ali Baba. Djinns and genis. Scheherazade and the sultan. These characters and their spellbinding narratives all originate in the Arabian Nights, a transcultural text whose embedded stories remain arguably unparalleled in their world-making and whose popular circulation has been world changing. This course will focus on readings from the long eighteenth century,
known as an "Age of Enlightenment" when philosophers and scientists emphasized reason, but also the period when Arabian Nights was translated into English and became a cultural phenomenon. Oriental tales often provide alternative ways of knowing that value magic, orality, and folk practices, and they will provide us with a lens for interrogating the hegemonic relation between the British Empire and its others. Harry Potter and its modern-day magic will serve as a coda.

## 321. Romanticism

The movement from the late eighteenth century to 1832 considered as a revolution in the aims and methods of poetry. Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.

## 322. The Victorian Age

Major poets, novelists, and essayists including Tennyson, Browning, Arnold, Rossetti, Carlyle, Newman, Mill, Pater, Bronte, and Gaskill will be studied in conjunction with the culture of the age of Victoria.

## 323. 19th-Century English Novel

Major writers such as Jane Austen, Emily Bronte, Charlotte Bronte, Charles Dickens, George Eliot, and Thomas Hardy will be studied. Attention will be given to the cultural and literary context of the novels.

## 330. The Rise of Modernism

This course will trace the rise of what we now call modernism beginning with the decadent movement at the end of the 19th century, its emergence during World War I, and its flourishing during the 1920s by reading a range of fiction, nonfiction, poetry, and drama by Henry James, Joseph Conrad, T.S. Eliot, H.D., James Joyce, Katherine Mansfield, Ezra Pound, Gertrude Stein, J.S. Synge, and Virginia Woolf among others.

## 331. Modernism and Its Discontents

A study of the fiction, nonfiction, poetry and drama from the 1920s to the late 1930s paying close attention to the after effects of the experimentation of high modernism and how it, coupled with the rise of fascism and World War II, led to the fracturing of the movement and a return to more traditional prose and poetic structures. Writers will include Djuna Barnes, Ernest Hemingway, James Joyce, Marianne Moore, Flann O'Brien, Jean Rhys, Virginia Woolf, and William Butler Yeats.

## 332. Modern and Contemporary British Literature

This course will cover a range of British and American writing from World War II and the retreat to realism in the 1950s through the postmodern turn and the current literary landscape. Writers will include W.H. Auden, Samuel Beckett, Elizabeth Bowen, Angela Carter, Caryl Churchill, Graham Greene, Edna O'Brien, Graham Swift and Zadie Smith.

## 333. James Joyce

This course will focus on the work of James Joyce, examining the forces-historical, sociopolitical, religious, artistic, and other-that helped shape his oeuvre. We will take stock of Joyce's enduring legacy-his status as an author whose writing practices have reshaped ways of understanding the scope and nature of fiction itself-- will explore, from multiple perspectives, the situation of Joyce's work within the landscapes of modernist writing. The bulk of the class will focus on a close reading of the 18 episodes of his 1922 masterpiece, Ulysses.

## 334. The Irish Short Story

The modern short story is part of an international tradition. The form is a relative newcomer to literature, and for various reasons that we will investigate, the Irish have taken to it with particular verve. Through lecture-discussions and response paper and essay assignments, the course teaches techniques for interpreting stories from the abundantly rich Irish imagination evident in its mythology and folklore to the modern agora of the written page. Writers include Maria Edgeworth, Elizabeth Bowen, Liam O'Flaherty, Frank O'Connor, Sean O'Faolain, Edna O'Brien, and William Trevor.

## 336. Postcolonial Literature: Resistance, Recovery, and Renewal

This course will investigate the impact of British colonialism, national independence movements, postcolonial cultural trends, and women's movements on the global production of literary texts in English. We will read a diverse grouping of writers including Mulk Raj Anand, Kiran Desai and Salman Rushdie from India, Jamaica Kinkaid, Una Marson, and Sam Selvon from the Caribbean, as well as the Kenyan Nugugi Thiong'o and the Zimbabwean Tsitsi Dangarembga among many others. Careful attention will be paid to ethnographic, geographic, and historical modes of understanding the multi-layered effects of colonialism and its aftereffects.

## 340. Women's Literature

Beginning with Jane Austen, Emily Dickinson, and George Eliot (Mary Ann Evans) in the nineteenth century and ending with Virginia Woolf, Adrienne Rich, and Zadie Smith in the 20th, this course will cover a range of fiction, non-fiction, poetry, and drama by women up to the present. The course will also introduce students to a range of feminist theory.

## 341. Native American Literature

This course will be a consideration of contemporary Native American prose and poetry. Most of the readings will focus on twentieth-century works and their sources in Native American and European American cultural and literary traditions. Students will consider how complicated the process of defining Native American literature can be; how works by native people relate to or depart from other ethnic American literatures; how indigenous speakers/writers respond to and
resist colonialism; and how Native American perspectives and narratives continue today. Emphasis will be placed on the use of Native American myths and images of the natural world in the texts.

## 342. Children's and Adolescent Literature

Various genres will be treated with regard to historical, social, cultural, and contemporary perspectives. Readings for the course will be drawn from the folk tale, fairy tale, poetry, myth, fiction, and picture books. The art and practice of storytelling will be treated.

## 343. American Short Story

Irving, Hawthorne, Poe, Twain, Crane, James, Hemingway, Porter, and Salinger are among the writers this course will consider. The study will be chronological and historical, placing emphasis upon the development of the genre.

## 344. The American Novel

This course is a survey of nineteenth- and twentieth-century novels written by Americans. Writers include Nathaniel Hawthorne, Herman Melville, Theodore Dreiser, Willa Cather, F. Scott Fitzgerald, Ernest Hemingway, J.D. Salinger, Toni Morrison, and Tom Wolfe.

## 345. African American Novel

This course examines the origin and development of the African American novel. We will begin with the earliest novels and conclude with an analysis of contemporary novels by African American writers. We will examine novels from multiple genres and give careful attention to the intersection of race, gender, class and environment in representative novels of the 19th, 20th and 21 st centuries.

## 346. The Postmodern American Novel

The main focus of this literature course will be the careful reading and examination of seven 'postmodern' novels from the 1950's to the 1980's. We will look at historical fiction, memoir, realism, post-modernism, post-post-modernism, science fiction, and satire. We will discuss contemporary issues in the context of the stories and novels we read, but this is not a course in cultural studies; we will come back to the individual, the character, and his or her place, experience, and reflections upon cultural and psychological idiosyncrasies in the general context of contemporary America.

## 347. American Environmental Writing

The study of writing from an environmental perspective is both an emerging field in literary criticism and a rich tradition in American literary history. What does it mean to be green from a literary point of view? This course explores that question in looking at classic and contemporary authors of American environmental writing, from Henry David Thoreau to Annie Dillard to recent examples of eco-criticism. Though the primary focus will be on nonfiction prose, the traditional home of nature writing, the course will also explore environmental perspectives in poetry, fiction, and film as well as cross-disciplinary connections with the natural sciences and social sciences.

## 351. (THE 351) Introduction to Playwriting

Analysis and practical application of techniques and styles employed in writing for the stage.

## 353. Contemporary American Literature: Living Writers

This course focuses on the study of American poetry, fiction, and nonficion from 1945 to the present. (The course focuses on poetry one year, novels and short fiction the next, and nonfiction the next, rotating among them.) Emphasis includes an examination of the work of major American poets or fiction writers of the past half-century. The course is structured in a way similar to a traditional offering in literature with this difference: some of the writers whose work is studied in class will at some time during the semester come to Washington College to visit the class, discuss their work with course participants, and give a public reading

## 354. Literary Editing and Publishing

The Rose O'Neill Literary House is home to Cherry Tree, a professional literary journal featuring poets, fiction writers, and nonfiction writers of national reputation and staffed by Washington College students. In this course, students receive hands-on training in the process of editing and publishing a top-tier literary journal. They analyze literary markets even as they steward into print work from the nation's most prestigious emerging and established writers. This class includes extensive research and discussion of nationally recognized literary magazines and covers topics such as a publication's mission statement, its aesthetic vision, and its editorial practices. All students who wish to join the editorial staff and be included on the masthead of Cherry Tree must complete one semester of ENG 394: Literary Editing \& Publishing.
360. The Literature of the European Colonies of North America and of the Early U.S. Alvar Nuñez Cabeza De Vaca, Père Jogues, Rowlandson, Marrant, Wheatley, Bradstreet, Franklin, Jefferson, Brockden Brown, Poe.

## 361. Literary Romanticism in the U.S. I

Poe, Emerson, Thoreau. Stowe.

## 362. Literary Romanticism in the U.S. II

Hawthorne, Melville, Whitman, Dickinson.

## 363. The Gilded Age and American Realism

This course examines key prose fiction of the Gilded Age of American literary history and culture (roughly 1878 - 1901). Careful attention will be given to various treatments of "Big Business," industrialization, urbanization, regionalism and social inequality in the work of Mark Twain, Stephen Crane, Kate Chopin, Frances E.W. Harper, Charles Chesnutt, and others.

## 370. The Harlem Renaissance

This course examines the literature and intellectual thought of the Harlem Renaissance. It is designed to move beyond a cursory treatment of the movement and offer students the
opportunity to study key figures and texts at length. Authors studied in this course include Alain Locke, W. E. B. DuBois, Zora Neale Hurston, Wallace Thurman, Nella Larsen and Langston Hughes.

## 371. Faulkner and Literary Modernism in the United States

The course will concentrate on the novels of Faulkner as exemplifying modernism.

## 372. American Poetry Since 1945

A survey of the major American poets who have written and published their work in the post-World War II era. Lowell, Wilbur, Stafford, Brooks, and Hecht are examples.

## 373. American Fiction Since 1945

A survey of major American fiction writers who have written and published their work in the post-World War II era. Salinger, Mailer, Updike, Cheever, and O'Connor are examples.

## 374. Main Divisions in American Culture: Race, Gender, Sexual Orientation, Generation, Class

Ever since the Harvard-educated Midwestern American Studies founder V.L. Parrington identified the Main Currents in American Thought, the tendency of most influential scholars has been synoptically to emphasize the commonalities that unite "We, the people," since even before the founding of the U.S. Conflictual approaches to American culture have been pursued mainly from the margins-by African-American, Latina/o, feminist, queer, and Marxian critics. Playing on the title of Parrington's book, this course will pay attention to what divides us, still, approaching a century after Main Currents first appeared back in 1927.

## 375. Body Language: Representation and Transgression from Theodore Dreiser and Claire Chopin through Nicholson Baker and Brett Easton Ellis

A study of how bodies have been transformed from soma into vox in modern and post-modern culture. Curriculum will be a catholic mixture of a variety of genres and media, including standard school texts, literary and feminist theory, popular music, still images and video, and journalism. Readings will include fiction that has been labeled transgressive, and in all but the very latest examples for a time banned in the U.S.; theory from De Beauvoir to Judith Butler; and various works associated with the pornography debate from Katherine MacKibbon and Andrea Dworkin through Madonna and Linda Williams.

## 376. Culture of the Old/Cultures of the Young

Whereas what once seemed controversial topics-race, ethnicity, gender, sexual orientation, borderlands -have become mainstream in college and university American Studies and English courses, one, arguably major category of cultural difference remains relatively understudied-at least in the humanities. The study of generation, like that of all of the topics listed above, is potentially subversive, and it may be neglected because of the fact that most college and university professors (admittedly with increasingly numerous exceptions) are members of the single, for some time now and for some time to come, dominant generation.

The Baby Boom runs the same risks as do white people in the U.S., white
Anglo-Saxon-Protestant people in the U.S., men everywhere, and heterosexuals everywhere when it acknowledges that the products of (sub)cultures other than its own are as worthy of becoming college and university curricula as its own traditional canon. The course will try to distinguish in a variety of ways the belated, frequently plaintive, cultures of the young from that of the Baby Boom.

## 377. 2PACalypse Now! The Cult of Heart of Darkness among White Male Anglophone Intellectuals

There's something about Heart of Darkness—neither the most readable nor the most teachable of books, even of Conrad's books. And there's something about Conrad, too, a native Pole for whom English was a third language, a third language that he evidently spoke so poorly that when conversing with his American literary friend Henry James they both reverted to what was for both of them a second language: French. The course will try to explore what it is that has attracted so many white male Anglophone intellectuals-and prompted the condemnation of one African writer, the mockery of one black rapper, and, perhaps, the rivalry of a prominent, brown, novelist-over the more than hundred years now since the original publication of Heart of Darkness in 1899 in England in Blackwood's Magazine. Class texts will include Conrad's novella, Coppola's Apocalypse Now, Tupac's 2PACalypse Now, Faulkner's Absalom, Absalom! (which contains a prominent allusion to Heart of Darkness), Chinua Achebe's essays, V.S. Naipaul's A Bend in the River, a sampling of the blizzard of journalistic quotations of the novel's title and of its most famous, four-word, speech, plus some theorizings of race and gender that might shed some light on why the book has managed to appeal so strongly to a relatively homogenous cohort of readers and adaptors.

## 410. Shakespeare Now: Shakespeare and Contemporary Criticism

This course focuses on the advanced study of plays initially covered in the 200-level Shakespeare course in conjunction with the study of contemporary literary theory. The semester begins with an introduction to literary theory and methodology. Then, using plays as case studies, we will examine each play in relation to historical, seminal, or controversial criticism. Reading will concentrate on important critical approaches to the study of Shakespeare (i.e., New Criticism, Reader Response Theory, Structuralism, Post-structuralism, Psychoanalytic Criticism, Marxism, Feminism, New Historicism/ Cultural Materialism, Queer Theory, Performance Criticism and Post-Colonialism).

## 411. Milton

This course focuses on Milton's poetry, especially his epic poem Paradise Lost, with some attention to his minor poems and prose. Emphasis includes study of the following: the formal elements of his poetry; the importance of his poetry in literary history; Milton's biography, especially his experience of blindness and revolutionary defeat; Milton's writing in relationship to his culture (regicide and revolution, the turmoil of the seventeenth-century Puritan experiment, the commonwealth government, and restoration of the monarchy.)

## 430. Joyce, Eliot, and Beckett

An intensive study of James Joyce's Dubliners, T.S. Eliot's major poems, and Samuel Beckett's major plays.

## 451 (THE 451). Advanced Playwriting

An advanced workshop in writing for the stage. Prerequisite: ENG 351 Playwriting I.

## 452. Creative Writing Workshop: Fiction

Prerequisite: Introduction to Creative Writing. (Students who completed Introduction to Creative Writing or Intermediate Creative Writing in previous years are also eligible to register.) Primarily intended for juniors and seniors.

## 453. Creative Writing Workshop: Poetry

Prerequisite: Introduction to Creative Writing. (Students who completed Introduction to Creative Writing or Intermediate Creative Writing in previous years are also eligible to register.) Primarily intended for juniors and seniors.

## 454. Creative Writing Workshop: Nonfiction

This course will use a workshop approach for students who are interested in developing their skills in a kind of writing which combines elements of journalism, such as the feature article, with elements of the literary, such as the personal essay. In addition, students will also develop their essay skills in the form of the personal narrative and travel writing. In essence this course treats the various forms of the essay with a special emphasis on the creative ways the genre can be interpreted and rewritten. Readings of representative essays will be included. Prerequisite: Introduction to Creative Writing. (Students who completed Introduction to Creative Writing or Intermediate Creative Writing in previous years are also eligible to register.) Primarily intended for juniors and seniors.

## 470. Toni Morrison

This course focuses on the works of Toni Morrison, the first African American and the eighth woman to receive the Nobel Prize in Literature. Students will study the important motifs, tropes and themes of Morrison's writings, including her notable critical essays and short fiction. Students will become well versed in Morrison's writings and develop an understanding of various contemporary critical approaches used to interpret her work.

## 190, 290, 390, 490. Internship

Internships in the English Department serve to give focus to a student's prospective employment in the world beyond Washington College, and they aim to integrate and develop the writing, thinking, and communicative skills acquired in the course of completing an English Major. The specific conditions related to each internship will be developed among the faculty advisor, the representative of the institution offering the internship, and the student. This course may be taken only once for academic credit.

## 393, 493. Journalism Practicum

The purpose of this practicum is to introduce students to journalism by writing for a newspaper or magazine. Students will receive instruction on effective news writing, along with other topics including AP Style, interviewing, bias in the media, libel and ethics. They will also receive one-on-one feedback about their articles from the instructor. This practicum is 2 credits, pass/fail only. Students may not earn more than 4 credits for ENG 391/491 and may not count more than four journalism practicum credits towards the major in English.

## 194, 294, 394, 494. Special Topics

The intensive study of a selected figure, movement, form, or theme.

## 195, 295, 395, 495. On-campus Research

196, 296, 396, 496. Off-campus Research

197, 297, 397, 497. Independent Study

## Courses offered in the Washington College Abroad Programs

## 385. Literature and Landscape

This course is attached to the Kiplin Hall Summer Program. Literature connected to specific landscapes in Yorkshire and the Lakes will be studied in conjunction with firsthand experience of those landscapes by foot.

## 386. Literature of London

London through the literature of Charles Dickens, Virginia Woolf, T.S. Eliot, George Orwell, and contemporary writers; developments in literary movements (Romanticism, Realism, Modernism). Offered in the London program only, both fall and spring semesters. Three credits.

## 387. Studies in the Drama

Special topics in author or authors, a type or types of drama, a period, or theme. Emphasis is on the development, function, and continuing development of the theater in London. Variable content: may be repeated for credit. Offered in the London program only, both fall and spring semesters. Three credits.

## 388. English in Africa: West African Literature

This course offers, through the study of selected texts, an introduction to the modern literatures in English of sub-Saharan Africa, the theorization of colonial and postcolonial discourse, the politics of language, the question of African identity, and the relationship between art and social praxis. offered at Rhodes University, South Africa.

## 389. English in Africa: East and Southern African Literature <br> Offered at Rhodes University, South Africa.

## Environmental Science and Studies

## Majors in Environmental Science (B.S.) and Environment Studies (B.A.) Minor in Earth and Planetary Science

Robin Van Meter, Chair<br>Karl Kehm, Director, Earth and Planetary Science Minor<br>John Seidel, Program Advisor, Chesapeake Regional Studies<br>Jillian Bible<br>Rebecca Fox<br>Brian Scott<br>Leslie Sherman

Washington College, located between the Chesapeake Bay and the Atlantic beaches, is in a unique location for the study of the environment. Washington College students can use the Chesapeake Bay region-its farms and waterways, its history and culture, its people and their environmental concerns-as a learning laboratory. The Chester River, a tributary of the Chesapeake Bay, is at Washington College's back door. The college has two research vessels, and state-of-the-art field equipment. In the Toll Science Center, an ICP-mass spectrometer is available for analysis of environmental samples. In addition, the college's Chester River Field Research station and Foreman's Branch Bird Observatory at the nearby River and Field Campus are additional locations for hands-on environmental study.

Two majors are available to students through the Department of Environmental Science and Studies. Students can pursue an environmental science major (B.S.) or an environmental studies major (B.A.) Both majors are grounded in an interdisciplinary course of study which prepares students to critically analyze and investigate solutions to regional and global environmental issues, whether it is the revival of a depleted fishery, the fate of toxics, land use management in the Chesapeake Bay watershed, world population concerns, loss of biodiversity, or climatic changes. The environmental science major focuses on an interdisciplinary scientific study of the environment, while the environmental studies major is broader in perspective and draws in numerous courses in the humanities and the social sciences, as well as the natural sciences.

For both majors, students are encouraged to participate in internships and summer research programs and complete a minor in an allied field of study. It is recommended that majors take a course that introduces them to the techniques and applications of Geographical Information Systems. The senior capstone experience (SCE) in environmental studies can be fulfilled by either doing a research paper or a laboratory investigation. With either selection, the Senior Capstone Experience should be interdisciplinary in nature. Advanced Placement credit will be given for ENV 101 provided a score of 5 is attained on the Environmental Science AP exam. However, it is strongly suggested that students in this category audit this course.

In addition to the two majors, the Department offers a minor in Earth and Planetary Science. The Earth and Planetary Science minor gives students a broad understanding of processes that formed and modify the Earth and other planets in the solar system. The curriculum introduces a wide range of topics, from surface phenomena such as weather and climate, to the Earth's internal composition and dynamics. Transcending the boundaries of traditional geological studies, the Earth and Planetary Science program focuses on the way large Earth systems such as the lithosphere, hydrosphere, and atmosphere interact and evolve. Further emphasis is placed on the fundamental physical and chemical laws that govern the cycling of matter and energy on the Earth. Together, these complementary approaches help to provide students with a comprehensive view of the planet's origin and evolution, as well as an enlightened appreciation for the forces at work in our natural environment.

## ENVIRONMENTAL SCIENCE MAJOR (B.S.) - Requirements

## Introductory course:

ENV 101. Introduction to Environmental Studies
ENV 117. Introduction to Environmental and Natural Resource Economics
Introductory science courses. Two of the following introductory sequences are required: BIO 111, 112. General Biology I, II
CHE 120, 220. Chemical Principles of Organic Molecules, Quantitative Chemical Analysis

## Math course:

MAT 109. Statistics, MAT 194. Stretch Calculus, or MAT 201. Differential Calculus

## Environmental science courses. All of the following are required (5 courses):

ENV 141. Atmosphere, Ocean, and Environment
ENV 294. Applied Ecology (pre-req ENV 101, BIO 111, and BIO 112)
CHE/ENV 210. Environmental Chemistry (pre-req CHE 120, CHE 220)
ENV 311. Field Methods in Environmental Science (pre-req ENV 101, ENV 141 and two of the following: BIO 112, CHE 120, PHY 112 and ENV 294 Applied Ecology or BIO 206)
ENV 312. Watershed Biogeochemistry (pre-req ENV 101, ENV 141, ENV 294 Applied Ecology or BIO 206, ENV/CHE 210)

## Three elective courses selected from the list below: <br> At least 2 must be ENV <br> At least 2 must have a science lab

ENV/BIO 221. The Bermuda Environment (summer course)
ENV 222. Summer Environmental Studies in Ecuador (env studies)
ENV 294. Environmental Communication (env studies)
ENV 302. Conservation and Wildlife Techniques
ENV 313. Wetlands Ecology

ENV 314. Energy and the Environment (env studies)
ENV 394. Sustainability and the Environment (env studies)
ENV 394. Climate Change
ENV 394. Marine Conservation
ENV 294, 394. Other Special Topics (with approval of the Chair, possibility of a lab, not including Applied Ecology)
CRS 246. Interdisciplinary Study of an Estuary: Integration and Action (if enrolled in the Chesapeake Semester)
BIO 309. Marine and Estuarine Biology
BIO 328. Behavioral Ecology
CHE 310. Greener and Sustainable Chemistry
CHE 340. Organic Mechanisms and Synthesis

## Junior and Senior Seminar (1-credit each)

ENV 392. Environmental Studies Junior Seminar
ENV 491. Environmental Studies Senior Seminar

## Note for students who double major or minor in Biology:

Students who double major in Environmental Science and Biology can count a maximum of 5 Biology courses (BIO 111, 112, and 3 more) towards their Environmental Science major. Courses cross-listed in BIO and ENV count towards this maximum. Only one Biology Category V class can be used. Students who minor in Biology can only count 4 Biology courses for the both the BIO minor and the Environmental Science major (BIO 111, 112, 206 and 1 more.) Also, double majors may fulfill the ENV 294 Applied Ecology requirement with BIO 206 Ecology.

Note for students who minor in Chesapeake Regional Studies (5 courses total):
Students who minor in Chesapeake Regional Studies can double count one course for this minor and the Environmental Science or Studies major.

Note for students who minor in Earth and Planetary Systems (6 courses total):
Students who minor in Earth and Planetary Systems can double count two courses from the core for this minor and the Environmental Science or Studies major.

## ENVIRONMENTAL STUDIES MAJOR (B.A.) - Requirements

## Introductory Course:

ENV 101. Introduction to Environmental Studies

One introductory-level majors sequence in the Natural Sciences chosen from below:
BIO 111, 112. General Biology I, II
CHE 120, 220. Chemical Principles of Organic Molecules, Quantitative Chemical Analysis

## Three additional science courses:

## Ecology: (1 course)

ENV 294. Applied Ecology (if taken BIO 111-112)
or BIO 100. Ecology (if do not plan to take BIO 111-112)
Environmental Chemistry: (1 course)
CHE/ENV 210. Environmental Chemistry (if taken CHE 120-220)
or CHE/ENV 110. Chemistry of the Environment (if do not plan to take CHE 120-220)
Earth Science: (1 course)
ENV 140. Exploring the Solid Earth
or ENV 141 Atmosphere, Ocean, and Environment

## Math course:

MAT 109. Statistics, MAT 194. Stretch Calculus, or MAT 201. Differential Calculus

## Social Science, Humanities, and Fine Arts Classes (5 courses):

Two core courses are required:
ENV 117. Introduction to Environmental and Natural Resource Economics
or ECN 317. Environmental Economics (if taken ECN 111, 112)
PHL 102. Contemporary Moral Issues
At least one additional Humanities or Fine Arts course, chosen from those listed below:
ART/ENV 241. Environment and Public Art
ART/CHE 294. Greener Art through Greener Chemistry
CRS 244. A Humanities Perspective on the Chesapeake (if enrolled in the Chesapeake
Semester)
ENG 321. Romanticism
ENG 347. American Environmental Writing
At least two additional Social Science courses, chosen from those listed below::
ANT/ENV 107. Introduction to Environmental Archaeology
ANT 280. Traditional Ecological Knowledge
CRS 242. The Social Science of an Estuary (if enrolled in the Chesapeake Semester)
ECN/ENV 318. Natural Resource Economics
SOC/ENV 370. Environmental Sociology

Two upper level ENV courses chosen from the following:
ENV/BIO 221. The Bermuda Environment (summer course)
ENV 222. Summer Environmental Studies in Ecuador
ENV 294. Environmental Communication
ENV 302. Conservation and Wildlife Techniques
ENV/BIO 313. Wetlands Ecology
ENV 314. Energy and the Environment
ENV 394: Sustainability
ENV 394: Climate Change
ENV 394. Marine Conservation

ENV 294, 394. Special Topics (with approval of the Chair, Applied Ecology not included)

## Junior and Senior Seminar (1-credit each)

ENV 392. Environmental Studies Junior Seminar
ENV 491. Environmental Studies Senior Seminar

Note for students interested in Physics: Students interested in pursuing a physics track within the environmental studies or environmental science degree program can substitute PHY 111 and/or PHY 112 for one or two courses in the major, after consultation with and written approval from the ENV department chair.

## EARTH AND PLANETARY SCIENCE MINOR

This minor can be combined with any major at Washington College. It comprises six courses, to be chosen as follows:

## Core - All of the following are required:

ENV 140. Exploring the Solid Earth
ENV 141. Atmosphere, Ocean and Environment
ENV/PHY 240. Earth and Planetary Systems Studies
MAT 201. Differential Calculus
ENV 109. Introduction to GIS

## And one course from the following:

CHE 120. Chemical Principles of Organic Molecules
CSI 201. Introduction to Computer Programming
ENV 394. Climate Change
PHY 111. General Physics I

## SENIOR CAPSTONE EXPERIENCE

Every environmental science and environmental studies major is required to complete a Senior Capstone Experience (SCE). Students will enroll in the four credit SCE course during their final semester, although students must begin work on their SCE during the previous semester. The SCE can take the form of a laboratory or field research project or a monograph. Selection of the nature of the SCE will be based upon discussion with Environmental Science and Studies faculty members, and also will require the approval of the Chair of the Environmental Science and Studies Department. The SCE will be graded Honors, Pass, or Fail. Grading will be based on joint evaluation of the SCE by Environmental Science and Studies faculty.

## RESEARCH AND INTERNSHIPS

Experiential learning is at the heart of the environmental science or studies major. Although not required for the major, internships and research opportunities help students directly apply the insight, theory, and research methodology they learn in class. The College sponsors ten-week summer research projects in the fields of biology, chemistry, environmental studies, psychology, and physics. Internships and research projects outside of the natural sciences are also encouraged. Students of environmental studies and science have completed internships with many organizations, such as the Chesapeake Bay Foundation in Annapolis, the National Oceanic and Atmospheric Administration, the Smithsonian Environmental Research Center, the Center for Environmental and Estuarine Studies in Cambridge and the Maryland Department of Natural Resources,

## SUMMER FIELD COURSES

The Department of Environmental Science and Studies regularly conducts summer courses abroad. Students are accompanied on these courses by Washington College faculty. Summer Study in Bermuda is based at the Bermuda Institute of Oceanographic Sciences in St. George. In field trips, lectures, and labs, students study the ecology and history of the island, exploring mangrove swamps, coral reefs and much more. Summer Study in Ecuador, jointly run with the Universidad de San Francisco in Quito, takes participants through a variety of ecosystems, from the Pacific coast and highlands to the rain forests of the Amazon, and to the Galapagos Islands. These trips allow students to relate their coursework to new parts of the world, to meet professionals and students from other countries, and to see a wide variety of ecosystems and related social systems.

## Course Descriptions

## 101. Introduction to Environmental Studies

This course is an introduction to the discipline of environmental studies. A multidisciplinary, international view of human responsibility toward the natural world will be emphasized, focusing on significant contemporary environmental issues. Topics to be covered include environmental literature (both historical and current), economic and ethical environmental concerns, scientific methods of assessment and analysis of environmental problems, and possible solutions to representative environmental problems. The laboratory/recitation section will be utilized for field trips, guest lectures, demonstrations, and discussions. This course is a prerequisite for all upper-level courses entitled environmental studies. The course should be completed by the end of the sophomore year if it is going to be counted toward the major.

## 107. Introduction to Environmental Archaeology

Exploration of the variety of past human societies and cultures through archaeology, with an emphasis upon the interplay between environment and culture. The course covers a wide time span, from the biological evolution of hominids and the origins of culture to the development of complex civilizations and the more recent historical past. (Also ANT 107)

## 109. Introduction to Geographic Information Systems

Geographic Information Systems (GIS) can be found throughout our modern society. Programs such as MapQuest and Google Earth have brought this technology into the lives of many citizens of our world. More advanced software systems such as ArcGIS are being used in academia, business, and government to manage large datasets of spatially-linked information and provide the users with powerful analytic tools. The course lectures will review the fundamental theories of GIS and will also focus on the various organizational and ethical issues that impact the implementation and sustainability of GIS in our society. The lab portion of the course will teach the student how to operate the ArcGIS Desktop software product; ArcGIS Pro. Introduction to GIS will be taught as a blended course, which means that online content will be used to supplement the course. The online content will not replace the traditional lecture and lab components of the course, but is instead meant to enhance the content, and allow for materials to be available outside of class time. Content will be reviewed prior to attending class, which will provide time for discussion, clarification, and problem solving during class time. All course materials along with lab assignments, quizzes, and exams will be managed in our innovative Canvas virtual learning environment. There will be little paper handed out or turned in during this class. (Also ANT 109)

## 110. Chemistry of the Environment

This introductory course focuses on the chemical dimensions of current environmental problems such as global warming, ozone depletion, water and soil contamination, and energy production. Fundamental principles of chemical bonding, reactions, and energy are studied as they arise in connection with each environmental issue. Interdisciplinary aspects are explored to further understand the multiple dimensions of the problems. Intended for students planning to major outside the sciences. Three hours of lecture and two hours of laboratory each week. (Also CHE 110)

## 117. Introduction to Environmental and Natural Resource Economics

Environmental and natural resource economics focuses on the economic sources of environmental problems and natural resource use in a market economy and the evaluation of the alternative policies for dealing with these problems. This analysis extends to the examination of regional issues (local air and water pollution, recycling programs, and fisheries) and global issues (climate change and waste disposal). The course is intended for students not planning to major in economics.

## 137. Cultures and Environments of the Chesapeake

An examination of prehistoric and historic societies in the Chesapeake Region. Archaeological, historical, and environmental evidence is used to understand cultural development and the relationships between people and their environment. Topics include the arrival of humans in the region, Native American groups, colonial settlement in the Tidewater, and the 19th Century.
(Also ANT 137)

## 140. Exploring the Solid Earth

This course investigates the composition, structure, and dynamics of the solid Earth. The course reviews prominent theories for the origin of matter, the accretion and differentiation of the planets, and the structure of the Earth's interior. The role of plate tectonics in driving the exchange of matter and energy between Earth systems is a central theme of the course, providing the theoretical context for understanding geological phenomena such as seismic activity, volcanism and mountain building. The course is designed to provide the necessary scientific and intellectual background for understanding a wide range of Earth phenomena, and to give students a greater appreciation for the origin and evolution of their planet. Includes three lecture-hours per week plus lab.

## 141. Atmosphere, Ocean and Environment

This course examines processes and features that characterize the Earth's surface. The course focuses on the major Earth systems of land (lithosphere), air (atmosphere), and water (hydrosphere) and explores how these systems evolve and interact through geologic time. Examples include studying global air circulation and its effect on weather, examining links between ocean currents and global climate, and exploring how stream processes help to shape landscape. The role of plate tectonics in driving the exchange of matter and energy between Earth systems is also a central theme. The course is designed to provide the necessary scientific and intellectual background for understanding a wide range of Earth phenomena, and to give students a greater appreciation for their natural environment. Includes three lecture hours per week plus lab. Prerequisite: ENV 140 or ENV 101

## 210. Environmental Chemistry

The cycling of natural chemical species and pollutants in the water, soil and air of our earth system is a major component of our complex ecosystem. In this environmental chemistry course, students will develop an understanding of the transport and reactions controlling natural chemical species in our environment, as well as the cycling of pollutants. Students will study current issues of water, soil and air pollution, and how society is working towards reducing the movement of pollutants through our environment. In the laboratory portion of the class, students will investigate the water quality of local water bodies, including the Chester River, as well as conduct hands-on experiments related to the environmental topics studied in class. Three hours of lecture and three hours of laboratory each. (Also CHE 210) Prerequisite. CHE 120, 220.

## 211. Intermediate Geographic Information Systems

This second course in geographic information systems builds upon the theories discussed in Introduction to Geographic Information Systems, and focuses on the more technical aspects of GIS. Laboratory activities teach the student to use more advanced functions of GIS software, and the fundamentals of advanced GIS analysis and display programs. The student will also learn to operate a precision GPS field data collector. Prerequisite: ENV/ANT 109.

## 221. The Bermuda Environment

This summer course will investigate the complex ecology of the Bermuda Islands, the impact
that human habitation has had on their natural history, and current environmental concerns and means of mitigating those concerns. Major areas of study will include (but not be limited to) coral reef ecology/symbioses, mangrove community ecology and environmental relevance, architectural and military influences during colonization, fisheries practices (past, present and future) and current concerns and problems, and ecotourism and associated environmental impacts. (Also BIO 221) Prerequisite: ENV 101, or BIO 111-112, or permission of the instructor.

## 222. Summer Environmental Studies in Ecuador

This three-week-long summer course, offered in conjunction with the Universidad San Francisco de Quito, will investigate many of the world's most distinctive species of plants, animals that inhabit the richly diverse ecosystems of Ecuador. Students will gain an understanding of Ecuador's social and economic issues and the challenges it faces as a developing country while attempting to conserve its natural resources. Topics investigated include conservation of the Amazon rainforest and oil exploration, ecotourism, biodiversity concerns, mangrove conservation and the fate of Galapagos tortoises and the Galapagos fisheries. Prerequisite: ENV 101 or permission of the instructor.

## 240. Earth and Planetary Systems

This course features a detailed examination of the unique interaction between the Earth's geosphere, biosphere, hydrosphere and atmosphere, and how these systems contrast with those of the other planets in the solar system. The course includes a lecture and an integrated lab component. The lecture discussion and reading emphasizes the history of Earth systems, from the birth of the solar system and differentiation of the Earth, to the emergence of biological life, chemical evolution of the modern atmosphere, and the changes to the Earth's climate, ocean and lithosphere throughout geologic history. The lab will introduce students to important tools in Earth Science research, including radiometric dating, chemical studies of natural materials, remote sensing and data base analysis. The course provides advanced students with the necessary scientific and intellectual background for pursuing further studies in Earth and planetary science, geography, and environmental studies. Includes three lecture hours per week plus lab. (Also PHY 240) Prerequisite: ENV 140 and 141, or permission of the instructor.

## 241. Environmental and Public Art

This course introduces students to the basic concepts of environmental and public art through team projects in the field and studio. Students concentrate on the development of one artwork created at Stepne Manor, a 77-acre farm owned by Washington College and adjacent to the College's waterfront campus. The curriculum centers on the production of a site specific work created by students working in two-person teams. Students regularly engage in class discussions about the projects being pursued by its participants, readings, screenings, and research papers directed toward the work of specific artists. Prerequisite: 1 course of Studio Art or permission of the instructor.

## 302. Conservation and Wildlife Techniques

Lecture will examine patterns in local and global biological diversity and current causes for
biodiversity loss. Conservation strategies from the genetic to ecosystem scale will be evaluated to inform students about tools scientists can use to prevent species loss and restore natural wildlife habitats and populations. Laboratory exercises will allow students to gain familiarity with hands-on techniques for monitoring wildlife populations and will include field trips that focus on local conservation efforts. Prerequisite: ENV 101, BIO 111-112.

## 311. Field Methods in Environmental Science

Students will learn to be environmental field researchers through two collaborative projects conducted throughout the semester. For these collaborative projects, student will begin with a literature review and then ask questions, form hypotheses, establish an experimental design, execute the design, analyze the data, and communicate the findings through writing. Other environmental research methods are demonstrated through lab activities including groundwater, river, and stream sampling. Prerequisite: ENV 101, ENV 141 and two of the following: BIO 112, CHE 112, PHY 112.

## 312. Watershed Biogeochemistry

Biogeochemistry is the study of the physical, chemical, biological, and geological processes and reactions that govern the composition of and changes to Earth. This class will examine the water, carbon, nitrogen, phosphorus, and sulfur cycles generally and more specifically related to the Chester River watershed. The laboratory component will involve biogeochemical field sampling and laboratory analysis techniques. Prerequisite: ENV 101, ENV 141, ENV 294 Applied Ecology or BIO 206, and CHE 210

## 313. Wetlands Ecology

This course provides an in-depth examination of the function and types of wetlands with an emphasis on ecosystem services, biodiversity and conservation. Lecture will include a broad overview of the role wetlands play in larger ecosystems as well as the hydrology, geology, chemistry, trophic interactions and species common to these unique aquatic systems. Laboratories will include a large field-based component where students will learn to identify wetlands and their associated flora and fauna. Prerequisite: BIO 111-112, and BIO 206 or ENV 294 Applied Ecology

## 314. Energy and the Environment

This course explores general topics of energy generation, distribution and use, as well as the many ways that the energy industry affects the environment. Topics include: fossil fuels, heat engines, renewable energy sources, global effects of energy use, politics and energy policy, nuclear energy, and energy conservation. Prerequisite: ENV 101 or permission of the instructor.

## 317. Environmental Economics

This course is a survey of the application of economic analysis to environmental problems. Analysis will focus on: policy options available to lawmakers and citizens, methods for assigning value to the environment, and air and water pollution and the laws meant to control these
problems. (Also ECN 317) Prerequisite: ECN 112, must not have taken ENV 117.

## 318. Natural Resource Economics

This course surveys the economic theory behind, and the management of, renewable and non-renewable resources including fisheries, minerals, timber, water, and biodiversity. Analysis of management options is at the local, regional, and national levels. Analysis includes trade-offs of policies and the effect of property rights regime on resource use. (Also ECN 318)
Prerequisite: ECN 112, must not have taken ENV 117.

## 335. Environmental Politics

This course explores public policy and the policy process in American politics, and specifically focuses on the development and enactment of environmental policies over the past several decades in the United States. Attention is given to how political actors have responded to environmental problems, what creates a favorable landscape for environmental policies to be implemented, and how effective such policies are at achieving their goals. (Also POL 335) Prerequisite: POL 102 or permission of the instructor.

## 370. Environmental Sociology

This class explores the human dimension of ecosystem science. Use of environmental sociology as a framework for understanding the dynamic relationship between humans and the environment, trends in environmental policy and public opinion, environmentalism as a social movement, human-induced environmental decline, and environmental justice. Students will explore how changes in ecosystems influence the achievability and sustainability of societal values such as security from natural disasters, health, good social relations, and freedom to pursue personal and cultural interests. (Also SOC 370) Prerequisite: SOC 101 and one additional sociology course or permission of the instructor.

## 195, 295, 395, 495. On-campus Research

The course is comprised of a ten-week summer project guided by a faculty member at Washington College. The student and the faculty mentor develop a research project, supported by a reading list and involving theoretical laboratory or field investigations supervised by the faculty mentor. Participants will produce a final report detailing the findings of their research.

## 190, 290, 390, 490. Internships

Students can receive credit for pursuing a full-time internship outside of Washington College. To receive academic credit, one must apply through the Washington College internship office and find a Washington College advisor and an on-site advisor. Participants will produce a final paper detailing the findings of their work. Internships must first be approved by the Chair of the Department.

## 194, 294, 394, 494. Special Topics

196, 296, 396, 496. Off-Campus Research

## 197, 297, 397, 497. Independent Study

Courses in this category are currently available in most disciplines. The course consists of an individualized research project chosen by the student in consultation with a faculty member. The student will, with the help of the faculty mentor, design a project to be implemented during the course of the semester. The student will conduct an appropriate literature search, carry out the research, and submit a written report by the end of the semester.

## 392, 491. Environmental Studies Seminar

A two semester weekly seminar that prepares students for either graduate education, career development, and writing a successful Senior Capstone Experience (SCE). Seminars are led by Environmental Studies faculty and invited guests. Students will present their SCE proposals and findings as part of the seminar. Required of all Environmental Studies majors.

## SCE. Senior Capstone Experience

Every senior is required to complete a Senior Capstone Experience (SCE). Students will enroll in the 4 credit SCE course during their final semester. The SCE can be in the form of either a monograph or a laboratory or field research experience.

## Ethnomusicology

## Interdisciplinary Minor

Jonathan McCollum, Director

Aaron Lampman
John Leupold
Julie Markin
Kenneth Schweitzer

Using music as an entry into a variety of cultures, social classes, and populations, the discipline of ethnomusicology has become an important field of study for students interested in music education, music performance, music history, performance studies (ritual studies, dramaturgy and ethno-choreology), cultural anthropology, linguistic anthropology, and other interdisciplinary fields. Broadly speaking, ethnomusicology can be defined as the study of music as a cultural phenomenon. Ethnomusicologists take a global, interdisciplinary approach to the study of music and seek to understand music as a social practice, viewing music as a human activity that is shaped by its cultural context. Ethnomusicologists often engage in ethnographic fieldwork, by participating in and observing the music being studied, and frequently gain facility (or expertise) in another music tradition as a performer or theorist. Ethnomusicologists also conduct historical research utilizing the methods of historiography, manuscript analysis, archaeomusicology, and archival/museum research. These skills reflect the diversity of learning expected from liberal arts students. Students who study ethnomusicology have a global outlook, are critical thinkers, and are better able to appreciate the cultural and aesthetic diversity of the world and communicate in ways that are ethically sensitive.

The minor in ethnomusicology is open to students in all subject areas, including both musicians and non-musicians. Though it represents an exciting opportunity for music majors, none of the 4 -credit classroom courses presume an ability to read music notation. The Music Department's 1-credit world music ensembles welcome students from a variety of backgrounds. While the Early Music Consort and the Steel Pan Ensemble cater to students with music-reading capabilities, the Afro-Cuban Ensemble relies entirely upon the oral/aural pedagogy, which is modeled on the traditional teaching style that typifies Afro-Cuban folk culture. The Japanese Music Ensemble, by contrast, utilizes a notational system unique to Japanese instruments, and is generally equally unfamiliar to both classically trained musicians and non-musicians. In this ensemble, students learn three different notation systems, depending on the instruments they choose to learn.

## REQUIREMENTS FOR THE MINOR (23 Credits)

## Core Requirements (4 credits)

Students must select one of the following courses:

## Required:

- MUS 406. Theory and Method in Ethnomusicology


## Elective Requirements (at least 2 must be a MUS course) (16 credits)

- MUS/ANT 104. Introduction to World Music and Ethnomusicology
- MUS 106. Rock, Pop and American Culture
- MUS 301. Music and Gender
- MUS/ANT 313. Music of Latin America
- MUS 314. Music of Asia
- MUS/PHL 327. Music, Ritual, and Early Christianity
- ANT 105. Introduction to Anthropology
- ANT 215. Sex, Gender and Culture
- ANT 305. Ethnographic Method
- ANT 420. Media and Power
- Appropriate Internships (credit bearing) (approved by the Chair of the Music Department)
- Other courses, such as study abroad or summer/winter session courses (approved by the Chair of the Music Department or the Director of the Ethnomusicology Minor, as appropriate)


## World Music Performance Requirement (3 credits)

- MUS 278. Steel Pan Ensemble
- MUS 279. Japanese Music Ensemble
- MUS 285. Early Music Consort
- MUS 289. Afro-Cuban Ensemble

In recognition of the close ties and shared skill sets between ethnomusicology and cultural anthropology, the Ethnomusicology Minor is being jointly sponsored by the Department of Music and the Department of Anthropology, whose chairs will cooperatively administer the Minor.To ensure that music students take this opportunity to expand their knowledge in a supplemental area, music majors who minor in ethnomusicology will have to observe the following guidelines: (1) they may only double count 2 courses between the MUS major and the Ethnomusicology minor and (2) at least two of the courses used to satisfy the minor must be offered by the Department of Anthropology. Students will not be permitted to minor in both music and ethnomusicology simultaneously. To ensure that anthropology students take this opportunity to expand their knowledge in a supplemental area, anthropology majors who minor in ethnomusicology will have to observe the following guidelines: (1) they may only double count 2 courses between the ANT major and the Ethnomusicology minor and (2) at least 2 of the electives must be have an MUS designation. Students will not be permitted to minor in both anthropology and ethnomusicology simultaneously.

MUSIC COURSE DESCRIPTIONS

## MUS/ANT 104. Introduction to World Music and Ethnomusicology

An introduction to music of the world, including popular, folk, religious and classical traditions. Explores the way ethnomusicologists organize and analyze knowledge about the world, while investigating the ways music acquires meaning in performances that are socially, historically, and culturally situated.

## MUS 106. Rock, Pop and American Culture

An examination of popular music in America from the 1830s through the modern day. With a particular emphasis being placed on the 1950s and 1960s, students will develop an understanding of the cultural, political, and economic forces of these eras and will examine how popular music history intersects with all aspects of American history and culture. This course also examines several important threads in popular music history, including the ever-present, but ever changing, role of race relations, the impact of evolving technologies, and the history of the music industry. In addition to reading the assigned textbook, students are also asked to watch/listen to important archival performances, televised interviews with notable musicians, radio interviews with scholars of popular culture, and other relevant primary sources.

## MUS 278. Japanese Music Ensemble

By the Edo period (1603-1868), three instruments had emerged from various directions to become popular among the Japanese people. The koto, a 13-string zither, the shamisen, a 3 -string banjo-like instrument, and the shakuhachi, a Zen Buddhist bamboo flute. In this new ensemble, students are introduced to these instruments, have the opportunity to research, write about, and learn how to perform on an instrument of the student's choice. Students also learn the unique notation systems of each instrument, as well as gain a deep understanding of Japanese traditional arts in relation to the social, ideological, and cultural development of Japanese traditional aesthetics.

## MUS 279. Steel Pan Ensemble

The Washington College Steel Band (Steel Revolution) offers students an opportunity to explore the Trinidadian steel band tradition, as well as classical and popular arrangements and transcriptions. Students learn to perform on steel band instruments and study the social, historical, and cultural context of the ensemble. Readings, recordings, and video viewings supplement in-class instruction. The ensemble will present public performances. Prerequisite: Permission of the instructor.

## MUS 285. Washington College Early Music Consort

The Early Music Consort is an instrumental ensemble that performs music from the Middle Ages, Renaissance, and Baroque eras on period instruments. Membership is open to qualified students.

## MUS 289. Washington College Afro-Cuban Ensemble

The ensemble focuses primarily on the Cuban drum and song traditions associated with rumba and Santeria. Musical literacy is not a requirement; instead, rhythms and melodies will be transmitted via the oral traditions that are prevalent in Cuba. Membership is open to all students.

## MUS 310. Music and Gender

An examination of the role of gender in music, including the effect of gender on music history, analysis, and performance. Topics will include the lives and musical accomplishments of selected musicians, and the impact of social and cultural conditions affecting those musicians.

## MUS/ANT 313. Music of Latin America

Students will be introduced to ethnomusicological theory and method, while focusing on the musical practices of selected musical areas from South and Central America and the Caribbean. Folk, ritual, popular, and art/classical traditions will be examined in the contexts of cultural issues such as belief systems, politics, aesthetics, and identity.

## MUS 314. Music of Asia

Using selected musical areas from Asia, this course introduces and reinforces the basic concepts of ethnomusicology and trains students to develop listening and musicological analytical skills. We will examine folk, ritual, popular, and art/classical traditions in the contexts of cultural issues, such as belief systems, politics, aesthetics, and identity.

## MUS/PHL 327. Music, Ritual and Early Christianity

Using music, ritual, and liturgical analyses, this course investigates the historical, social, political, and intellectual circumstances that led to the eventual success of Christianity as a major religion of the world. Examples are drawn from Eastern Orthodoxy and Catholicism.

## MUS 406. Theory and Method in Ethnomusicology

This course examines the formation of the discipline of ethnomusicology through a survey of its history, theory, and methodology. Students read and discuss the works of major scholars in the field and examine the interdisciplinary nature of ethnomusicology, particularly its relationship with historical musicology, anthropology, folklore, linguistics, and cultural studies. Research projects will compliment theoretical discussions and technical activities associated with the field such as fieldwork, ethnography, historical research, and transcription.

## ANTHROPOLOGY COURSE DESCRIPTIONS

## ANT 105. Introduction to Anthropology

This course will focus on anthropological perspectives of the human condition and provide students with an introduction to the fundamental concepts, methods, and theories of the discipline of cultural anthropology. Readings by professional anthropologists will present students with a variety of viewpoints and an awareness of some of the controversial issues in the field. This course is centered on four research projects that will provide honors students with the opportunity to learn some of the elementary skills of qualitative research, a ritual analysis, analysis of a workplace, analysis of a family, and an oral history of an immigrant. For each of these projects, students will interview informants, do participant observation, and interpret their data within a theoretical framework of cultural anthropology.

## ANT 215. Sex, Gender, and Culture

The study of the biological differences of sex in relationship to the cultural construction of gender. The importance of modes of production and ideology in forming gender concepts for all human societies. Cross-cultural issues of gender identity, roles, relationships, and equality or inequality. Prerequisite: Anthropology 105.

## ANT 305. Ethnographic Method

Introduction to cultural anthropological field methods and the writing of ethnographies. Students practice skills of observation, participation, reflection, mapping, selection of informants, ethnographic interviewing, analysis, proposal writing, and ethnographic writing. Each student researches a cultural scene in the Chesapeake region and writes an ethnography. Prerequisite: Anthropology 105.

## ANT 420. Media and Power

By investigating the idea that what we view and express regarding cultural identity and cultural difference is artificial, we can see that popular entertainment, global news broadcasts, monuments and museums, and the internet might be doing more than merely "capturing," "reporting," or "exhibiting." Understanding this, we can uncover something more about how representations are created, how they have been manipulated historically to oppress or devalue certain groups, and how they can be contested. Knowing that images are constructed and not real, we can turn our focus to how people can reclaim their identities and thus their own power through revising or even appropriating the representations that have been made of them. Prerequisite: Anthropology 105

# European Studies Minor Interdisciplinary Minor 

Nicole Grewling, Director

T. Clayton Black

Cristina Casado Presa
Pamela Pears

Europe's historical importance is undeniable: Many of the ideas and inventions that have shaped our world originate in Europe - from capitalism and parliamentary democracy to the printing press, Christianity, the nation state, the railroad, or industrialization. Studying Europe's diverse past therefore is essential to understanding the world we live in.

Europe continues to play a central role in the globalized world of the twenty-first century: The European Union is a key actor on the political and economic world stage and an important stakeholder in topics of global concern, such as worldwide migration, environmental stewardship, or global security. Understanding Europe in its cultural, political, economic, and ethnic diversity is thus critical to shaping the future and developing solutions for such global challenges, as well as developing an insight into different cultures in their own right.

European Studies at Washington College provides an excellent complement to multiple majors, offering an interdisciplinary focus on the study of Europe through fields such as economics, foreign languages, history, literature, and political science, as well as a semester (or winter/summer) of studying in Europe.

The options for studying abroad include WAC programs in England, Finland, France, Germany, Ireland, Italy, the Netherlands, Scotland, and Spain.

European Studies is an interdisciplinary minor of 24 credits.

Requirements:

- Completion of two of the following introductory courses, preferably taken during the first two years at WAC:
- ANT 105: Introduction to Anthropology
- ECN 111: Introduction to Macroeconomics
- HIS 203, 204, 205, or 206
- POL 104: Introduction to World Politics

Students may substitute other introductory level courses that pertain to Europe with approval from the minor director.

- Study of a European language (in fulfillment of the college-wide language requirement or beyond): French, German, Spanish (or another European language abroad).
- Study abroad for at least one semester (preferred) or in an approved short-term abroad program in Europe. The options for semester-long study include WAC programs in England, Finland, France, Germany, Ireland, Italy, the Netherlands, Scotland, and Spain.
- Completion of four upper (300 and 400)-level courses related to Europe, beyond the study of language. Two courses must be completed at Washington College (see recommended courses listed below) and two courses abroad. Alternatively, participation in non-Washington College programs or a Washington College short-term abroad program (such as a summer or winter break program) plus one additional course at Washington College may substitute for two courses abroad, with approval from the minor director.
- By the middle of the final semester at Washington College, provide evidence of completion of a research-based paper on a topic relating to Europe, to be approved by the minor director. Students are free to use a paper written for one of the courses taken for the minor or their SCE to fulfill this requirement.

Pre-Approved Courses for the Minor*:
*Please note that some of these courses might have prerequisites.

ART 311. Italian Renaissance Art
ART 315. Northern Renaissance Art
ART 316. European Art from the Baroque to Neoclassicism
ART 318. Nineteenth Century European Art
ENG 323. Nineteenth Century English Novel
ENG 332. Modern and Contemporary British Literature
ENG 333. James Joyce
ENG 334. The Irish Short Story
ENG 430. Joyce, Eliot, and Beckett
HIS 350. Empire and Papacy: Medieval Germany and Italy
HIS 351. Ancient Rome
HIS 352. Castles, Cloisters, Cathedrals, and Mosques
HIS 353. Medieval Europe
HIS 354. Renaissance and Reformation
HIS 355. Women in Medieval Europe
HIS 360. Modern Germany
HIS 391, 392. Russia and the Soviet Union
ILC 305. European Cinema

ILC 306. French Literature in Translation
ILC 307. German Literature in Translation
ILC/FRS 311. Contemporary France
ILC/GRS 313. Berlin: Symphony of a Great City
ILC/GRS 315. Minorities in Germany: Reading at the Margins
ILC/GRS 317. German Cinema
POL 344. Comparative Government: Western Europe

In addition, many courses that count toward the minor are taught in the French, German, and Spanish languages. Special Topics courses dealing with Europe and courses taken off-campus also may be counted with approval from the minor director.

# Finance Minor <br> Department of Business Management <br> <br> Division of Social Sciences 

 <br> <br> Division of Social Sciences}

Hui-Ju Tsai, Director

Students pursuing the Finance Minor learn how to make the financial decisions critical to the sustainability of corporations. The acquisition of foundational knowledge related to the financial analysis of firms as well as an understanding of risk and return allows students to pursue advanced finance concepts both from the internal view of the corporation informing the study of financial policies and the external evaluation and assessment of firms needed for making meaningful investment decisions. Throughout, students will examine business ethics as it particularly pertains to the field of finance.

This minor is designed to prepare students for employment or further study at the graduate level. While internships are not required for the minor, they are strongly encouraged. Please contact the Director of the Minor or the chair of the Department of Business Management for information regarding earning academic credit for internships.

## Four Core Courses

ECN 111. Introduction to Macroeconomics, or ECN 112. Introduction to Microeconomics BUS 109. Managerial Statistics, or ECN 215. Data Analysis, or equivalent course
BUS 112. Introduction to Financial Accounting
BUS 209. Financial Analysis

## Four Elective Courses (at least three electives must be BUS courses)

BUS 355. Corporate Finance
BUS 356. Multinational Financial Management
BUS 440. Investments
BUS 455. Financial Derivatives
ECN 314. Money and Banking
ECN 411. International Finance
Special topic elective courses are also offered from time to time.
With the prior permission of the director of the Finance Minor or the chair of the Department of Business Management, relevant special topic courses from other Washington College departments or taken at study-abroad partners may also be counted for the minor. See the
catalog entry for the Business Management major for more information regarding study-abroad partners offering business-related courses.

## STUDENT OPPORTUNITIES

## Brown Advisory Student-Managed Investment Fund Program

Students from any major can participate in the Brown Advisory Student-Managed Investment Fund Program and help manage an equity fund valued at hundreds of thousands of dollars. Under the mentorship of Richard Bookbinder P‘10, founder and manager of TerraVerde Capital Management and Bookbinder Capital Management, LLC, students learn to analyze and report on stocks, and then determine trades worth tens of thousands of dollars. The program includes career preparation, talks by visiting business leaders, and intensive work over the semester that will help prepare students for a career in the investment field. Networking events and special opportunities such as attendance at shareholder meetings allow students to acquire valuable real world knowledge and experience.

Students interested in participating in this program are required to submit applications for review by the Finance Minor Director and the Distinguished Executive-In-Residence for the program. More information is available on the Finance Minor webpage.

## Gender Studies

Interdisciplinary Minor

Cristina Casado Presa, Director

Erin Anderson
Jennifer Benson
Cristina Casado Presa
Melissa Deckman
Richard De Prospo
Richard Gillin
Alisha Knight
Matthew McCabe
Pamela Pears
Aileen Tsui
Christine Wade
Carol Wilson

The Gender Studies minor offers students the opportunity to concentrate on the ways gender is analyzed in a variety of fields in the liberal arts. In order to complete this interdisciplinary minor, students will take six courses. One course, either Sociology of Gender (GEN 213/SOC 213) or Sex, Gender, and Culture (GEN 215/ANT 215), is required. Five more courses may be taken as electives from regular or special topics offerings in a number of departments: Art; Theatre; English; Modern Languages; History; Philosophy and Religion; Political Science; Psychology; and Sociology and Anthropology. Other courses which are not cross-listed as Gender Studies may be applied to the Gender Studies minor after consultation with the instructor and the program director in order to set up specific Gender Studies requirements. Students planning to complete the Gender Studies minor should consult with the program director on their course selection. Students whose senior capstone experience focuses on the issue of gender may also apply that credit toward the minor. Courses regularly offered that apply toward the Gender Studies minor include:
GEN 194. Introduction to Women's Studies
GEN 212. Sociology of the Family
GEN 213. Sociology of Gender
GEN 215. Sex, Gender, and Culture
GEN 220. Human Sexuality
GEN 302. Renaissance: Age of Elizabeth
GEN 305. Romanticism
GEN 312. Contemporary Francophone World
GEN 317. Women's Literature
GEN 319. The African-American Novel
GEN 321. Women and Politics
GEN 343. History of American Women

GEN 348. Gender in Western Civilization to 1600
GEN 355. Women in Medieval Europe
GEN 374. Main Divisions In American Culture: Race, Gender, Sexual Preference, Generation, Class
GEN 375. Body Language: Representation and Transgression from Theodore Dreiser and Claire Chopin through Nicholson Baker and Brett Easton Ellis
GEN 376. Culture of the Old/Cultures of the Young
GEN 377. 2PACalypse Now! The Cult of Heart of Darkness among White Male Anglophone Intellectuals
GEN 399. Gender Studies Seminar
GEN 425. Women Artists and Feminist Art History (Honors)

## Course Descriptions

## 194: Introduction to Women's Studies

This course serves as an introduction to the cross-disciplinary field of Women's Studies. We will explore issues relevant to women from a variety of fields, including history, politics, law, media and communication, sexuality, literature, and economics. We will also study the concepts of gender and sex from psychological, anthropological, and sociological perspectives. The class will focus mainly on the lives of women in the United States, but will pay particular attention to diversity-ethnic, racial and class-within our nation.

## 212. Sociology of the Family

Study of the family as a social institution. Comparative family systems, history of the family, and theory and research dealing with courtship, marriage, and disorganization of the modem family. Prerequisite: Sociology 101

## 213. Sociology of Gender

Gender as a social construction. Sex and gender. Effects of gender on individuals' statuses and opportunity structures. Focus on contemporary American responses to sex and gender. Gender roles and definitions earlier in U.S. history and in other societies. Prerequisite: Sociology 101.

## 215. Sex, Gender, and Culture

The study of the biological differences of sex in relationship to the cultural construction of gender. The importance of modes of production and ideology in forming gender concepts for all human societies. Cross-cultural issues of gender identity, roles, relationships, and equality or inequality. Prerequisite: Anthropology 105 or permission of the instructor.

## 220. Human Sexuality

A biological approach to the study of human sexuality. This course emphasizes topics such as the anatomy and physiology of the human reproductive system, conception and contraception, STDs and infertility, and then continues on to discuss the influences that shape sexual attitudes as well as the values and behavior systems that influence human sexual behavior. An overview of attitudes towards sexuality across cultures is included.

## 302. Renaissance: Age of Elizabeth

The literature and culture of the Tudor period focusing on the age of Elizabeth. Poetry, prose, and drama including Kyd, Shakespeare, Marlowe, Sidney, Spencer, More, and Whitney.

## 305. Romanticism

The movement from the late eighteenth century to 1832 considered as a revolution in the aims and methods of poetry. Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.

## 312. The Contemporary Francophone World

Taught in English, this course provides an introductory historical and cultural study of the contemporary Francophone world. Designed as a survey of the non-European Francophone world, the course will offer for study both literary and cultural documents from the Caribbean, North Africa, Sub-Saharan Africa, and Canada. Initially students will be provided tools for cultural interpretation via critical texts, media analysis (including print and internet sources) and the analysis of Francophone films; they will then apply them to the cultural history of Francophone world. We will explore French colonization, the process of decolonization, and subsequent independence movements. We will examine social, political, and economic roles of both women and men, changing gender roles, and contemporary divisions of labor. Finally, we will reflect on the political, historical, and socio-cultural situations of post-colonial Francophone nations.

## 317. Women's Literature

A study of women writers with an emphasis on nineteenth- and twentieth-century works. Essays, fiction, poetry, and drama.

## 319. African American Novel

This course examines the origin and development of the African-American novel. We will begin with the earliest novels and conclude with an analysis of contemporary novels by African-American writers. We will examine novels from multiple genres and give careful attention to the intersection of race, gender, class, and environment in representative novels of the $19^{\text {th }}, 20^{\text {th }}$, and $21^{\text {st }}$ centuries. Prerequisite: Any combination of two 200-level English courses, or permission of the instructor.

## 321. Women and Politics

This course examines the role of women as voters, citizens, candidates, and leaders in American politics, grounded in theories of gender. Attention will also be given to the history of the women's movement and the current status of women's organizations. The course also focuses on how various public policies, including workplace issues, family issues, education issues and reproductive rights, affect women and their legal rights.

## 343. History of American Women

Examines the private lives and public roles of women throughout American history, from colonial
settlement to the present. Social attitudes and laws and policies affecting women will be studied, as well as women's daily lives, experiences, and accomplishments. Attention will be given to women of different races, classes, and ethnic backgrounds. Topics include women's right to vote; involvement in reform movements; family life; education; birth control and abortion; and economic activities. Prerequisite: One year of introductory history required.

## 348. Gender in Western Civilization to 1600

A survey of the differing social roles, legal status, and day-to-day lives of women and men in Mediterranean and European societies from the earliest Near Eastern civilizations through the Middle Ages, the Renaissance, and the Reformation. Prerequisite: One year of introductory history or permission of the instructor.

## 355. Women in Medieval Europe

A seminar exploring the lives of women and their role in society from the fifth through the fifteenth centuries. Topics include legal status, economic activity, marriage and family, and women in religion. Readings include both traditional and feminist-influenced secondary works, medieval works about and for women, and the writings of medieval women themselves. Discussion is a major component of the course. Prerequisite: One year of introductory history or permission of the instructor.

## 374. Main Divisions In American Culture: Race, Gender, Sexual Preference, Generation, Class

Ever since the Harvard-educated Midwestern American Studies founder V.L. Parrington identified the Main Currents in American Thought, the tendency of most influential scholars has been synoptically to emphasize the commonalities that unite "We, the people," since even before the founding of the U.S. conflictual approaches to American culture have been pursued mainly from the margins-by African-American, Latina/o, feminist, queer, and Marxian critics. Playing on the title of Parrington's book, this course will pay attention to what divides us, still, approaching a century after Main Currents first appeared back in 1927.

## 375. Body Language: Representation and Transgression from Theodore Dreiser and Claire Chopin through Nicholson Baker and Brett Easton Ellis

A study of how bodies have been transformed from soma into vox in modern and post-modern culture. Curriculum will be a catholic mixture of a variety of genres and media, including standard school texts, literary and feminist theory, popular music, still images and video, and journalism. Readings will include fiction that has been labeled transgressive, and in all but the very latest examples for a time banned in the U.S.; theory from De Beauvoir to Judith Butler; and various works associated with the pornography debate from Katherine MacKibbon and Andrea Dworkin through Madonna and Linda Williams.

## 376. Culture of the Old/Cultures of the Young

Whereas what once seemed controversial topics-race, ethnicity, gender, sexual preference, borderlands-have become mainstream in college and university American Studies and English
courses, one, arguably major category of cultural difference remains relatively understudied-at least in the humanities. The study of generation, like that of all of the topics listed above, is potentially subversive, and it may be neglected because of the fact that most college and university professors (admittedly with increasingly numerous exceptions) are members of the single, for some time now and for some time to come, dominant generation. The Baby Boom runs the same risks as do white people in the U.S., white Anglo-Saxon-Protestant people in the U.S., men everywhere, and heterosexuals everywhere when it acknowledges that the products of (sub)cultures other than its own are as worthy of becoming college and university curricula as its own traditional canon. The course will try to distinguish in a variety of ways the belated, frequently plaintive, cultures of the young from that of the Baby Boom.

## 377. 2PACalypse Now! the Cult of Heart of Darkness among White Male Anglophone Intellectuals

The course explores Conrad's The Heart of Darkness to understand what it is that has attracted so many white male Anglophone intellectuals--and prompted the condemnation of one African writer, the mockery of one black rapper, and, perhaps, the rivalry of a prominent, brown, novelist--over the more than hundred years now since its original publication in 1899 in England in Blackwood's Magazine. Class texts will include Conrad's novella, Coppola's Apocalypse Now, Tupac's TUPACalypse Now, Faulkner's Absalom, Absalom!, Chinua Achebe's essays, V.S. Naipul's A Bend in the River, and other sources, plus some theorizings of race and gender that shed light on the book's long-standing appeal to a relatively homogenous cohort of readers and adaptors.

## 399. Gender Studies Seminar

A special topics course that offers opportunities for courses on gender that are trans-disciplinary in nature or are co-taught. Examples are Gender and Multiculturalism, and Women in Sport and Society: 1850-present.

## 425. Women Artists and Feminist Art History (Honors)

In recent decades, growing scholarly attention has been brought to the previously neglected productions of female artists. This seminar will examine the variety of approaches that feminist art historians have taken in studying art made by women in the modern period. We will be concerned both with the historical analysis of the visual productions of particular female artists and with an exploration of how feminist theories, practices, and political commitments have affected, and can continue to change, the discursive and institutional construction of the history—or histories—of art and visual culture. Prerequisite: Art 200 or permission of instructor.

## 294, 394, 494. Special Topics in Gender Studies

Offered occasionally, these courses provide focused study of specialized topics in gender. Contents will vary according to the instructor. Examples include Philosophy, Feminism, and the Body; Human Rights and Social Justice; Post-1945 Revolutions in Art and Theory; and American Women Playwrights.

## History

Division of Social Sciences

Janet Sorrentino, Chair

T. Clayton Black

Adam Goodheart
Kenneth Miller
Richard Striner
Carol Wilson

Through stimulating teaching of the works of historians, and also non-historians, we foster in our students a sense of the development of past societies and a curiosity about why these developments occurred. We believe that understanding the past through a maturing historical consciousness and instruction in the proficient use of primary and secondary sources can improve students' understanding of their own time. Students at Washington College are trained as generalists, studying a variety of geographical areas and eras, and able to apply their skills of research and analytical thinking to whatever interests them.

The study of history is closely related to other disciplines that inform the student's understanding of the world. History gives a context to and a wider perspective on the approaches offered by the political scientist, the geographer, the economist, the sociologist, as well as the disciplines of art history, music, and literature. History is in many ways the broadest of the traditional disciplines. In other words, it has a great deal to contribute to the making of a cultured person. We endeavor to promote among our students an appreciation for outstanding cultural achievements, an appreciation which helps them to know who they are and who they might become.

Engaging in historical studies at Washington College is an excellent preparation for future careers. Our graduates have been successful in secondary school and college teaching, archival, curatorial, and museum work, law, journalism, and publishing. Many of our majors work in other areas traditionally attracting liberal arts graduates--business and government, for example.

## The Major

Twelve courses: Students pursuing the history major must successfully complete the following requirements: HIS 111, one U.S. History survey (201 or 202), one non-U.S. History survey (203, 204, 205, or 206), HIS 399 Historical Method (Junior Seminar) History Senior Capstone Experience, five additional department offerings at the 300 and 400 level, at least one coming from each of the following sub-categories, plus two elective 300 or 400 level history courses:

## 1. Pre-1860 United States

313: Seventeenth- and Eighteenth-Century America

315: The Early Republic
319: African-American History
342: Victorian America
343: History of American Women
414: Comparative Cultural Encounters

## 2. Post-1860 United States

319: African-American History
334: The American Civil War
335: Reconstruction and the Gilded Age
336: Progressivism and the Twenties
337: The New Deal and World War II
342: Victorian America
343: History of American Women
344: Hollywood Films in the Depression and World War II

## 3. Early Europe

350: Empire and Papacy: Medieval Germany and Italy
351: Ancient Rome
352: Castles, Cloisters, Cathedrals, and Mosques
353: Medieval Europe
354: Renaissance and Reformation
355: Women in Medieval Europe

## 4. Modern Europe

360: Modern Germany
391: Russia and the Soviet Union I
392: Russia and the Soviet Union II

## 5. Global

371: History of South Africa
381: History of Modern China
383: History of Modern Japan
357: Early Islamic Civilization
372: Colonial Latin America
473: Latin American Literature as History
Departmental special topics courses (HIS 394 or 494) offered in the above subject areas can be counted toward the requirements.

History majors have opportunities for internships with the George Washington's Mount Vernon, Kent County Historical Society, the Maryland Department of Archives and History, the Maryland General Assembly, the Office of the Governor of Maryland, the Library of Congress, the

National Portrait Gallery, and the Hansard Society for Parliamentary Government in London, and many others.

History majors are eligible to prepare for secondary school teaching certification either in history or social studies. To ensure proper scheduling of courses, interested students should consult with the chairs of the History and Education Departments as early in their college careers as possible.

Students who major in history may pursue a regional concentration. These concentrations are administered through the International Studies Program, but students are not required to major in International Studies. Current regions of study include African, Asian Studies, Latin American Studies, Near Eastern Studies, and Western European Studies. More information about the requirements for these concentrations can be found in the International Studies Program section in this catalog.

## Senior Capstone Experience

The Senior Capstone Experience in history consists of studies in historiographical techniques and preparation of a substantial senior thesis. During the spring term of the junior year, history majors participate in a required course entitled Historical Method (HIS 399). In connection with this course, each student is assigned a thesis advisor under whose supervision a prospectus, preliminary bibliography and other elements are prepared. Students who wish to be considered for departmental honors, or who are preparing for graduate study in history or related fields, should request permission to attempt an honors thesis. Students who wish to be candidates for honors on the senior thesis must have and maintain a 3.5 grade point average by the start of Spring semester junior year.

## The Minor

The history minor consists of at least six courses: HIS 111, one U.S. History survey (201 or 202), one non-U.S. History survey (203, 204, 205, or 206), and three more courses at the 300 or 400 level. At least one of the upper-level courses must be in U.S. history; at least one must be in non-U.S. history. Introductory courses must be taken at the college level; AP credits will not count toward the history minor.

## Distribution Credit

The distribution requirement in Social Science may be satisfied by: HIS 111 paired with any other history course, or any two 200-level history courses

To satisfy the requirement of an unpaired third course for social science distribution, students may take HIS 111 or any 200-level history course

## Course Descriptions

## 111. Introduction to History

This course introduces students to the discipline of history by exploring compelling themes or
problems in history. Through study of different topics, each section instructor will teach students the core methodological skills of historical analysis and interpretation. Students are expected to appreciate differing interpretations of the same historical questions. Students will study appropriate primary and secondary sources in the field, and learn the basic analytical and writing skills historians use to interpret the past. Various topics offered each semester, such as "The Underground Railroad," "The Invention of Childhood," "American Home Front," "Russian Revolution," Harry Potter's World: Renaissance Science, Magic, and Medicine," "Small Worlds of Early America," and "America in the 1960s."

## 201. History of the United States to 1865

A survey of United States history through the Civil War, this course begins with the history of the first residents of North America, Native Americans. Includes the founding and development of the various colonies that eventually joined to form a new nation, and the early history of that nation--political, economic, and social.

## 202. History of the United States Since 1865

This survey of United States history starts with the Reconstruction era and traces the growth of the nation to the present. We will study how the nation was restored after the Civil War, how the United States industrialized, urbanized, and became a world power in the twentieth century.
Note: HIS 201 is not a prerequisite for HIS 202.

## 203. Modern World History I

A survey of world history from the fourteenth century to the end of the eighteenth. This course treats the increasing integration of world civilizations through commercial and cultural interactions and traces the emergence of Europe as a center of global economic and military power. Prominent themes include the Mongol empire, Black Death, Age of Exploration, Reformation, Gunpowder empires, Enlightenment, and French revolution.

## 204. Modern World History II

A survey of world history in the nineteenth and twentieth centuries. The course examines the world in the age of global integration and includes such themes as the rise of republicanism and nationalism, the industrial revolution, imperialism, communism and fascism, the world wars, the Cold War, and globalization, among others. Note: HIS 203 is not a prerequisite for HIS 204.

## 205. Early Origins of Western Civilization I

Focuses on ancient societies, from Sumer through imperial Rome, whose cultures contributed to the development of Western civilization. The course stresses the multiplicity of cultures that melded and conflicted in the ancient Near Eastern and Mediterranean worlds, and looks to the origins of cultural symbols that appear and reappear in the emerging Western world.

## 206. Early Origins of Western Civilization II

Studies European society from the fall of the western Roman empire through Galileo and Newton. The course is a continuation of History 205; it builds on the assimilation of ancient
culture into Roman, Germanic, Greek, Christian, Jewish, and Islamic societies. It traces the development of Europe through the Middle Ages, Renaissance, Reformation, and Scientific Revolution. Note: HIS 205 is not a prerequisite for HIS 206.

## 218. Historical Film Genres

In this course, a selection of film genres will be presented for comparative analysis, including four or five genres such as gangster films, "film noir" detective films, westerns, musicals, or films that depict and characterize professions such as journalism or jurisprudence. Films will be selected within each genre that offer different commentaries on recurrent social themes in American history. This course will also incorporate a significant amount of reading and research in primary-source documents relating to the historical periods and themes represented in the films. It will also include new secondary-source and interpretive texts. The course will thus extend the students repertoire of analytical skills in the field of history to more sophisticated intellectual challenges.

## 313. Seventeenth- and Eighteenth-Century America

The social, economic, and political structure of Colonial America; the background and development of the American Revolution; and the interaction of social and political life during the Confederation, Constitutional, and Federalist periods. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 315. The Early Republic

This course explores the history of the early American republic from the framing of the Constitution to the Civil War. The course investigates the clash between Hamiltonian and Jeffersonian visions, the development of party politics and a popular political culture, territorial expansion and the dispossession of Native Americans, the spread of King Cotton and slavery, the transportation and market revolutions, religious revival and social reform, and the sectional conflict between North and South. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 319. African-American History

Examines the experience of African Americans from African origins through two centuries of slavery to emancipation in 1865, through segregation, the civil rights movement, up to the present. This course explores the nature of racism and race relations as well as Black initiative. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 334. The American Civil War

This course encompasses the U.S. Civil War (1861-1865) in all pertinent areas. In addition to military history, the course reviews significant historical interpretations of the causes and effects of the Civil War; the dimensions of social, economic, political, and diplomatic history pertaining to the war; and the evolution of war aims relating to the central issues of slavery and race relations. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 335. Reconstruction and the Gilded Age

A study of the thirty-five years of American history that followed the Civil War, with particular emphasis given to problems of reconstruction, the achievements and costs of industrialization, the economic and social problems confronting workers and farmers, and the major intellectual and cultural cross-currents of American life during the late nineteenth century. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 336. Progressivism and the Twenties

A study of America's early-twentieth-century age of reform and the very different period that followed in the 1920s. Emphasis is placed on the politics and culture of reform at the local, state, and federal levels from 1900 through 1920; the presidencies of Theodore Roosevelt and Woodrow Wilson; the impact of World War I; and the cultural contradictions and ferment of the 1920s, culminating in the Wall Street crash of 1929. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 337. The New Deal and World War II

A study encompassing a period dominated by the presidential leadership of Franklin D. Roosevelt. Emphasis is placed on the crisis and challenge of the Great Depression, the interlude of Herbert Hoover's administration, the themes and occasional contradictions of the New Deal, the struggles for the redefinition of American society, and the challenge of totalitarian aggression in World War II. Prerequisite: Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 342. Victorian America

Examination of American social attitudes and behavior in both the public and private spheres during the nineteenth century. Topics include marriage and the family; childhood; the individual's role in society; entertainment; race and ethnicity; religion; migration; immigration; urbanization; and reform movements. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 343. History of American Women

Examines the private lives and public roles of women throughout American history, from colonial settlement to the present. Social attitudes and laws and policies affecting women are studied, as well as women's daily lives, experiences, and accomplishments. Attention is given to women of different races, classes, and ethnic backgrounds. Topics include women's right to vote; involvement in reform movements; family life; education; birth control and abortion; and economic activities.Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 344. Hollywood Films in the Depression and World War II

This course uses American films of the 1930s and early-to-mid 1940s combined with appropriate readings to provide a richer understanding of the social and cultural history of the
era encompassed in the regular upper-level course HIS 337 (New Deal and World War II). Films from a variety of genres-social protest/ topical exposés, melodramas, screwball comedies, musicals, historical romances, gangster films, and "film noir" detective films-will present a wide array of themes reflecting the moods and preoccupations of the era. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 350. Empire and Papacy: Medieval Germany and Italy

Germany and Italy emerged as modern nations only in the nineteenth century. Both experienced turbulent internal divisions for centuries prior to their respective national unifications. A common thread bound their political difficulties, that is, the tension between two supranational ideas: The Roman Empire and the Roman Papacy. This course will explore the origins and development of this conflict between the Holy Roman Emperors and the Papacy and its effect on the histories of medieval Germany and medieval Italy. Prerequisite: HIS 111 or two 200-level history taken at the college level courses required.

## 351. Ancient Rome

The social, cultural, and political history of ancient Rome and its dominions, from prehistory through the decline and fall of the Roman Empire in the fifth century C.E. Topics will include republican and imperial government, Rome's army and conquests, the Roman family, Roman religion, and the rise of Christianity. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 352. Castles, Cloisters, Cathedrals, and Mosques

This course traces the history of France and Spain from the $8^{\text {th }}$ to $16^{\text {th }}$ centuries from the perspective of their castles, monastic cloisters, cathedrals, and mosques. Topics include architectural structure and style; pre-modern French and Spanish history; history and regular routines of religious life; social and cultural aspects of buildings including their roles in military technology, guild organization, palatial residence, and church life. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 353. Medieval Europe

An exploration of the cultural and political development of medieval Europe in the period 500-1500. Topics covered include the fall of Rome, kingship, feudalism, the medieval church, art and architecture, literary culture, and the realities of everyday life. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 354. Renaissance and Reformation

A study of Europe in the period 1400-1648. Cultural developments in fifteenth-century Italy are the starting point; students then explore religious and political change, and social and economic trends throughout Europe. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 355. Women in Medieval Europe

A seminar exploring the lives of women and their role in society from the fifth through the fifteenth centuries. Topics include legal status, economic activity, marriage and family, and women in religion. Readings include both traditional and feminist-influenced secondary works, medieval works about and for women, and the writings of medieval women themselves. Discussion is a major component of the course. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 357. Early Islamic Civilization

Early Islamic civilization from its origins in Arabia to its expression in several imperial regimes in the sixteenth century (e.g. Ottoman, Mughal). We will examine the creation of a Muslim community, the development of a rich and dynamic civilization, the competing claims for political and religious authority, the forging of empires and their break-up, as well as contacts with the non-Muslim societies. Thus we will be studying a universal religion as it was expressed and incorporated into a variety of unique cultures that differed in ethnicity, language, geography and beliefs. Students will acquire an understanding of basic vocabulary, geography, historical sources and narrative, through directed readings, lecture and class discussion. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 360. Modern Germany

An examination of Central Europe from the unification of the German lands in the mid-nineteenth century through the Kaiserreich, World War I, Weimar Republic, National Socialism, Cold War division, and reunification. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 371. History of South Africa

Traces the political, economic, and social history of the Republic of South Africa. Beginning with the earliest inhabitants, the course traces the diversity of African institutions, the establishment of European colonies, the policy of apartheid, and African resistance. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 372. Colonial Latin America

This course surveys Spanish and Portuguese America from the pre-Columbian era to the present. Topics include the origins and evolution of indigenous civilizations, the process of European conquest and colonization, the formation of mixed cultures, and the struggle for independence. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 381. History of Modern China

This course traces the history of China from roughly 1800 to the present. It devotes special attention to the development of nationalism and communism in China and China's uneasy relationship with the West. Topics will include the Opium War and Taiping Rebellion, Republican era and warlordism, China in the Pacific War, Maoism and the reforms of Deng Xiaoping,
among others. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 383. History of Modern Japan

An examination of Japan from the late Tokugawa era (ca. 1800-1868) to the present. The course looks at the causes and consequences of the Meiji Restoration, Japan's rise as a modern industrial state, its struggle with democratic government, imperialist expansion, the impact of World War II on the country's subsequent political, social, and economic development, the "Japanese Miracle" of the 1970s, and Japan's current difficulties in confronting its past and defining its place in the twenty-first century. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 391, 392. Russia and the Soviet Union

Russian political, social, economic, and cultural developments from the founding of the first eastern Slavic state to the present. The first semester treats Kievan Rus, Muscovy, and the Imperial period from Peter the Great to Alexander II. The second semester deals with the final decades of the Russian autocracy, the revolutionary movement, World War I, the revolutions of 1917, the Civil War, and the history of the Soviet Union to the end of the Gorbachev era. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 399. Historical Method

A study of history as a discipline. Classroom lecture and discussion on fundamental aspects of research and synthesis plus the history of historical writing. With the help of an assigned advisor, each student prepares first a prospectus and then a preliminary chapter of the eventual senior thesis in history. Both papers are presented to the class for comment and review in workshop format. Enrollment is limited to history majors. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 414. Comparative Cultural Encounters

This seminar examines interactions among native, European, and African peoples during the initial centuries of North American colonization. Situating the American colonies within a broader Atlantic World and offering a comparative approach, the course investigates processes of cultural conflict, exchange, adaptation, and transformation. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 473. Latin American Literature as History

This seminar employs new and classic novels to investigate diverse trends in modern Latin American history, focusing on the insight each text offers into the land's people and institutions. Collectively, these volumes illuminate sweeping historical themes, harnessing personal stories to broad, impersonal forces and surveying a range of topics, from poverty and repression to adaptation and rebellion. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

## 474. Historic Preservation and Cultural Resource Management

Provides a comprehensive overview of historic preservation and cultural resource management as practiced in the United States. Examines the history of the preservation movement, the role of preservation in American culture, and the legislative framework for historic preservation.
Reviews the growing field of cultural resource management, looking at issues in architectural design, contract or "salvage" archaeology, and heritage tourism. Prerequisite: 200-level coursework in archaeology or American history, or permission of instructor.

190, 290, 390, 490. Internship

194, 294, 394, 494. Special Topics in History
Intensive study of specialized topics or limited periods in American history. Such courses will be offered occasionally and topics will vary. Prerequisite: HIS 111 or two 200-level history courses taken at the college level required.

195, 295, 395, 495. On-campus Research

196, 296, 396, 496. Off-campus Research
197, 297, 397, 497. Independent Study

## SCE. Senior Capstone Experience

See page 183.
History courses taken by students participating in The Washington College Study Abroad Programs will be assigned appropriate course numbers by the chair of the department.

## Humanities

Interdisciplinary Major

Nicole Grewling, Director
T. Clayton Black, Advisory Board Member

Peter Weigel, Advisory Board Member
The humanities include branches of learning that investigate what makes us essentially human, specifically languages and literatures, the arts, and history. This interdisciplinary program offers students the opportunity to define their own fields of concentration. They might, for example, choose a particular historical period and view it from a particular philosophical or aesthetic perspective, compare forms of artistic expression, or combine insights from distinct fields of research in the pursuit of specific themes or interests.

The humanities are central to the liberal arts and, as such, foster eminently practical skills that can be applied to a diverse array of professional fields. Written and oral communication, critical analysis, research techniques, and cross-disciplinary thinking are among the many strengths of students in humanistic fields. Our majors have gone on to graduate studies in a variety of subjects, from philosophy and English to library science. Others have chosen careers that value interdisciplinary skills such as publishing, public relations work, or the legal profession.

The program encourages students to seek a broad background in the associated disciplines and to recognize that all significant achievements of culture are closely interrelated. In the course of their studies, students will develop disciplined thinking and writing skills in more than one academic field and will learn to transfer insights and methods from one area to another.

Students interested in the major should discuss their ideas and plans with the director as early as possible in their college careers. Majors will take introductory courses in at least three of the following areas: art history, English, foreign languages, history, music history, philosophy, theatre, and world literature (International Literatures and Cultures). Humanities majors must take at least one year of a foreign language or literature in translation.

The major consists of a minimum of eight courses on the 300 and 400 level in at least two, preferably three, of the disciplines mentioned above. Please be sure to take the necessary introductory courses prior to that and check the prerequisites for upper-level courses. These upper-level courses may not double-count for other majors or minors. While offering students the opportunity to work in several academic fields, the humanities major nevertheless requires a distinct focus and careful planning, and regular contact with the director and affiliated professors is essential.
The Humanities Program offers no minor.

Students generally select courses for the major from the humanities disciplines taught at Washington College (see list above), and they are encouraged to work from an interdisciplinary perspective in these courses. In addition, there are two courses specifically designed to introduce Humanities majors to the history and development of the humanities. These courses are offered when staffing allows and they do not fulfill distribution.

## Course Descriptions

## 305. The Humanist Tradition and the Humanities

Intended for students majoring in the humanities program, but open to all, this course is designed to focus on the historical context, educational intent, and social vision which shaped the study of the humanities from its beginnings in the fifteenth century to the present day. The course will emphasize the reading of primary sources in the humanist tradition, but will also include secondary analyses of its achievements. Required of all majors in the humanities program unless excused by the director.

## 400. The Humanities in the Twentieth and Twenty-First Centuries

An intensive exploration of major challenges which developments in modern life and thought have mounted against the traditional canons of the humanities. Topics will vary but will concentrate on such movements as feminism, pragmatism, radical political theories, and post-modernism in their impact on the identity and viability of the humanities today. Strongly recommended to all majors in the humanities program, open to all upperclass students or by permission of the instructor.

## 394, 494. Special Topics

## SCE. Senior Capstone Experience

The Humanities Senior Capstone Experience is an intensive research project (thesis) on a topic of the student's choice. It must draw on and include research from at least two disciplines in the Humanities and it will be advised by at least two professors from these fields. Students are responsible for finding SCE advisors from among humanities faculty. Students are enrolled for four SCE credits usually in the spring of their senior year but the SCE is a year-long project that should be started at the end of the junior year. The Capstone receives a mark of Pass, Fail, or Honors.

# Information Systems <br> Interdisciplinary Minor 


#### Abstract

Austin A. Lobo, Diirector

Information Systems is the interdisciplinary study of the ways in which computer technology can foster organizational excellence. Drawing from both Business Management and Computer Science, the Information Systems minor builds on the foundations of an education in the liberal arts by stressing strong analytical skills, the facility to find imaginative solutions to difficult problems, and the application of ethical principles. Students who complete the Information Systems minor will understand and be able to write and orally communicate about technology to a body of professionals and non-professionals alike. The minor is especially suited to students majoring in Business Management who would like to acquire an in-depth understanding of technology, and to students majoring in Computer Science who wish to acquire business skills essential to a productive career. The minor is open to students from all majors offered at Washington College.


A minimum of eight courses ( 32 credits) are needed for the minor. Of these, the following seven are required:
BUS 112. Introduction to Financial Accounting
BUS 210. Management Information Systems
BUS 302. Organizational Behavior
MAT 201. Differential Calculus
CSI 201. Computer Science I
CSI 202. Computer Science II
CSI 360. Database Systems

The eighth course, an elective, may be chosen from the following:
BUS 109. Managerial Statistics
BUS 111. Principles of Marketing
BUS 209. Financial Analysis
BUS 212. Introduction to Managerial Accounting
BUS 303. Legal Environment of Business
BUS 315. Enterprise Resource Planning Systems
BUS 316. Data Analytics
CSI 100 . Basics of Computing
CSI 250. Introduction to Computer Organization and Architecture
CSI 470. Computer Networks
CSI 480. Software Engineering
ANT 210. Intermediate Geographical Information Systems
Additionally, special topics courses in Business Management or Computer Science or in other
areas deemed suitable and approved by one of the Information Systems program co-directors may be taken as the elective. Students majoring in Computer Science are urged to take the elective from the courses offered in Business Management; students majoring in Business Management are similarly encouraged to take the elective from the courses offered in Computer Science.

Students may not count the courses for a minor in Information Systems again for a minor in Computer Science or Business Management without the approval of the Chairs of the respective departments. Students who wish to double-major in Computer Science and Business Management will be required to take an additional elective.

# International Business Minor <br> Department of Business Management <br> Division of Social Sciences 

Maria M. Vich Llompart, Director

The interconnectedness of enterprises in global commerce is increasing at a dizzying pace, making an understanding of the opportunities and challenges of competing globally increasingly important. The International Business minor offers students an opportunity to learn about and analyze the forces impacting decisions necessary for conducting business around the world, including the evaluation of international organizational models and an understanding of the impact of country differences, particularly the roles culture and ethics play. Students also gain insight into how trade affects profitability, the nature of international monetary systems, and how to configure international business functions.

## Four Required Courses

ECN 111. Introduction to Macroeconomics
BUS 111. Principles of Marketing
BUS 112. Introduction to Financial Accounting
BUS 310. International Business (offered in the fall semester)

## Three Electives (at least one elective must be a BUS course)

BUS 311. Global Business Strategy
BUS 330. International Business Experience
BUS 356. Multinational Financial Management
BUS 294. Special Topic in International Business (will vary by semester)
BUS 394. Special Topic in International Business (will vary by semester)
BUS 497. Independent Study in International Business (with permission of the Director of the minor).
ECN 410. International Trade
ECN 411. International Finance
PHL 226. Global Ethics
POL 375. International Political Economy

With the prior permission of the Director of the International Business minor or the Chair of the Department of Business Management, relevant special topic courses from other Washington College departments or taken at study-abroad partners may also be counted for the minor. See
the catalog entry for the Business Management major for more information regarding study-abroad partners offering business-related courses.

## BUS 330. THE INTERNATIONAL BUSINESS EXPERIENCE

This summer course, taught by Business Management faculty, takes students abroad for approximately two weeks of concentrated study and experiential learning in international business after meeting regularly during the prior spring semester. Students visit two businesses each weekday for facilities tours and/or presentations by managers on their firms' international strategy. Cultural activities are scheduled in the evenings and on weekends. On-campus sessions prior to travel ensure that students get the most out of their experience abroad and enhance the academic component of the course.
The itinerary for this course varies from year to year. In the past, students have visited Europe (England, Ireland, Brussels, Holland, Spain, Portugal, and France) as well as China and India.

## International Literatures and Cultures

 Interdisciplinary MajorStudents pursuing the interdisciplinary major in International Literatures and Cultures will complete nine upper-level courses chosen in consultation with their advisor from among course offerings in this department or related courses in other disciplines as outlined below. In addition, they will successfully complete the Senior Capstone Experience (see below.) The prerequisites for the major are completion of ANT 105 Introduction to Anthropology and study of a foreign language through the 202 level (or demonstration of proficiency at that level). The major courses must include one of the following Anthropology courses: ANT 208, ANT 215, ANT 235 and ANT 320. Of the remaining eight, at least four should be selected from the upper-level offerings in a foreign language, literature or culture in this department or at study abroad sites. At least two of these must be at the 400 -level.

If students are pursuing study in a language in which Washington College does not offer upper-level courses, four culturally relevant courses in other disciplines taught in English may be substituted as necessary. The remaining four courses may be chosen from among the International Literatures and Cultures courses (ILC) offered by this Department or appropriate courses from other departments or programs (such as History, Art, Music, Theatre, Philosophy, Humanities). With the help of the advisor, students will design their major to focus on a language or culture, a particular theme (such as gender or ethnicity), a historical period, or a particular literary genre or form of cultural expression (such as the novel, poetry, drama, film, art, or music). Students may choose, for instance, Chinese, Italian, or Arabic cultural studies as the central focus of their major in International Literatures and Cultures by combining appropriate study abroad with courses that are available on campus in those fields.

Majors must successfully complete the Senior Capstone Experience, which entails producing a thesis or other project related closely to the focus of the major. The project or thesis may be written in English or in the foreign language. Students will also give a formal oral presentation of their thesis or project before their peers and faculty, again either in English or the foreign language. The Senior Capstone Experience will be graded Pass, Fail or Honors. International Literatures and Cultures majors are strongly urged to engage in a semester-long or summer study abroad experience.

## Courses Taught In English

305. European Cinema

Study of European film and its history. Special attention will be given to the various dimensions of film structure and criticism, with emphasis on foreign language films (with English subtitles). Selected films will be viewed and analyzed.

## 306. French Literature in Translation

Study of a selected author, movement, genre, or theme. Open to all students.

## 311. Contemporary France

This course provides an introductory historical and cultural study of contemporary France. Students will be provided tools for cultural interpretation via critical texts and the analysis of French films and their American remakes; they will then apply them to the cultural history of France. We will explore the impact of World War II, of the student protests of May '68, and of women's emancipation movements. We will examine France's position in the world-its past as a colonizing nation, its present post-colonial actions, and its multicultural identity enriched by different waves of immigration. We will study the political and economic roles of women, their place in the family, health concerns, and struggles for autonomy through works by women. This course counts toward the French major and minor if the journal entries, mid-term exam, and final paper are written in French.

## 312. The Contemporary Francophone World

This course provides an introductory historical and cultural study of the contemporary Francophone world. Designed as a survey of the non-European Francophone world, it will offer for study both literary and cultural documents from the Caribbean, North Africa, Sub-Saharan Africa, and Canada. Initially students will be provided tools for cultural interpretation via critical texts, media analysis (including print and Internet sources) and the analysis of Francophone films; they will then apply them to the cultural history of the Francophone world. We will explore French colonization, the process of decolonization, and subsequent independence movements. We will examine social, political, and economic roles of both women and men, changing gender roles, and contemporary divisions of labor. Finally, we will reflect on the political, historical, and sociocultural situations of post-colonial Francophone nations. This course counts toward the French major and minor if the journal entries, mid-term exam, and final paper are written in French.

## 313. Berlin - Symphony of a Great City. History, Culture and Identity in Germany's Metropolis

The course provides an overview of the cultural, sociological, political, and historical significance of Berlin. It presents a survey of its history and culture over the past century, examining how Berlin has come to stand as a symbol of the development of Germany as a whole. Discussion of selected (fictional and nonfictional) texts from specific moments in Berlin's history. Course may be taught in English or German. This course counts toward the German major and minor if the written work is in German.

## 315. Minorities in Germany: Reading at the Margins

The course provides an overview of the historical background to situate minorities in contemporary Germany, focusing on cultural productions (fictional, non-fictional texts, films) that contribute to the discussion about the situation of minorities in postwar Germany. We examine works that address minorities and their particular circumstances such as guest workers, the Turkish community, Black Germans, Jews, Muslims, Aussiedler, Russian immigrants. Course may be taught in English or German. This course counts toward the German major and minor if the written work is in German.

## 413. The Film in Spain and Latin America

A study of the film as art form and as social and cultural document in Spain, Spanish America, and Brazil. The thematic focus of this course and the films included will vary. Important topics include gender issues, the quest for identity, and freedom versus repression.

194, 294, 394, 494. Special Topics in International Literatures and Cultures
Study of a selected topic within a single national literature or culture, or a comparative study across cultures. Recent and planned offerings include: Perspectives on International Film; Food in Film, Literature and Culture; Shakespeare and Cervantes (Honors); The Big City in Literature and Film; Love and the Ideal in European Literature and Film; and The Reception of the Middle Ages.

## SCE. Senior Capstone Experience in International Literatures and Cultures

The senior capstone experience consists of a thesis or other project in the field of International Literatures and Cultures. Senior ILC majors register for four SCE credits in the last semester in which they have full-time status at the College. All students will give a formal oral presentation of their thesis or project before their peers and the faculty at the end of the seminar. Both written and oral work may be presented in English or in the foreign language. The Senior Capstone Experience will be graded Pass, Fail or Honors.

# International Studies 

Interdisciplinary Major

Christine Wade, Director<br>Lisa Daniels<br>Nicole Grewling<br>Aaron Lampman<br>Andrew Oros<br>Carrie Reiling<br>Tahir Shad<br>Janet Sorrentino<br>Maria Magdalena Vich Llompart

Our world has become globalized, with organizations, corporations, and individuals from around the world interacting on a daily basis. International Studies majors learn the importance of understanding and experiencing diverse cultures and the skills to work together on solutions to global challenges. International Studies is an interdisciplinary major, coordinated by the departments of anthropology, business management, economics, history, political science, and world languages and cultures. The major requires coursework drawn from these departments and supplemented by other departments and courses taken abroad. All International Studies majors study abroad for at least one semester, at one of thirty partner programs managed by our Global Education Office. Majors also engage in "experiential learning" to link real-world experiences to classroom-based learning. Other opportunities to make such linkages exist on campus as well, through our vibrant Model United Nations program, the student-run International Studies Council, foreign language "coffee hours," lectures from internationally known speakers sponsored by the Goldstein Program in Public Affairs and the Institute for Religion, Politics, and Culture, and other on-campus programming. After graduation, our majors go on to apply their education and skills in a wide range of careers, including business, journalism, non-profit organizations, politics, teaching, and public service. Double majors also find International Studies a useful supplement to all of Washington College's major fields of study. There is no minor in International Studies, though non-majors (and majors) are encouraged to pursue a related regional or functional minor (listed below).

## Major Requirements

The International Studies major is an intensive, interdisciplinary program with five required elements:
13 four-credit courses, taken across at least five academic departments;
Foreign language study beyond the College-wide requirement;
A semester-long study-abroad experience*;
An experiential learning activity; and

The senior capstone experience.
In addition, International Studies majors are encouraged to pursue a related minor, either regional or functional, or a second major to add additional focus and depth to their course of study.

* International students at Washington College pursuing an International Studies major are not required to study abroad, though they are encouraged to do so.

1. 13 required four-credit courses:

Five introductory courses to be completed in the freshman and sophomore years:
Anthropology 105. Introduction to Anthropology
Economics 111. Introduction to Macroeconomics (should be completed in the first year)
Economics 218. Economic Development (typically offered fall semester only)
History 203, 204, 205, or 206. Modern World History I or II, or Early Origins of Western Civilization I or II
Political Science 104. Introduction to World Politics

One upper-level course in International Business, Economics, or Political Economy, chosen from:

BUS 310. International Business
BUS 311. Global Business Strategy
ECN 410. International Trade
ECN 411. International Finance
POL 375. International Political Economy
An equivalent course taken abroad

One course focusing on theories of international politics, chosen from:
POL 201. Theories of Peace and Conflict
POL 371. International Politics
POL 374. International Organization and Law
An equivalent course taken abroad
Five upper-level elective courses related to International Studies:
These courses are offered in a wide range of academic departments at Washington College and abroad, including Anthropology, Business Management, Economics, History, and Political Science as well as most foreign language courses above the 302 level and courses in departments such as Art, English, Philosophy, and others. A list of pre-approved courses is published in the on-line schedule of classes each semester. At least three of these courses are typically completed during the required study abroad component of the major.

The international studies senior seminar
INT 491. International Studies Seminar (taken in the first semester of the senior year)

## 2. Foreign language requirement

Option One: completion of a 202-level or higher language course at Washington College or abroad.

Option Two: completion of at least four credits of study of an approved language not taught at Washington College while studying abroad. (This option may also require students to separately fulfill the College-wide foreign language requirement.)

Note (1): students with a documented learning accommodation related to language acquisition may substitute two additional courses towards this requirement.

Note (2): majors may also count foreign language courses above the 302 level toward the five upper-level elective courses for the major, as discussed under the 13-course requirement above.

Option Three: native speakers of a foreign language may be excused from the foreign language requirement upon request to the Director of International Studies.

## 3. Semester abroad requirement

Majors must study abroad for one semester at one of the programs offered through the Global Education Office before the fall of the student's senior year.

Note (1): students must attain a GPA of at least 2.5 to be considered for study abroad. Failure to achieve this GPA by the fourth semester at Washington College may require students to pursue a different major or to extend their graduation beyond the typical eight semesters.

Note (2): a combination of short-term study abroad programs shall not be substituted for this requirement, though short-term study abroad does satisfy the experiential learning requirement discussed below.

Note (3): students may petition the Director of International Studies to pursue a semester-long equivalent at a non-Washington College program to satisfy this requirement, though ordinarily this would require withdrawal from the College during the time of this experience (apart from a semester-long summer experience).

Note (4): international students pursuing the major may be excused from this requirement, though they are encouraged to study abroad as well.
4. Experiential learning requirement

Majors must complete one activity from an approved list of options, including an internship or volunteer work related to international studies, study abroad beyond the one-semester
requirement, or participation in an off-campus Model United Nations simulation.
A worksheet that details how majors have completed this requirement must be submitted once this activity is completed. See the experiential learning page of the International Studies web-site for further information.

Note: An internship or volunteer work should consist of at least 80 hours of work and may or may not be pursued for academic credit.

## 5. Senior capstone experience (SCE) requirement

The senior capstone experience (SCE) requirement for International Studies is a year-long self-directed project. The traditional route for the SCE is to complete a 30-page-minimum research-based thesis written in English and followed by a poster presentation that highlights the main findings of the research. By application and under the direction of a willing capstone advisor, majors alternatively may propose a self-designed capstone project that could take different forms, such as a performance, exhibition, web-site, or advocacy project - but which also must include a written component and a poster presentation that highlights the main findings of the research aspect of the project. Double-majors may complete a combined thesis or self-designed project with approval of advisors from both majors; double-majors with a modern language may complete a thesis written in French, German, or Spanish under the direction of a willing capstone advisor. Ordinarily students initiate the senior capstone together with the required International Studies Seminar (INT 491) during the fall semester of the senior year. Students will be registered for the SCE during the last semester of their senior year, when a final version of the capstone is due. The senior capstone should be interdisciplinary in scope, methodology and content and should have at the center of the analysis an "international" issue. Capstone projects will be assessed on the basis of Pass/Fail/Honors. Students who wish to be considered for honors should indicate this interest to their SCE advisor prior to submission of the complete draft soas to be advised on the additional requirements for an honors-level SCE. A minimum 3.5 GPA in the major is required to pursue an honors SCE. An oral defense of the SCE project is held at the end of the semester during which a student is seeking SCE honors by a committee of faculty members of the program. Note: Students who wish to complete their studies at Washington College in the fall semester must begin working on their senior thesis in the preceding spring semester under the direction of an assigned SCE advisor.

## Minors Related to International Studies (open to all majors)

Regional and functional minors related to International Studies are open to students of all majors, offering an interdisciplinary approach to the study of a particular area. Regionally focused minors are available in Asian Studies, European Studies, Latin American Studies, and Near Eastern Studies. Functionally focused minors are available in Black Studies, Ethnomusicology, Gender Studies, International Business, Peace and Conflict Studies, and Public Health. Many international studies majors also or alternatively choose a minor from an academic department.

## Course Descriptions

190, 290, 390, 490. International Studies Internship
Students may receive course credit for an individualized internship at an organization that engages in substantial international activity, under the supervision of a faculty advisor. The details of the internship and associated academic requirements will be specified in a learning contract drawn up by the student and advisor. For-credit internships combine work experience (at least 140 hours for two credits) with scholarly readings and reflective writing. Grading is pass-fail. Prerequisite: must be a declared international studies major.

## 194, 294, 394, 494. Special Topics in International Studies

The Program occasionally offers a course on a special topic in International Studies that is not a part of the regular course offerings.

## 195, 295, 395, 495. On-campus Research

## 196, 296, 396, 496. Off-campus Research

## 197, 297, 397, 497. Independent Study

Students may receive credit for an individualized course of reading and writing under the supervision of a faculty advisor. The requirements of the course will be specified in a learning contract drawn up by the student and advisor.

## 327, 328, 329. Washington Center Semester

An integrated three-course unit for students spending a semester at the Washington Center. Students receive 8 elective credits in International Studies and 8 general elective credits, and fulfill the Experiential Learning requirement. Prerequisite: 2.8 cumulative GPA and successful application to the Washington Center for Internships and Academic Seminars. This program is normally open only to juniors and seniors.

## 327. Washington Center Internship

A full-time, semester-long internship in Washington, DC, with a federal agency, non-profit organization, foreign embassy, or private firm. Depending upon interest and internship placement, students may attend hearings, conduct policy research, draft correspondence, monitor legislation, lobby members of Congress, or write analytical reports. Students will create an in-depth portfolio of their internship experience. 12 credits.

## 328. Washington Center Seminar

Washington Center interns participate in an evening seminar selected from a variety of topics offered during the semester. Students engage in class discussion and may also research seminar topics, prepare written assignments, and take examinations. Students must choose a seminar with clear international content chosen in consultation with the Director of International Studies. Required of and limited to students enrolled in International Studies 327. Three credits.

## 329. Washington Center Forum

Washington Center interns participate in lectures, site visits, small group discussions, briefings, and other required events designed to help them understand the connection between their academic and professional goals and the special educational opportunities available through living and working in Washington, DC. Evaluations of these experiences are included in the student portfolio. Required of and limited to students enrolled in International Studies 327. One credit.

## 491. International Studies Seminar

This course is designed to help students to consider in depth their off-campus experiences as an International Studies major and to draw connections among inter-disciplinary courses required of the major. The nature of theory, its application to International Studies, and problems involved in defining this field of study and in developing empirical methods for it will be analyzed. Special attention will be given to anthropological, economic, historical, and political approaches to International Studies, as well as to approaches that include textual analysis (including foreign language texts). The seminar also will provide students with an opportunity to discuss topics for their senior capstone. This course is required for, and limited to, senior International Studies majors.

## SCE. Senior Capstone Experience

See description of the SCE requirement in International Studies under that heading above. To be completed in the final semester at Washington College.

# Journalism, Editing, \& Publishing Minor 

## Division of Humanities and Fine Arts

Sean Meehan, Director<br>Kimberly Andrews<br>Katie Charles<br>James Allen Hall<br>Alicia Kozma<br>Elizabeth O'Connor<br>Melissa McIntire

Students interested in the fields of journalism, and editing \& publishing are invited to deepen their understanding and practice a range of applicable skills within the classroom. Whether through interviewing members of the College community for news story in Intro to Journalism or learning how to screen poetry submissions in Literary Editing and Publishing, students will develop and strengthen the essential skills of critical thinking, analysis, and synthesis.
Furthermore, the minor will foster increased creativity and clarity of expression through a study of writing in a range of different styles and modes. The minor should appeal not only to English majors but also to Communications majors as well as to a host of students majoring in the humanities, social sciences, and even the natural sciences.

The Sophie Kerr fund also supports the justly famous Sophie Kerr Prize (at $\$ 63,912$ in 2019, the largest undergraduate literary prize in the country), as well as student scholarships, library collection development, and professional development for English Department faculty. The Literary House supervises over 50 learning opportunities and internships for students, as well as provides a space where students can explore letterpress and bookmaking in the print studio.

## Courses

## Gateway: Two (2) courses chosen from

- ENG 101 Literature and Composition
- ENG 103 Intro to Creative Writing
- ENG 224 Introduction to Journalism
- ENG 221 Introduction to Nonfiction
- ENG 201 the Art of Rhetoric
- CMS 101 Intro to Communication \& Media Studies


## Advanced: Three (3) courses chosen from

- ENG 354 Literary Editing \& Publishing
- ENG 393 and ENG 493 Journalism Practica (must take both 2-credit classes)
- ENG 454 Nonfiction Workshop

Other special topics courses like Book Arts and Design for Literary Editing \& Publishing could
count with the approval of the Chair. Students would also be allowed to take 1 class on the media from Anthropology (ANT 420 Media and Power), Business (BUS 451 Advertising), Political Science (POL 334 Media and Politics), Sociology (SOC 294 Media and Society) or a related discipline with permission of the Chair.

## Internship: At least one (1) 2-4 credit internship

- ENG 390/ENG 490 (English Internship focused on Journalism or Editing \& Publishing

The internship can be completed either on or off campus during either the academic year or the summer.

## Events

- Attendance at six (6) literary events. Students are required to sign the official attendance form at the envent in order to be credited with attendance.


## Total Required Courses: 6 (22-24 credits)

Note: Students may count up to two courses (8 credits) toward multiple programs in the English department (i.e., toward the English major, Creative Writing minor, and/or Journalism, Editing \& Publishing minor).

## ENG 101. Literature and Composition

This course develops the student's capacity for intelligent reading, critical analysis, and writing through the study of literature. There are frequent writing assignments, as well as individual conferences on the student's writing. Fulfills the W2 writing requirement.

## ENG 103. Introduction to Creative Writing

A workshop introducing new writers to several forms of creative writing, including poetry, fiction, and nonfiction. Students will use classic and contemporary literature as models for their own efforts. In the fall semester, some sections are designated first-year only and at least one section will be open to all students. In the spring semester, beginning writers from all years may enroll in ENG 103. Fulfils the W2 writing requirement.

## ENG 201. The Art of Rhetoric

Students will study and develop the rhetorical knowledge readers and writers use to generate persuasive critical analysis and compelling expository prose in any discipline or field of inquiry. Topics chosen by the instructor (for example: the rhetoric of documentary, the rhetoric of science, the rhetoric of identity) explore the ways writers, artists, and thinkers use rhetoric to communicate in a range of circumstances and texts, both print and multimedia, literary and multidisciplinary. Guided by readings in classical elements of rhetorical study (the 5 canons of rhetoric, rhetorical tropes and figures) students will develop knowledge of writing process and effective style; attention will also be given to the oratorical delivery of composition in the form of speech and/or multimedia presentation. The guiding principle of the course is emulative: while
students read and critique various models of rhetorical knowledge evident in the course texts, they will also apply that knowledge to the texts they generate as writers. Fulfils the W2 writing requirement.

## ENG 221. Introduction to Nonfiction

This course will offer students a selective overview of the "fourth genre" of nonfiction prose. Readings will be drawn from some of the principal subdivisions of this field, which includes autobiography and biography, documentary, the essay, literary journalism, memoir, and writing in new media. Fulfils the W2 writing requirement.

## ENG 224. Introduction to Journalism

This course will cover the foundations of reporting, writing, fact checking, and editing. Students will write a range of news and feature stories, including an event story, and issue story, and a profile. We will also discuss journalistic ethics and the way the field has been transformed by the Internet. Fulfils the W2 writing requirement.

## ENG 354. Literary Editing and Publishing

The Rose O'Neill Literary House is home to Cherry Tree, a professional literary journal featuring poets, fiction writers, and nonfiction writers of national reputation and staffed by Washington College students. In this course, students receive hands-on training in the process of editing and publishing a top-tier literary journal. They analyze literary markets even as they steward into print work from the nation's most prestigious emerging and established writers. This class includes extensive research and discussion of nationally recognized literary magazines and covers topics such as a publication's mission statement, its aesthetic vision, and its editorial practices. All students who wish to join the editorial staff and be included on the masthead of Cherry Tree must complete one semester of ENG 394: Literary Editing \& Publishing.

## ENG 393/493. Journalism Practica

This practicum for The Elm teaches basic news reporting and writing - the who, what, when, where, why \& how of story organization; getting quickly to the point; conciseness; straightforward exposition; accuracy, fairness and balance, and ethical issues. This is a two-credit course. Students may count no more than 4 journalism practicum credits toward the English major. (Students must take both ENG 393 and ENG 493 to earn credit for a course in the major or minor.)

## ENG 454. Creative Writing Workshop: Nonfiction

This course will use a workshop approach for students who are interested in developing their skills in a kind of writing which combines elements of journalism, such as the feature article, with elements of the literary, such as the personal essay. In addition, students will also develop their essay skills in the form of the personal narrative and travel writing. In essence this course treats the various forms of the essay with a special emphasis on the creative ways the genre can be interpreted and rewritten. Readings of representative essays will be included. Prerequisite: ENG 103 Introduction to Creative Writing.

## Justice, Law and Society

 Interdisciplinary MinorRachel M. Durso, Director

The minor in Justice, Law and Society provides an interdisciplinary study of justice, law, civil liberties, crime and ethics in both domestic and global contexts, from a variety of social sciences and humanities perspectives. The Minor explores a range of topics, such as social control, variant behaviors, legal processes and human rights, as well as crime ranging from street violence to complex organizational crime, often referred to as white collar and transnational. The Minor is open to students with various majors and encourages them to: explore theoretical explanations of justice, law, civil rights, and criminal activities; and to use an array of research tools to study incidence, prevention, and reduction policies associated with American and international legal systems.

The minor prepares students for post-graduate study at more than $30 \mathrm{Ph} . \mathrm{D}$. and 100 Master's and certificate programs here in the U.S. Juris Doctor programs (law school) or combined law and Master's programs in criminology may also be of interest to students with this minor.

Students seeking entry level positions in law firms, advocacy organizations, government, and social service agencies involved with the administration of justice will find the Justice, Law and Society minor has provided useful theoretical and practical concepts.

This interdisciplinary minor consists of seven courses (28 credits). Sociology 101 (Introduction to Sociology) and Sociology 240 (Criminology) are required unless a waiver is granted by the director. Students must select two other Sociology courses of which one pertains to criminology and three elective courses from the list specified below. The three electives include selections from both Humanities and Social Sciences courses. Students interested in pursuing the Justice, Law and Society minor should consult with the Director on their course selections and should be aware that internship opportunities in justice and law related organizations are offered through the Washington Center program as well as several of the courses listed below.

## Department of Sociology Courses That Count Toward the Justice, Law and Society Minor

Criminology Options (one required):
SOC 341. Variant Behavior
SOC 347. Juvenile Delinquency and Social Welfare

Additional Sociology Course Options (one required):
SOC 221. Social Inequalities
SOC 250. Cities and Suburbs
SOC 341. Variant Behavior (if not taken as a criminology option)

SOC 483-484. Field Experience in Social Welfare

Note: Special Topics courses (such as SOC 294 Sociology of Law, SOC 394 Environmental Justice, Law and Sustainable Development: Legal Theory and Practice and SOC 394 Fraud: A Forensic View and Analysis) may be used to meet Criminology and/or Additional Sociology Course options with approval from the director.

## Other Social Science Courses That Count toward the Justice, Law and Society Minor ELECTIVE REQUIREMENT

ANT 109. Introduction to Geographic Information Systems
BUS 303. Legal Environment of Business
POL 202. Justice, Power, and Political Thought
POL 320. Law and Society
POL 323. Constitutional Law
POL 374. International Organization and the Law
Note: The elective courses may have prerequisite courses that must be taken prior to enrollment. See course descriptions for further information.

## Humanities Courses That Count toward the Justice, Law and Society Minor ELECTIVE REQUIREMENT

PHL 210, Introduction to Political Philosophy
PHL 225. Ethics
PHL 226. Global Ethics
PHL 300. Business Ethics
PHL 303. Environmental Ethics
PHL 325. Biomedical Ethics
PHL 335. Philosophy of Law
Note: The elective courses may have prerequisite courses that must be taken prior to enrollment. See course descriptions for further information.

## Course Descriptions

SOC 101. Introduction to Sociology
Introduction to basic concepts and theories in sociology concerning the nature of society, culture, and personality. Consideration of social processes, groups, and institutions found in modern American society.

## SOC 221. Social Inequalities

The nature of the systems of social stratification and racial inequality as well as the interaction between social class and race in the United States. Personal consequences of the various forms of inequality and perceptions of the legitimacy of social systems based on race are considered. Prerequisite: Sociology 101.

## SOC 240. Criminology

Study of the nature, causes, and social significance of crime. Prerequisite: Sociology 101.

## SOC 250. Cities and Suburb

Cities from their origins to the present. Cities are both causes and consequences of social and technical change: therefore they are always places of social problems and conflict. Course will focus on medieval and industrial cities, and on the newly emerging "edge cities." Prerequisite: Sociology 101 or Anthropology 105.

## SOC 341. Variant Behavior

An exploration of behavior that has been socially defined as "deviant." The nature, sources, and consequences of this definition will be discussed. Prerequisite: Sociology 101 and one additional course in sociology.

## SOC 347. Juvenile Delinquency and Social Welfare

Examines theories of delinquency causation and looks critically at programs that treat delinquents and status offenders, nationally and in Maryland. Students visit detention center and Juvenile Court and talk with experts in the field. Prerequisite: Sociology 101 and at least two of the following: Sociology 212, 240,250, 303, 341, 382; or prior permission of the instructor.

## SOC 483-484. Field Experience in Social Welfare

A study of the organization and operation of social agencies. Field Experience in welfare work under professional supervision. Prerequisite: Sociology 382 and prior permission of the instructor.

## ANT 109. Introduction to Geographic Information Systems

Geographic Information Systems (GIS) are used in academia, business and government to manage large datasets of spatially-linked information to provide users with powerful analytic tools. Classroom discussions introduce the theories and uses of GIS and focus on the organizational issues that impact the implementation of GIS in our society. Lab activities teach the student how to extract and present GIS data in graphical form and how to construct and augment GIS databases using on-the-ground data gathering, map point-plotting equipment, and auxiliary data bases.

## BUS 303. Legal Environment of Business

This course looks at how the law has evolved from English common law to today's statutory and regulatory legal environment. The course explores recent statutes such as Sarbanes-Oxley and Dodd-Frank and how they have impacted the way businesses operate. The course also investigates legal and ethical issues facing businesses today, different types of business associations, and liability issues faced by businesses under current tort law, contract law, and property law.

## PHL 210, Introduction to Political Philosophy

Political philosophy applies the tools of philosophical analysis to the challenges of politics and
social life. Most fundamentally, political philosophy seeks to answer the question, how should we organize our society? The course content may focus on such themes as rights, justice, equality, freedom, power, oppression, exploitation, multiculturalism, obligations of the State, and the duties of citizenship. Prerequisite: Philosophy 100

## PHL 225. Ethical Theory

An examination of some of the major ethical theories in Western philosophy. Applications of these theories to concrete ethical problems will be considered. Special attention will be given to Consequentialist, Deontological, and Virtue theories. Readings will be drawn from classical and contemporary authors. Prerequisite: Philosophy 100

## PHL 226. Global Ethics

As we become a global community, the need for secular ethical discourse becomes increasingly important. This course will explore how international culture, policy, and standards impact ethical practices around the world. Current events, anecdotes, and personal experiences will be brought together to highlight ethical theory in action in today's global environment. General topics include: the Absolutism-Relativism debate, The Ethics of Globalization, Global Business Ethics, Global Bioethics with emphasis on Feminist issues, Global Environmental Ethics, and the Ethics of Warfare and Terrorism. Prerequisite: Philosophy 100.

## PHL 300. Business Ethics

A course focused on major ethical theories and principles as they apply to individuals, companies, corporations, and consumers in the business world. Typical issues treated are: corporate social responsibility; government versus self-regulation; employee and consumer safety; whistle-blowing; deceptive advertising; conflicts in accounting; insider trading and issues in international business. Prerequisite: Philosophy

## PHL 303. Environmental Ethics

A study of the nature and history of the environmental movement and our ethical responsibilities with regard to such current issues as the preservation of species, animal rights, the value of ecosystems, ozone depletion, and "deep" or radical ecology. Prerequisite: Philosophy 100

## PHL 325. Medical Ethics

This course focuses on patients rights, duties of physicians, conflicts of interest between regulators, pharmaceutical companies, and physicians. Prerequisite: Philosophy 100

## PHL 335. Philosophy of Law

This course explores the philosophical issues surrounding a number of areas of the law including, the nature of law, constitutional interpretation, legal responsibility, punishment, capital punishment, and legal limits on personal liberty. Readings will be drawn from classical and contemporary authors. Prerequisite: Philosophy 100

POL 202, Justice, Power, and Political Thought

This course will introduce students to the study of political philosophy by examining the ways many of the most influential political theorists have struggled to define the nature of justice, as well as developing an understanding of how theorists have approached the question of founding just regimes; ensuring that just systems of government operate legitimately once established; and assessing the major causes for the deterioration of regimes based on justice.

## POL 320. Law and Society

A study of the American system of criminal justice. The major emphases of the course are the operation of the institutions and processes of the system, the constitutional rights of those accused of crime, and the social goals and consequences of criminal punishment. Prerequisite: Political Science 102 or permission of the instructor.

## POL 323. Constitutional Law

An analysis of the distribution of power among the three branches of the federal government, and between the federal and state levels of government, as specified in major decisions of the U.S. Supreme Court. The Court itself will be studied as a political institution, with emphasis on its role in a democratic political system. The course also includes a study of the constitutional rights of individuals, as specified by the U.S. Supreme Court, with primary emphasis on issues of freedom and equality. Prerequisite: Political Science 102.

## POL 374. International Organization and the Law

A study of organized human efforts made throughout history to promote international cooperation and peace. Special attention is given to the principles and rules of international law regulating national conduct in international affairs, the League of Nations, the United Nations, and contemporary blueprints for world federation and government. Prerequisite: Political Science 104 or permission of the instructor.

## Latin American Studies Minor <br> Interdisciplinary Minor

Dr. Christine Wade, Director

Latin American Studies is an interdisciplinary minor that aims to help students make connections across different scholarly approaches to the region. Students are encouraged to explore the diverse region through the study of culture, language, literature, history, music, and politics. Students minoring in Latin American Studies will develop knowledge about the multicultural nature of the region and its interactions with the global community, both past and present.

Students will achieve the goals of the minor by taking a set of courses on Latin America in at least three different departments across two divisions. Since language is essential to understanding any culture, a degree of proficiency is required in one of the region's languages. Finally, minors will submit a final project on the region.

## Minor Requirements:

1) Language requirement: Two Semesters of HPS beyond HPS 201 (up to 302).
*Native speakers of the region's languages should contact the director about the language requirement for the minor. Please note, the Latin American Studies Director cannot waive the College's language requirement.
2) Five (5) courses distributed across at least three departments in the Humanities and Fine Arts and Social Science divisions.*

ANT 235 Cultures of Latin America
ANT/MUS 329 Cuban Music and Culture
HIS 371 Colonial Latin America
HIS 473 Latin American Literature as History
HPS 303 Intro to Latin American Literature
HPS 305 Intro to Latin American and Spanish Lit
MUS 313 Music of Latin American
POL 348 Latin American Politics
POL 382 US-Latin American Relations
Any special topics class at the 300-400 level with a Latin American focus
*Students may count up to two relevant courses taken at our study abroad partners towards the minor.
3) Minors are also required to submit to the LAS Director either 1) a Senior Capstone Experience from their major on a topic related to Latin American Studies or 2) a portfolio of three research
papers, written for Latin American Studies courses, showcasing their development in Latin American Studies. This requirement is non-credit bearing.

# Marketing Minor <br> Department of Business Management <br> Division of Social Sciences 

Susan A. Vowels, Interim Director

Students pursuing the Marketing Minor learn that marketing is a creative problem-solving process that begins with recognition of consumers' needs and desires, culminates in the development or improvement of products and services in response, and repeats cyclically to refine consumption outcomes. The practice of marketing includes analyzing both internal and external influences on the consumer, and understanding and predicting consumer responses to these influences; conducting market research and data analysis to identify appropriate target market segments; developing, improving, and curating brands, products, services, and their ancillary attributes; assessing and developing organizational capacity for production, distribution, and other requirements; effectively communicating and promoting product offerings; and cultivating and maintaining relationships with customers. The range of demands placed on the marketing professional thus necessitates a combination of strong quantitative and analytical proficiencies, along with robust creative and communication skills. The Minor also underscores the ethical demands placed on marketing professionals, along with the legal, environmental, organizational, and individual consequences of making ethical marketing decisions.

While internships are not required for the minor, they are strongly encouraged. Please contact the director of the Marketing Minor or the chair of the Department of Business Management for information regarding earning academic credit for internships.

## Five Required Courses

ECN 112. Principles of Microeconomics
BUS 109. Managerial Statistics (or equivalent: MAT 109, PSY 209, ECN 215)
BUS 111. Principles of Marketing
BUS 223. Marketing Research Methods
BUS 323. Consumer Behavior

## Two Electives (at least one elective must be a BUS course)

BUS 224. Digital Marketing
BUS 351. Advertising
BUS 294. Special Topic in Marketing (will vary by semester)
BUS 394. Special Topic in Marketing (will vary by semester)
BUS 497. Independent Study in marketing (with permission of the Director of the minor)
ART 231. Creative Process
ART 251. Visual \& Critical Thinking

With the prior permission of the director of the Marketing Minor or the chair of the Department of Business Management, relevant special topic courses from other Washington College departments or taken at study-abroad partners may also be applied to the minor.

## STUDENT OPPORTUNITIES

## American Marketing Association Student Chapter

Students declaring the Marketing Minor are invited to participate in the student chapter of the American Marketing Association (AMA), which provides a variety of opportunities and experiences, including speakers, networking, real-life case-based competitions and more. Participation requires student membership in the American Marketing Association. Please see ama.com for more information, or speak to the director of the Minor.

## Alpha Mu Alpha Honorary

Alpha Mu Alpha, the national marketing honorary, recognizes qualified undergraduate students for their outstanding scholastic achievement in the area of marketing. Graduating students who have (1) declared the Marketing minor and (2) who have achieved an overall GPA of at least 3.25 as of the semester prior to graduation will be invited to join.

## Mathematics and Computer Science

## Division of Natural Sciences and Mathematics

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The Mathematics and Computer Science Department's curriculum gives students technical knowledge along with a broad foundation of reasoning and analytical skills that can be applied to many fields. Graduates can pursue graduate work in computer science or mathematics, teach in secondary schools, work as professionals in government and industry, or use quantitative and computing techniques in the natural sciences or social sciences. All students must master the relevant basic mechanical concepts necessary to perform the fundamental operations related to mathematics or computer programming. The learning environment places emphasis on reasoning and problem-solving and communications skills. Students are required to make oral presentations in classes and at seminars and to write detailed papers and reports for regular classes and for their Senior Capstone projects.

## Freshman/Sophomore Courses

Provided they have the necessary prerequisites, students planning to take one quantitative course for distribution credit may take any course in this department; students planning to take two quantitative courses may take any combination of two courses in mathematics and/or computer science.

In mathematics, the calculus sequence of MAT 201, MAT 202, and MAT 203 is the gateway to the major; the analogous sequence for computer science consists of CSI 201, CSI 202, and CSI 203. Prospective majors should begin coursework in these sequences in their first semester at the College.

The Department strongly advises students not to take a course unless they received a grade of C or better in the prerequisite course.

## The Major in Mathematics

Normally a student with good preparation in mathematics who intends to major in mathematics or one of the natural sciences will start in the calculus sequence with MAT 201, but a student who has had some work in calculus or who has received advanced placement credit for calculus may start with a more advanced course, and is encouraged to consult with the department chair
to make such arrangements.

Mathematics majors are eligible for the teacher education program. In order to assure proper scheduling, students wishing to become certified to teach mathematics should inform the chairs of both the Mathematics and Education Departments as soon as possible.

The major in mathematics consists of the senior capstone plus a minimum of eleven courses: three gateway courses, two theory courses, and six electives:

Three Gateway Courses:
MAT 201 Differential Calculus
MAT 202 Integral Calculus
MAT 203 Multivariable Calculus

A Minimum of Two Theory Courses from:
MAT 311 Real Analysis I
MAT 312 Real Analysis II
MAT 322 Abstract Algebra
MAT 325 Vector Spaces
Six Electives Chosen From:
MAT 240 Discrete Mathematics
MAT 316 Complex Analysis
MAT 318 Probability
MAT 327 Number Theory
MAT 330 Foundations of Geometry
MAT 340 Numerical Analysis
MAT 345 Differential Equations
MAT 294, 394, 494 Special Topics in Mathematics
Any of MAT 311, MAT 312, MAT 322, MAT 325 that was not counted as a theory course.
CSI 201 Computer Science I
CSI 202 Computer Science II
CSI 350 Theory of Computation
CSI 370 Analysis of Algorithms
CSI 380 Organization of Programming Languages

## The Minor in Mathematics

The minor in mathematics consists of MAT 201, MAT 202, MAT 203, and any four other courses that count for the major. However, at least one of these must be a theory course from the list above.

## The Major in Computer Science

Typically, a student with good background preparation who intends to major in computer
science will start in the computer science sequence with CSI 201. However, a student who has received advanced placement credit for computer science may start at a higher level and is encouraged to consult with the department chair to make such arrangements.

The major in computer science consists of the senior capstone plus a minimum of twelve courses: six core courses, four theory and systems courses, and two electives.

## Six Core Courses:

MAT 201. Differential Calculus
CSI 201. Computer Science I
CSI 202. Computer Science II
CSI 203. Object Oriented Programming
CSI 240. Discrete Mathematics (cross-listed as MAT 240)
CSI 250. Introduction to Computer Organization and Architecture

Four Theory and Systems Courses:
CSI 350. Theory of Computation
CSI 360. Database Systems
CSI 370. Design and Analysis of Algorithms
CSI 480. Software Engineering
Two Electives Chosen From:
CSI 340. Numerical Analysis
CSI 380. Organization of Programming Languages
CSI 394. Special Topics in Computing
CSI 450. Operating Systems
CSI 460. Artificial Intelligence
CSI 470. Computer Networks
CSI 494. Special Topics in Computing

## The Minor in Computer Science

The minor in computer science consists of MAT 201, CSI 201, CSI 202, CSI 203, CSI 250, and any two of the following: CSI 240, CSI 340, CSI 350, CSI 360, CSI 370, CSI 380, CSI 394, CSI 450, CSI 460, CSI 470, CSI 480, CSI 494.

## Mathematics Course Descriptions

MAT 109. Statistics
Introduction to the appropriate methods for analyzing data and designing experiments. After a study of various measures of central tendency and dispersion, the course develops the basic principles of testing hypotheses, estimating parameters, and reaching decisions.

## MAT 110. Precalculus Mathematics

The objective of this course is to prepare students to undertake Mathematics 201. Topics
studied will include a review of algebra, properties of transcendental functions including trigonometry, and elementary analytic geometry. Prerequisite: permission of the department. Students who have successfully completed a calculus course or who have received advanced placement credit for calculus may not enroll in this course.

## MAT 120. Chaos and Fractals

This course is an introduction to the rapidly developing science of complexity. It is a discussion of the tools-fractals, chaos, and self-organization-being refined for the purpose of understanding such things as the fractured and irregular structures of Nature, surprise and unpredictability, and the emergence of lifelike properties from inanimate matter. The theme of the course is that complexity can arise from simple origins, such as the repeated application of elementary processing rules. The course emphasizes the use of the computer for visualization. Practical application of these ideas in medicine and engineering will be discussed, as will examples of the connections between complexity in the sciences and that in the humanities and the arts.

## MAT 135. Finite Mathematics

Linear programming, matrices, sets and counting, Markov process, difference equations, and graphs. The course will emphasize developing, analyzing, and interpreting mathematical models.

## MAT 201. Differential Calculus

Analytic geometry, the derivative and differential, elementary functions, limits, continuity, and applications.

## MAT 202. Integral Calculus

The indefinite integral, the definite integral, the fundamental theorem of the integral calculus, sequences, series, and applications. Prerequisite: Mathematics 201 or permission of the instructor.

## MAT 203. Multivariable Calculus

Vectors, partial derivatives, and multiple integrals for functions of several variables. Line and surface integrals. Prerequisite: Mathematics 202 or permission of the instructor.

## MAT 221. Communication, Patterns, and Inventions in Mathematics

This course is designed for students in the Elementary Education Certification Program and for students planning to complete the Secondary Education Certification Program in an area other than mathematics. The framework of the course consists of four themes: Number Systems and their Operations, Algebra and Functions, Geometry and Measurement, Data Analysis, Statistics, and Probability. Emphasis throughout is on reasoning and problem solving using concepts and procedures from all four areas. Substantial amounts of both reading and writing will be required and students will be expected to demonstrate both orally and in writing a thorough understanding of the concepts and the ability to communicate this understanding to others.

## MAT 240. Discrete Mathematics (cross-listed as CSI 240 )

An introduction to logic, reasoning, and the discrete mathematical structures that are important in computer science. Topics include proposition logic, types of proof, induction and recursion, sets, combinatorics, functions, relations, and graphs.

## MAT 311, MAT 312. Real Analysis I and II

A rigorous treatment of calculus. Topics include limits, continuity, sequences and series, differentiation and integration, compactness, completeness, and calculus of several variables. Prerequisite: Mathematics 202 and at least one of Mathematics 322, Mathematics 325, Mathematics 327, or Mathematics 330, or permission of the instructor.

## MAT 316. Complex Analysis

Theory of functions of a complex variable, including applications to problems in the theory of functions of a real variable. Cauchy's Integral Formula and its application to the calculus of residues. Prerequisite: Mathematics 203 or permission of the instructor.

## MAT 318. Probability

Events and their probabilities, dependence and independence. Bayes Theorem. Variates and expected values. Theorems of Bernoulli and De Moivre. Special distributions. Central limit theorem and applications. Prerequisite: Mathematics 202 or permission of the instructor.

## MAT 322. Introduction to Abstract Algebra

Introduction to groups, rings, and fields. Other topics may include integral domains, polynomial rings, and extension fields. Prerequisite: Mathematics 202.

## MAT 325. Vector Spaces

Axiomatic treatment of vector spaces. Adjoint spaces. Linear transformations. Elementary spectral theory. Proof of the Cayley-Hamilton Theorem. Prerequisite: Mathematics 202.

## MAT 327. Theory of Numbers

Factorization of integers. Congruences and residue classes. Theorems of Euler, Fermat, Wilson, and Gauss. Primitive roots. Quadratic residues and the reciprocity theorem. Prerequisite: Mathematics 202.

## MAT 330. Foundations of Geometry

A critical study of the basic concepts of geometry. This course begins with an axiomatic approach to Euclidean geometry which includes careful proofs of its principal theorems. The course will continue with an examination of various types of non-Euclidean geometries which may include spherical geometry, projective geometry, and/or hyperbolic geometry. Prerequisite: Mathematics 202.

## MAT 340. Numerical Analysis (cross-listed as CSI 340)

Solution of equations and systems of equations by iteration and elimination, numerical differentiation and integration, assessment of accuracy, methods of interpolation and extrapolation. Prerequisite: Mathematics 203 or permission of the instructor.

## MAT 345. Differential Equations

Elementary methods for the solution of ordinary differential equations, including the expansion of the solution in an infinite series. Prerequisite: Mathematics 203 or permission of the instructor.

## MAT 194, MAT 294, MAT 394, MAT 494. Special Topics in Mathematics

Study of an area of mathematics not covered in other courses. Students are urged to suggest possible topics to the department as their interests and needs develop. Prerequisite: Permission of the instructor.

## MAT 190, MAT 290, MAT 390, MAT 490. Internship

## MAT 195, MAT 295, MAT 395, MAT 495. On-campus Research

## MAT 196, MAT 296, MAT 396, MAT 496. Off-campus Research

## MAT 197, MAT 297, MAT 397, MAT 497. Independent Study

## MAT SCE. Senior Capstone Experience

The Senior Capstone Experience in mathematics consists of two components:
a senior thesis and oral presentation AND
the solution and oral presentation of six approved problems or equivalent.

Each major will research and write a senior thesis with the supervision of a faculty member and will make an oral presentation on the thesis at a departmental seminar. Each major should have a thesis topic selected and approved by the end of his/her junior year. The senior capstone in mathematics will be graded Pass, Fail, or Honors.

Capstone problems may be selected from a departmental list of approved problems or from current issues of the following journals: Mathematics Magazine, The American Mathematical Monthly, The College Mathematics Journal, Math Horizons, The AMATYC Review, SIAM Review, Journal of Recreational Mathematics, and School Science and Mathematics. Students may also earn credit for problems solved while participating in teams in the annual ACM Programming Contest or the COMAP Mathematical Contest in Modeling. A maximum of three such problems may be credited toward the six required capstone problems. The department strongly recommends that each major complete at least two capstone problems by the end of his/her junior year. Capstone problem credit may also be earned for the oral presentation of the review of an approved scholarly paper in Mathematics. Papers may be chosen from the journals mentioned above as well as from other sources after consultation with a faculty member from
the department.

Weekly seminars of the majors and faculty in the department are scheduled to provide information about careers, graduate school, thesis topics, and research areas, as well as to enable each major to make presentations of problem solutions and to make the required presentation on the thesis. All mathematics majors are enrolled in the seminar and will receive a pass/fail grade at the end of the semester.

The Senior Capstone Experience in mathematics is graded as Pass, Fail, or Honors.

## Computer Science Course Descriptions

CSI 100. Basics of Computing
This course introduces computer programming in a modern, high-level programming language. Objectives include proficiency in the language (including variables, functions, types, flow control, and basic data structures) as well as familiarity with common computer science problem solving strategies. Students will also gain experience in team programming and in program design for practical problem solving. This course counts for distribution but does not count towards the major in computer science.

## CSI 201. Computer Science I

The objectives of this course are threefold: (a) to introduce problem-solving methods and algorithmic development; (b) to teach an object-oriented programming language; and c) to teach how to design, code, debug, and document programs in an object oriented environment using techniques of good programming style.

## CSI 202. Computer Science II

The objectives of this course are twofold: (a) to study data structures, such as stacks, queues, trees, dictionaries, tables, and graphs, their efficiency, and their use in solving computational problems; and (b) to gain proficiency in an object-oriented programming language. Exercises in that language will provide an opportunity to design and implement the data structures. Prerequisite: Computer Science 201 and Mathematics 201 or permission of the instructor.

## CSI 203. Object Oriented Programming

This course gives a deep understanding of object-oriented programming, and the design and coding of applications programs using Java. The use of Java for graphics and graphical user interfaces, multithreading, connectivity with databases and across networks will be covered. Students will be required to design and write a large application for a final course project that incorporates GUIs and a selection of the principles taught. Prerequisite: Computer Science 202 and Mathematics 201.

## CSI 240. Discrete Mathematics (cross-listed as MAT 240)

An introduction to logic, reasoning, and the discrete mathematical structures that are important in computer science. Topics include proposition logic, types of proof, induction and recursion,
sets, combinatorics, functions, relations, and graphs.

## CSI 250. Introduction to Computer Organization and Architecture

Principles of computer organization and architecture are introduced, including interfacing and communication, register and memory organization, digital logic, representation of data, and introduction to assembly language. Prerequisite: Computer Science 202 and Mathematics 201.

## CSI 340. Numerical Analysis (cross-listed as MAT 340)

Solution of equations and systems of equations by iteration and elimination, numerical differentiation and integration, assessment of accuracy, methods of interpolation and extrapolation. Prerequisite: Mathematics 203 or permission of the instructor.

## CSI 350. Theory of Computation

Formal models of computation such as finite state automata, pushdown automata, and Turing machines will be studied along with corresponding formal languages, e.g., regular languages and context-free languages. Uncomputability, including the halting problem, and computational complexity including the classes P and NP and NP-completeness will be studied. Prerequisite: Computer Science 202 and Computer Science 240.

## CSI 360. Database Systems

An introduction to the design and use of databases together with insights into the key issues related to the use of database systems. The course covers the entity-relationship model; the hierarchical, network, and relational data models, and their languages; functional dependencies and normal forms; the use of SQL language, and the design and implementation of relational databases using MS ACCESS and MySQL. Prerequisite: Computer Science 202 and Computer Science 240, or permission of the instructor.

## CSI 370. Design and Analysis of Algorithms

The topic of this course is the design of computer algorithms and techniques for analyzing their efficiency and complexity. Types of algorithms include greedy algorithms, divide and conquer algorithms, dynamic programming, searching and sorting. Prerequisite: Computer Science 202, Computer Science 240.

## CSI 450. Operating Systems

Introduction to operating systems including tasking, memory management, process scheduling, file systems, protection, and distributed systems. Prerequisite: Computer Science 250.

## CSI 460. Artificial Intelligence

Explores the principles and techniques involved in programming computers to do tasks that usually are thought of as requiring intelligence when done by people. State-space and heuristic search techniques, logic and other knowledge representations, and statistical and neural network approaches are applied to problems such as game playing, planning, the understanding of natural language, and computer vision. Prerequisite: Computer Science 202.

## CSI 470. Computer Networks

This course covers the principles, structure, and operation of computer networks. Emphasis will be placed on understanding the protocols and mechanisms used in the Internet, and in local and wide-area networks. The student will write application-level programs running on the LINUX or Windows operating systems. Prerequisite: Computer Science 240, Computer Science 250, and a strong background in C++ and Java.

## CSI 480. Software Engineering

The topic of this course is the systematic process for creating software products as opposed to simply coding programs. The course covers project and product management, software architecture and design patterns, working in teams and communicating effectively. The course provides individualized and collaborative experience and a broad understanding of the practical skills necessary to be an effective software engineer in a professional environment.
Prerequisite: Computer Science 203 (or Computer Science 202 with permission of the instructor).

CSI 194, CSI 294, CSI 394, CSI 494. Special Topics in Computing
Study of an area of computer science not covered in other courses. Students are urged to suggest possible topics to the department as their interests and needs develop. Prerequisite: Permission of the instructor.

CSI 190, CSI 290, CSI 390, CSI 490. Internship

## CSI 195, CSI 295, CSI 395, CSI 495. On-campus Research

## CSI 196, CSI 296, CSI 396, CSI 496. Off-campus Research

## CSI 197, CSI 297, CSI 397, CSI 497. Independent Study

## CSI SCE. Senior Capstone Experience

The Senior Capstone Experience in Computer Science can take one of two forms: a senior thesis and oral presentation on a topic in theoretical computer science; OR a senior programming project with a written exposition and oral presentation.

Each major choosing the thesis option will research and write a senior thesis with the supervision of a faculty member and will make an oral presentation on the thesis at a departmental seminar. Each major choosing the thesis option should have a thesis topic selected and approved by the end of his/her junior year. For students with double majors in mathematics and computer science, this thesis may also satisfy the thesis requirement of the Senior Capstone Experience for a major in mathematics.

Each major choosing the programming project option will complete the project with the
supervision of a faculty member and will also complete a written exposition and make an oral presentation on the project at a departmental seminar. Each major choosing the programming project option should have a project selected and approved by the end of his/her junior year.

For students with double majors in mathematics and computer science, the senior programming project may be awarded credit for some of the problems to be done as part of the Senior Capstone Experience for a major in mathematics. The Chair will decide the number. Students may also earn credit for problems solved while participating in teams in the annual ACM Programming Contest or the COMAP Mathematical Contest in Modeling.

A maximum of three problems from these alternative sources may be credited toward the six required capstone problems in mathematics.

Weekly seminars of the majors and faculty in the department are scheduled to provide information about careers, graduate school, thesis ideas, and research areas, as well as to enable each major to make the required presentation on the thesis or programming project.

The Senior Capstone Experience in computer science is graded as Pass, Fail, or Honors.

## Music

## Division of Humanities and Fine Arts

Jonathan McCollum, Chair<br>Matthew Brower<br>Davy DeArmond<br>J. Ernest Green<br>Lori Kesner<br>John Leupold<br>Kimberly McCollum<br>Matt Palmer<br>Woobin Park<br>Eric Plewinski<br>Heidi Schultz<br>Kenneth Schweitzer<br>Jonathan Steele<br>Bennett Umhau<br>Keith Wharton<br>Carolene Winter

Music transcends time and geographic boundaries. The study of music, as a diverse human cultural expression, includes not only the analysis of the music itself, but importantly, the very processes that shape the uses and functions of music in society, such as the construction of historical memory, the role of music in human migrations, kinesics (bodily movement) as well as other socio-cultural factors such as the role of music in shaping identity, its use in ritual and belief systems, as a tool for political activism, and as a creative artistic expression. In this spirit, the Department of Music recognizes and celebrates the diversity of musical experiences-from performance and education to music business and production.

As a model for true liberal arts learning, the Department of Music's educational goals are guided by an interdisciplinary approach to teaching music. In the medieval university, music, arithmetic, geometry, and astronomy together formed the quadrivium, the upper division of the seven liberal arts. In addition, music held an important position in the philosophy and theology of the age. The music department at Washington College is committed to assisting both students who expect to study music in preparation for a professional career, as well as those who wish to pursue music as an interest or avocation. Our BA degree program is flexible and divided into specific advisory tracks that include performance (vocal and instrumental), music education, music history and criticism, world music and ethnomusicology, theory and composition, and the traditional liberal arts. The course offerings provide solid preparation for a lifelong engagement with music.

All students pursuing the study of music in a liberal arts setting, regardless of intended major or
future career, are given opportunities to explore music and to develop their individual musical talents through a selection of classroom experiences, private lessons, and ensemble offerings.

## MAJOR REQUIREMENTS

The music major at Washington College requires 58 credits ( 14.5 courses which includes a 4 credit Senior Capstone Experience).

## Music Theory (16 credits)

- MUS 131, 132, 231 (Music Theory I, II, III)
- One of the following 300/400-level Music Theory Courses: MUS 330 - Analysis of Popular Music, MUS 331 - Analytical Techniques, or MUS 430-Orchestration and Arranging


## Music History (8 credits)

Two courses selected from the following History of Western Music sequence:

- MUS 203. Ancient to Baroque
- MUS 204. Classical to Romantic
- MUS 205. Music Since 1900


## World Music Elective (4 credits)

One course selected from the following:

- MUS 104. Introduction to World Music \& Ethnomusicology
- MUS 313. Music of Latin America
- MUS 314. Music of Asia
- MUS 327. Music, Ritual, \& Early Christianity
- MUS 406. Theory and Method in Ethnomusicology


## Music Electives (8 credits)

- Any two four-credit courses in music (except MUS 100)


## MUS 400: Music Practicum ( 0 credits); must be enrolled every semester while a declared major

## Performance Requirements (18 credits)

## Performance Requirements for students of Brass, Woodwind, Percussion, Strings, and Voice

- Four semesters of two-credit (400-level) applied music in their declared area (8 credits)
- Two semesters of two-credit (400-level) applied or class piano, or by passing a piano proficiency exam (4 credits)
- Performance ensemble participation (6 credits):
- Brass, Woodwind, and Percussion students must acquire at least four credits in

MUS 277 Symphonic Band. The remaining two credits may come from any other ensemble offered by the Department of Music.

- String students must acquire at least four credits from MUS 291 String Orchestra.

The remaining two credits may come from any other ensemble offered by the Department of Music.

- Voice students must acquire at least two credits from MUS 283 College Chorus. The remaining two credits may come from any other ensemble offered by the Department of Music.


## Performance Requirements for students of Guitar and Composition

- Four semesters of two-credit (400-level) applied music in their declared area (8 credits)
- Two semesters of two-credit (400-level) applied or class piano, or by passing a piano proficiency exam (4 credits)
- Six additional credits of additional applied music or ensemble participation, of which at least four credits must be in a large ensemble (MUS 277 Symphonic Band, MUS 281 Jazz Ensemble, MUS 283 College Chorus, or MUS 291 String Orchestra) (6 credits)


## Performance Requirements for students of Piano

- Four semesters of two-credit (400-level) applied music in applied piano (8 credits)
- Ten additional credits of additional applied music or ensemble participation, of which at least four credits must be in a large ensemble (MUS 277 Symphonic Band, MUS 281 Jazz Ensemble, MUS 283 College Chorus, or MUS 291 String Orchestra) (10 credits)


## Other Expectations

- Music majors should regularly enroll in MUS 400 Performance Practicum every semester they are a declared major. This course provides experiential learning for majors and minors through participation in music department events. By enrolling in this course, students commit to completing all required activities during the indicated semester. Course requirements will be clearly outlined by the instructor(s) at the beginning of the semester. These requirements will typically include: attendance at concerts, attendance at department-sponsored lectures/masterclasses, and attending general information meetings. This is a zero-credit course and is graded pass/fail. Majors must enroll in and pass the course four times; minors must enroll and pass twice.
- If a music major intends to pursue graduate work in music, the department strongly recommends studying two years of German or French, in that order of preference.


## SENIOR CAPSTONE EXPERIENCE (4 credits)

The Senior Capstone Experience in music may be fulfilled by writing an extensive research paper or an extended composition; by presenting a research paper in conjunction with a lecture recital; by performing an hour-long solo recital; or by combining a half recital with a research paper. Students may pursue an alternate Senior Capstone Experience project with the approval of the department chair. Students who double major are encouraged to explore a project that satisfies both majors. The SCE will be accorded Pass, Fail, or Honors, and, upon successfully
completing it, the student will receive four credits.

## MUSIC MINOR REQUIREMENTS

For the music minor, students are required to take MUS 131, 132, and twenty additional credits selected in music, including history, ethnomusicology, theory, applied music, and ensembles. In addition, minors must attend and participate in department-designated performances and events.

## ETHNOMUSICOLOGY MINOR

Using music as an entry into a variety of cultures, social classes, and populations, the ethnomusicology minor offers a unique opportunity for students interested in both music and anthropology. Ethnomusicologists take a global, interdisciplinary approach to the study of music and seek to understand music as a social practice, viewing music as a human activity that is shaped by its cultural context. Ethnomusicologists often engage in ethnographic fieldwork, by participating in and observing the music being studied, and frequently gain facility (or expertise) in another music tradition as a performer or theorist. Ethnomusicologists also conduct historical research utilizing the methods of historiography, manuscript analysis, archaeomusicology, and archival/museum research. Students who study ethnomusicology have a global outlook, are critical thinkers, and are better able to appreciate the cultural and aesthetic diversity of the world and communicate in ways that are ethically sensitive.

The minor in ethnomusicology is 23 credits and is open to students in all subject areas, including music. To ensure that music students take this opportunity to expand their knowledge in a supplemental area, music majors who minor in ethnomusicology will have to observe the following guidelines: (1) they may only double count 2 courses between the MUS major and the Ethnomusicology minor and (2) at least 2 of the courses used to satisfy the minor must be offered by the Anthropology department. Students will not be permitted to minor in both music and ethnomusicology simultaneously. For more information, see the catalog entry ETHNOMUSICOLOGY.

## DISTRIBUTION REQUIREMENT

To fulfill the Quantitative component of the Natural Sciences and Quantitative distribution requirement, students may complete two consecutive courses in the music theory sequence (MUS 131, 132, 231). If the student chooses to take two Natural Science courses, then any one course in music theory (MUS 131, 132, 231) may be used to satisfy the Quantitative component.

To fulfill the Humanities and Fine Arts distribution requirement with two Fine Arts courses and one Humanities course, students may complete eight credits of Music courses (except MUS 131,132 , or 231 ). This includes any combination of applied music (private instruction) and musical ensembles. To fulfill the Humanities and Fine Arts distribution requirement with one Fine Arts course, students may complete any four credits of Music courses (except MUS 131, 132, or 231) along with two Humanities courses.

## Applied Music

Instruction in applied music solves technical problems, develops knowledge of the literature, and teaches performance techniques. 200-level applied music courses are one-credit and are open to all students. Each course consists of a weekly 30-minute individual lesson. One hour of daily practice is expected. For non-majors, there is an additional fee of $\$ 360$ for each 200-level applied music course. The fee is waived for music majors.
251. Voice
253. Piano
255. Woodwinds
257. Guitar/Lute
259. Brass
261. Strings
263. Percussion/Drums
265. Composition

400-level applied music courses are intended for advanced students, and may require auditions. They are 2 credits and are open to all qualified students. Each course consists of a weekly 60 -minute individual lesson. One to two hours of daily practice per hour lesson is expected. For non-majors, there is an additional fee of $\$ 720$ for each 400 -level applied music course. The fee is waived for music majors.
451. Advanced Voice
453. Advanced Piano
455. Advanced Woodwinds
457. Advanced Guitar/Lute
459. Advanced Brass
461. Advanced Strings
463. Advanced Percussion/Drums
465. Advanced Composition

## Music Ensembles

Music ensembles are one credit. Although students may register directly for music ensemble courses, their enrollment in the course may be subject to an audition. Students who do not successfully audition for an ensemble will be dropped from the course by the instructor or by the department chair for music, who will communicate an enrollment list to the Registrar's Office once auditions for the ensemble are complete. Auditions sometimes take place beyond the Drop/Add deadline for a semester. Additionally, spaces in these courses are not always guaranteed. Therefore, full-time students are encouraged to plan their course load in such a way that they will not drop below full-time status if they do not succeed in their audition.

## 266. Pan Pipe Ensemble

This ensemble focuses on learning to perform the panpipe music of South American Andean communities, a diverse culture comprising the South American countries of Bolivia, Colombia, Ecuador, and Peru. Open to all. No prior musical experience required.

## 277. Symphonic Band

The Symphonic Band studies and performs concert band and wind ensemble music from various musical periods. Membership is open to qualified students.

## 278. Steel Pan Ensemble

The Steel Pan Ensemble (Steel Revolution) offers students an opportunity to explore the Trinidadian steel band tradition, as well as classical and popular arrangements and transcriptions. Students learn to perform on steel band instruments and study the social, historical, and cultural context of the ensemble. Readings, recordings, and video viewings supplement in-class instruction. The ensemble will present public performances. Prerequisite: Permission of the instructor.

## 279. Japanese Music Ensemble

By the Edo period (1603-1868), three instruments had emerged from various directions to become popular among the Japanese people. The koto, a 13-string zither, the shamisen, a 3 -string banjo-like instrument, and the shakuhachi, a Zen Buddhist bamboo flute. In this new ensemble, students are introduced to these instruments, have the opportunity to research, write about, and learn how to perform on an instrument of the student's choice. Students also learn the unique notation systems of each instrument, as well as gain a deep understanding of Japanese traditional arts in relation to the social, ideological, and cultural development of Japanese traditional aesthetics.

## 281. Jazz Ensemble

The Jazz Ensemble presents programs each semester and plays at various College functions throughout the year. Membership is open to qualified students.

## 283. College Chorus

The College Chorus performs music from all principal style periods. Membership is open to all students.

## 285. Early Music Consort

The Early Music Consort is an instrumental ensemble that performs music from the Middle Ages, Renaissance, and Baroque eras on period instruments. Membership is open to qualified students.

## 291. String Orchestra

The String Orchestra studies and performs orchestral music from various musical periods. Membership is open to qualified students.

## 295. Afro-Cuban Ensemble

The Afro-Cuban Ensemble focuses primarily on the Cuban drum and song traditions associated with rumba and Santeria. Musical literacy is not a requirement; instead, rhythms and melodies will be transmitted via the oral traditions that are prevalent in Cuba. Prerequisite: Permission of the instructor.

## 475. Jazz Combo

The Jazz Combo allows advanced jazz students to perform various styles of jazz literature, including standards, original compositions and arrangements. Ample opportunity is given for improvisation. The Combo presents programs each semester and performs at various College functions throughout the year. The ensemble is open to students through auditions, which take place at the beginning of each semester. Prerequisite: Permission of the instructor.

## 479. Chamber Singers

Chamber Singers perform music from all principal periods and performs both on and off campus. The ensemble is open to students through auditions, which take place at the beginning of each semester. Prerequisite: Permission of the instructor.

## 487. Chamber Ensembles

Various woodwind, brass, and string ensembles (duets, trios, quartets, quintets) perform in recitals throughout the year. The ensembles are open to students through auditions, which take place at the beginning of each semester. Prerequisite: Permission of the instructor.

## Course Descriptions

## Music History/Literature, World Music and Ethnomusicology, and Music Theory

## 100. Introduction to Music

An introduction to music, including the study of notation, the basic elements of music theory, terminology, instrumentation, form, and the basic style periods. Representative works will be examined, and the aesthetics of music will be considered. Intended for students with little or no background in music.

## 104. Introduction to World Music and Ethnomusicology

An introduction to music of the world, including popular, folk, religious and classical traditions. Explores the way ethnomusicologists organize and analyze knowledge about the world, while investigating the ways music acquires meaning in performances that are socially, historically, and culturally situated.

## 106. Rock, Pop and American Culture

An examination of popular music in America from the 1830s through the modern day. With a particular emphasis being placed on the 1950s and 1960s, students will develop an understanding of the cultural, political, and economic forces of these eras and will examine how popular music history intersects with all aspects of American history and culture. This course
also examines several important threads in popular music history, including the ever-present, but ever changing, role of race relations, the impact of evolving technologies, and the history of the music industry. In addition to reading the assigned textbook, students are also asked to watch/listen to important archival performances, televised interviews with notable musicians, radio interviews with scholars of popular culture, and other relevant primary sources.

## 131. Music Theory I

The basic goal in music theory courses is to focus on the growth and development in the areas of comprehension, skills, and creativity. The academic approach will be to study and apply principles of melodic, harmonic, contrapuntal and formal structures, which are basic to musical composition and essential to the serious musician. The lecture portion of this course will focus on the elements of diatonic harmony through part-writing, formal analysis, and composition. The ear-training portion will focus on the development of intervals, triads, rhythmic study/dictation, melodic dictation, and sight-singing. Recommended for participants in performance groups.

## 132. Music Theory II

As a continuation of MUS 131, Music Theory II will continue the development of music comprehension through theory lectures/exercises and aural skills training. The lecture portion of this course will focus on part writing, the study of diatonic harmony, and formal analysis. The ear-training portion of this course will focus on the continuation and development of intervals, triads, seventh chords, melodic dictation, harmonic dictation, rhythmic dictation, as well as sight-singing and rhythmic studies. Recommended for participants in performance groups. Prerequisite: MUS 131 (Students who have a strong background in theory may take an examination to receive advanced standing and exemption from this prerequisite).

## 135. Class Piano I

Class Piano I introduces the art of piano playing through establishing fundamentals in proper piano technique and facility. Simplified classical and popular literature will be taught in conjunction with fundamental music theory, technique, rhythmic exercises, and sight-reading. It is a prerequisite course for those students wishing to take applied music piano lessons, but have no prior experience with the piano instrument.

## 136. Class Guitar I

Class Guitar I offers group instruction in the fundamental principles of playing the guitar. Students will be introduced to a variety of styles and techniques for the guitar, and will learn to read standard notation and tablature. Course goals are to develop and improve technical skills and musicality, while gaining a deeper understanding of music theory, fretboard harmony, and performance practice of various stylistic periods and musical genres. No prior experience is required.

## 203. History of Western Music: Ancient to Baroque

An examination of music in Western culture from its roots in ancient Greece to 1750. This
course covers the Ancient, Medieval, Renaissance, and Baroque periods of music history. Areas of focus include the transformation of musical language and form, notions of musical creativity, music and politics, and the sociology of listening. These themes will be explored through close readings and analyses of significant musical, literary and philosophical works. This course requires that students have an advanced knowledge in reading and writing music notation.

## 204. History of Western Music: Classical to Romantic

An examination of music in Western culture from the end of the Classical to the Romantic periods. Areas of focus include the transformation of musical language and form, notions of musical creativity, music and politics, and the sociology of listening. These themes will be explored through close readings and analyses of significant musical, literary and philosophical works. This course requires that students have an advanced knowledge in reading and writing music notation.

## 205. History of Western Music: Music since 1900

An examination of music in Western culture since 1900. This course covers Impressionism, Modalism, Expressionism, Free Atonality, Modernism, Neoclassicism, Nationalism, Minimalism, and Postmodernism. Areas of focus include the transformation of musical language and form, notions of musical creativity, music and politics, and the sociology of listening. These themes will be explored through close readings and analyses of significant musical, literary and philosophical works. This course requires that students have an advanced knowledge in reading and writing music notation.

## 206. Jazz History

Jazz is both a uniquely American style as well as an international collaboration. Beginning with an examination of the roots and antecedents of jazz in the mid 1800s, students will learn the artistic contributions of many notable instrumentalists, vocalists, bandleaders and arrangers. Particular emphasis will be placed upon understanding the musical and social forces that influenced each artist, and the role of each artist in encouraging innovation and development within this art form. Prior musical experience is not required.

## 231. Music Theory III

Upon completion of Music Theory I and II, students will have gained a basic knowledge of diatonic harmony. Music Theory III will delve into more advanced topics address diatonic and chromatic harmonies, as well as large-scale form. The lecture portion of this course will focus on more advanced work in diatonic harmony, including applied chords, modulation, form, modal mixture, and other chromatic harmony. This will be accomplished through part-writing, formal analysis, and composition. The ear-training portion will focus on the continued development of intervals, triads, rhythmic study/dictation, melodic dictation, harmonic dictation, and sight-singing. Prerequisite: Music 132.

## 233. Conducting I

A study of basic conducting skills, score reading, rehearsal techniques, and the elements of arranging. Prerequisite: Music 132 or permission of the instructor.

## 234. Creative Process

In this course students learn how to develop an idea over time. Students are expected to focus on one concept and develop it more fully each week as the semester progresses. All media and art forms are acceptable, including the written word, video, performance, painting, photography, sound, construction, etc. Though centered upon the student and their ability to be objective about their work, it also demands they help others to see the values, problems, and potentials in their work. Thoughtful class participation in the form of discussion during weekly presentations and critiques is expected from each student. 3 contact hours per week. Prerequisite: One course of Studio Art, Music, Theatre, or Creative Writing or permission of the instructor.

## 235. Class Piano II

Class Piano II teaches the art of piano playing through establishing fundamentals in proper piano technique and facility. This course is a continuation of Class Piano I and is designed for students who already possess basic piano skills. Intermediate level classical and popular literature will be taught in conjunction with fundamental music theory, technique, rhythmic exercises, and sight-reading. Prerequisite: MUS 135, or by instructor permission.

## 236. Class Guitar II

Class Guitar II offers Intermediate/advanced group guitar instruction. In a group setting, students will learn music from various stylistic periods and genres, and will continue to develop technical and musical skills on the guitar. Prerequisite: MUS 136, or by instructor permission.

## 303. American Music

A study of music in the colonies and the United States from the various editions of the Bay Psalm Book to the music of the present.

## 304. Opera

Opera from the Florentine era to the present. The elements that comprise opera are studied, and representative works are analyzed. Students attend performances at the Washington National Opera as part of their study in the course.

## 313. Music of Latin America

Students will be introduced to ethnomusicological theory and method, while focusing on the musical practices of selected regions in South and Central America and the Caribbean. Folk, ritual, popular, and art/classical traditions will be examined in the contexts of cultural issues such as belief systems, politics, aesthetics, and identity.

## 314. Music of Asia

Using selected musical areas from Asia, this course introduces and reinforces the basic concepts of ethnomusicology and trains students to develop listening and musicological
analytical skills. We will examine folk, ritual, popular, and art/classical traditions in the contexts of cultural issues, such as belief systems, politics, aesthetics, and identity.

## 327. Music, Ritual and Early Christianity

Using music, ritual, and liturgical analyses, this course investigates the historical, social, political, and intellectual circumstances that led to the eventual success of Christianity as a major religion of the world. Examples are drawn from Eastern Orthodoxy and Catholicism.

## 328. The Symphony in Context: History and Development

This course traces the history and development of the symphony from its roots in music of the late Baroque, its development in the Classical and Romantic periods, and its interpretations during the twentieth century. Using symphonic literature and readings as sources for analyses, this course examines both the musical innovations and social contexts of key composers and style periods. This course requires that students have an advanced knowledge in reading and writing music notation. Prerequisite: MUS 132 or permission of instructor.

## 331. Analytical Technique

A study of the principles of musical organization through analysis of compositions from diverse periods in music history. Prerequisite: MUS 232 or permission of the instructor.

## 332. Music Technology

A study of a variety of technologies associated with music recording, post-production, performance and composition. Students will become familiar with advanced software, a variety of recording equipment, and MIDI peripherals. Potential students must first demonstrate competency as an instrumental or vocal performer.

## 333. Conducting II

Advanced study of conducting skills, score reading, and rehearsal techniques. Prerequisite: MUS 233 or permission of instructor

## 350. Analysis of Popular Music

This class introduces different theoretical and analytical approaches to the study of popular music. Students will examine form, phrase structure, pitch syntax, rhythm and meter, texture, timbre, recording techniques, and other parameters, in order to understand how these elements are organized in popular music and how they combine to create expressivity and meaning. Prerequisite: MUS 231 or permission of the instructor

## 400. Music Practicum

This course provides experiential learning for majors and minors through participation in music department events. By enrolling in this course, students commit to completing all required activities during the indicated semester. Course requirements will be clearly outlined by the instructor(s) at the beginning of the semester. These requirements will typically include: attendance at concerts, attendance at department-sponsored lectures/masterclasses, and
attending general information meetings. This is a zero-credit course and is graded pass/fail. Majors must enroll in and pass the course four times; minors must enroll and pass twice.

## 406. Theory and Method in Ethnomusicology

This course examines the formation of the discipline of ethnomusicology through a survey of its history, theory, and methodology. Students read and discuss the works of major scholars in the field and examine the interdisciplinary nature of ethnomusicology, particularly its relationship with historical musicology, anthropology, folklore, linguistics, and cultural studies. Research projects will compliment theoretical discussions and technical activities associated with the field such as fieldwork, ethnography, historical research, and transcription. Prerequisite: MUS 104 or ANT 105 or permission of Instructor.

## 430. Orchestration and Arranging

A study of the fundamentals of instrumentation, orchestration, and arranging. Prerequisite: MUS 132 or permission of instructor.

## 194, 294, 394, 494. Special Topics

A period course in music history or an offering in some other specific area of interest, such as conducting, composition, or independent research.

190, 290, 390, 490. Internship
195, 295, 395, 495. On-campus Research
196, 296, 396, 496. Off-campus Research

## 197, 297, 397, 497. Independent Study

## SCE. Senior Capstone Experience

The Senior Capstone Experience in music may be fulfilled by writing an extensive research paper or an extended composition; by presenting a research paper in conjunction with a lecture recital; by performing an hour-long solo recital; or by combining a half recital with a research paper.

## Courses Offered In The Washington College Abroad Programs

103. Appreciation of Music

An introduction to Western music literature through a nontechnical presentation of various musical styles and forms. Offered in the London program only, both fall and spring semesters. Three credits.

# Near Eastern Studies Minor Interdisciplinary Minor 

Dr. Tahir Shad, Director

The Near Eastern Studies minor provides students with an opportunity to complement their major with a concentration of courses that explore the Near East and North Africa region in its historical, political, social, and cultural complexity. The minor in Near Eastern Studies requires students to study in the Middle East and North Africa at one of our partner institutions as a way to complement their coursework at Washington College, deepen their facility in language, and immerse themselves in the cultures of the region. Current Washington College study abroad programs are offered in Morocco, Turkey, Egypt, and Israel.

Students will achieve the goals of the minor by completing six courses focusing on the Near East and North Africa in at least three different departments across two divisions. Since language is essential to understanding any culture, students are also required to take French at Washington College or Arabic, Turkish, or Hebrew at a partner institution. Finally, minors must submit a research paper on the region (ordinarily as part of the required coursework for the minor).

Of the six courses required for the minor, two must be introductory courses (listed below; preferably taken during the freshman and sophomore years), and four must be upper level courses, taken both at Washington College and in the region itself. Two of the upper level courses must be taken at Washington College, and two must be taken abroad. Alternatively, participation in a Washington College summer program plus one additional course at Washington College may substitute for two courses abroad.

Introductory courses options:
ANT 105. Introduction to Anthropology
ECN 111. Principles of Macroeconomics
HIS 203, 204, 205, 206 Modern World History I, II or Early Western Civilization I, II POL 104. Introduction to World Politics

Recommended upper level courses offered at Washington College:
HIS 357 Early Islamic Civilization
POL 388 US Foreign Policy in the Middle East
FRS 312 The Contemporary Francophone World
Other special topics courses as approved by the program chair

## Pre-Nursing

Tia Murphy, Faculty Advisor

The 3:2 Pre-Nursing Articulation with the University of Maryland School of Nursing Students may earn a bachelor's degree from Washington College and then earn a bachelor of science in nursing degree (BSN) from the University of Maryland School of Nursing (UMSON). This dual-degree program requires five years of study. The first three years are spent at Washington College fulfilling the general education requirements, requirements for a major, and the prerequisites for entrance into the school of nursing. For students applying through the articulation agreement, UMSON prefers the prerequisite courses are taken at Washington College. Because of the shortened period at Washington College and the prerequisites in biology, students will usually major in biology or psychology, although other majors can be considered with departmental approval. At the University of Maryland, students enter the "Traditional Baccalaureate Program," which takes two years.

Admission to UMSON requires an application and successful completion of their requirements. Students should contact the Pre-Nursing Faculty Advisor to learn more about the specific requirements for applying to the UMSON through the articulation agreement. Successful students admitted through the articulation agreement have at least a 3.25 cumulative GPA. Students also have the option of applying through the University of Maryland School of Nursing's regular admission process as a four-year Washington College student. For these students, applicants are reviewed on an individual basis and admission is not guaranteed.

Once matriculated to UMSON, students' successful completion of their first year will satisfy the requirements for a bachelor's degree from Washington College. To be eligible for graduation from Washington College, students must see that the Registrar of Washington College receives their transcripts from the University of Maryland by the appropriate graduation deadline. In their first year at the nursing school, students must plan to carry sufficient credits to satisfy the graduation requirement of Washington College.

It is recommended that students intern in a healthcare setting to prepare for their future career. Students may speak with the Pre-Nursing Faculty Advisor or the Director of Pre-health Professions Programs for information about internship opportunities.

## Prerequisite Courses for the University of Maryland School of Nursing

BIO 111 \& BIO 112. General Biology (w/lab)
BIO 203. Microbiology (w/lab)
BIO 301. Integrative Human Anatomy (w/lab)
BIO 424. Integrative Human Physiology (w/lab)
CHE 120. Chemical Principles of Organic Molecules (w/lab)
Nutrition. (Must be taken elsewhere.)

MAT 109 or PSY 209. Statistics
Mathematics. (any college math course, but not a computer science course)
ENG 101. English Composition
ENG 200-level. Literature
PSY 111 or PSY 112. General Psychology
PSY 202. Lifespan Development
SOC 101. Intro to Sociology
Social Sciences Elective. One course from the following: Anthropology, Economics, History, International Studies, Political Science, or another course in Psychology or Sociology
Humanities Electives. Three courses from the following (from at least two different departments): English, Philosophy, Art, Music, Theatre, Dance, Religion, or Foreign Languages
Open Electives. Two additional courses.
Grades lower than a C in prerequisite pre-nursing courses are not typically accepted by Nursing Schools.

## Biology and Psychology 3:2 Major Requirements

Requires the completion of 96 credit hours before leaving Washington College
Requires the completion of all general education requirements prior to leaving Washington College

## For A Major in Biology:

BIO 111 \& BIO 112. General Biology (w/lab)
BIO 203. Microbiology (w/lab)
BIO 301. Comparative Vertebrate Anatomy (w/lab)
BIO 424. Comparative Animal Physiology (w/lab)
One course from Category I, II, or III (see Biology Description in Catalog). Immunology or Genetics is recommended
One course from Category I, II, III, IV, or V
CHE 120. Chemical Principles of Organic Molecules
CHE 140. Reactions of Organic Molecules
CHE 220. Quantitative Chemical Analysis
MAT 201. Differential Calculus

## For A Major in Psychology:

PSY 111 \& 112. General Psychology
PSY 209. Statistics and Research Design I*
PSY 309. Statistics and Research Design II*
PSY 202. Life-span Development
Applied/Clinical Requirement (Options: PSY 233, 234, 304, 313*, 320*, 333, 433*, 410*: Human
Neuropsychology)
Biological Requirement (Options: PSY 210*, 305*, 317*, 410*)

* Course has a lab component


## Advising

The strict requirements of this program make it imperative that interested students start planning their schedules of courses early in the first year at Washington College. It is strongly recommended that students contact the Pre-Nursing Faculty Advisor, Dr. Tia Murphy, soon after their arrival on campus and attend information sessions on the 3:2 Pre-Nursing Program during orientation. Students should continue to meet with the Pre-Nursing Faculty Advisor on a semester basis.

## Letter of Agreement with Johns Hopkins School of Nursing MSN: Entry into Nursing Degree Program

Washington College has established a letter of agreement with Johns Hopkins School of Nursing's (JHSON) Master of Science in Nursing (MSN): Entry into Nursing Program. Qualified students who obtain their bachelor's degree at Washington College and subsequently enter the JHSON Entry into Nursing degree program gain the essential knowledge and skills required to take the RN licensure exam, while also earning their MSN degree at JHSON. Although this letter of agreement does not guarantee admission for Washington College students into their program, extra guidance is provided. Specifically, JHSON provides a dedicated program liaison to work with the Faculty Advisor to the Pre-nursing Program and interested pre-nursing students to facilitate information exchange and guide qualified students through the application process for the MSN: Entry into Nursing Program.

Students can major in the discipline of their choice at Washington College. Interested students should contact the Pre-Nursing Faculty Advisor, Dr. Tia Murphy, as soon as possible. The Pre-Nursing Faculty Advisor can guide students through the requirements and application process. Students will apply at the beginning of their final year at Washington College.

Students applying to JHSON through the letter of agreement must have a cumulative GPA of 3.2 or higher and will be required to complete the prerequisite courses listed below with a grade of $B$ or better. Please note that several of these courses have prerequisite courses.
BIO 203. Microbiology (w/lab)
BIO 301. Integrative Human Anatomy (w/lab)
BIO 424. Integrative Animal Physiology (w/lab)
PSY 202. Lifespan Development Psychology
PSY 209/MAT 109/BUS 109. Statistics
Nutrition. (Must be taken elsewhere.)

## Pre-Nursing 4-Year Option

Students interested in pursuing a career in nursing can also earn a four-year bachelor's degree at Washington College while completing the prerequisite courses for nursing school. Following graduation, students can attend nursing school elsewhere to earn a bachelor's degree through
an accelerated bachelor of science in nursing degree (BSN) program or choose a direct entry master of science in nursing degree (MSN) program.

Students should work with the Pre-Nursing Faculty Advisor and the Director of Pre-health Professions Programs to plan coursework and seek advice when applying to nursing schools. Students should refer to the website for each nursing school for which they would like to submit an application and contact personnel at the nursing school to learn more about each program. For more information on the most frequently required prerequisite courses for nursing school, please see the pre-nursing section of the Washington College website.

# Peace and Conflict Studies Minor Interdisciplinary Minor 

Dr. Christine Wade, Director

Peace and conflict studies is an interdisciplinary area of study that emerged in the post World War II era that seeks to promote a greater understanding of causes of war and ways of resolving conflicts without resorting to violence.

The goals of the minor are to expose students to the nature of contemporary conflicts, increase awareness about the practices and philosophies that guide peacemaking, and to help students develop a critical understanding of policies and values about conflict, war, and peace. The minor is composed of six courses, as well as either an experiential learning component or a senior capstone project. Minors are encouraged to meet with the program advisor prior to the second semester of their sophomore year to develop a coherent course of study.

## Minor Requirements:

## Minors are required to take POL 201 Theories of Peace and Conflict and five (5) courses from the three categories listed below:

a) Two courses on the philosophical approaches and practical applications of peace and peace processes. Courses in this category include religious approaches to our conceptions of peace and those focusing on the resolution of conflict and peacebuilding. Students are required to take either POL 373, POL 374, or POL 386 and any additional course in this category which includes:

- PHL 111. Introduction to Comparative Religion: Western
- PHL 112. Introduction to Comparative Religion: Eastern
- PHL 225. Ethical Theory
- PHL 235. Foundations of Morality
- PHL 335. Philosophy of Law
- PHL 416. Philosophy of Buddhism
- POL 373. Human Rights and Social Justice
- POL 374. International Law and Organization
- POL 386. Comparative Peace Processes
b) One course exploring contemporary conflict. Students are required to take one course exploring area studies of conflict-prone regions. Courses in this category include:
- HIS 360. Twentieth Century Germany
- HIS 371. History of South Africa
- HIS 381. History of Modern China
- HIS 383. History of Modern Japan
- HIS 392. Russia and the Soviet Union
- POL 347. Chinese Politics and Foreign Policy
- POL 348. Latin American Politics
- POL 351. Politics, Religion and Ethnicity in South Asia
- POL 356. Civil War and Violence in Africa
- POL 382. US-Latin American Relations
- POL 388. US Foreign Policy in the Middle East
c) Two courses on the structural causes of violence and conflict, including inequality, poverty, racism, repression, and demographic stresses. Students are required to take either POL 341, POL 342 or POL 371, and any additional course in this category which includes:
- ANT 320. Race and Ethnicity
- ECN 218. Economic Development
- PHL 226. Global Ethics
- PHL 414. Philosophy of Marxism
- POL 341. Politics of Development
- POL 342. Revolutions, Violence and Terrorism
- POL 371. International Politics
- SOC 221. Social Inequalities
- SOC 240. Criminology

Note: No more than two courses taken at abroad institutions may be applied to the minor. Any courses taken abroad for the minor must be approved by the program advisor.

Minors are also required to complete either an experiential learning exercise or a Senior Capstone Experience. For the Experiential Learning option, students are required to participate in a semester-long applied learning experience in the field of conflict resolution. Such activities include the Model UN course, internship, or volunteer activity. Alternatively, minors may complete a senior capstone experience in their respective major discipline on a topic related to peace and conflict studies. Minors should seek the approval of program advisor prior to either endeavor.

## Pharmacy

A Dual-Degree (3:4) Program
Martin Connaughton, Program Advisor

For students with a strong interest in a liberal arts education and a career in pharmacy, Washington College and the University of Maryland offer the 3:4 Pharmacy Program. Through this program, students may earn a bachelor of science degree from Washington College and a doctor of pharmacy degree (Pharm. D.) from the University of Maryland School of Pharmacy (UMDSOP). A Pharm. D. is the current standard for today's pharmacists. This dual degree program requires a minimum of seven years of study: The first three years are spent at Washington College, completing the Washington College general education requirements and the prerequisites for entrance into the UMDSOP. After the third year at Washington College, four years of additional study are required at the School of Pharmacy.

Consideration of the prerequisite courses for entrance into the UMDSOP leads to the recommendation that students major in biology. Students in this program will receive their B.S. degree from Washington College after successful completion of the first year of courses in the Pharm. D. program. To be eligible for graduation from Washington College, grades from the UMDSOP must be submitted to the Washington College registrar by the appropriate deadline. Because the academic calendar at the University of Maryland generally runs behind that of Washington College, students in the 3:4 program might not be able to participate in graduation exercises after their first year in the Pharm. D. program.

## Prerequisites to enter the School of Pharmacy: <br> Natural Sciences

Biology (w/lab) 5 semesters: BIO 111, 112, 203, 301, 424
Chemistry (w/lab) 4 semesters: CHE 120, 140, 220, 240
Physics (w/lab) 2 semesters: PHY 111, 112
Mathematics 2 semesters: MAT 109, 201

## Humanities and Social Sciences

English Composition 1 semester
ECN 112. Microeconomics
Other humanities and social sciences 4-6 semesters

## Additional requirements for completion of the BS at Washington College: <br> Required of all students

Completion of 96 credit hours before leaving Washington College.
Completion of all distribution courses before leaving Washington College
Completion of the required FYS seminar course.

## Required for the Major in Biology

BIO 203. Microbiology
BIO 301. Integrative Human Anatomy
BIO 424. Comparative Animal Physiology
Any additional upper-level biology course
A Senior Capstone Experience is not required unless a student wishes to be eligible to graduate with departmental honors.

## Advising and application

The numerous requirements of this program make it imperative that interested students and their advisors lay out an appropriate schedule of courses as soon as possible! Prospective students should contact the 3:4 Pharmacy Advisor during the freshman orientation period and take required courses beginning with the first semester at Washington College. Each semester, students should consult with both their regular advisors and the 3:4 Pharmacy Advisor to make sure that they are meeting all requirements of the program.

Students can obtain an internship at a local pharmacy to get experience before applying to the School of Pharmacy. For additional assistance in finding pre-pharmacy experience please make an appointment with the program advisor.

Admission to the University of Maryland School of Pharmacy is a separate process, and it is highly competitive. Washington College students are not guaranteed positions in the School of Pharmacy. Students participating in the 3:4 Pharmacy Program should submit applications to the School of Pharmacy by February 1 of the third year at Washington College. Applicants must have an overall GPA of 2.5; the average GPA for entering students has been 3.5 in recent years. Applicants must also submit results of the Pharmacy College Admission Test (PCAT), which should be taken in October prior to application to the School of Pharmacy. An admissions interview and writing assessment are required as well.

## Pre-Pharmacy 4-year option

Students interested in pursuing a career in pharmacy can also earn a four-year bachelor's degree at Washington College while completing the prerequisite courses for pharmacy school. Following graduation, students can attend pharmacy school elsewhere to earn a Pharm.D. degree

Students should work with the Pre-Pharmacy Program Advisor to plan coursework and seek advice when applying to pharmacy schools. Students should refer to the website for each pharmacy school for which they would like to submit an application and contact personnel at the pharmacy school to learn more about each program. For more information on the most frequently required prerequisite courses for pharmacy school, please see the pre-pharmacy section of the Washington College website.

## Philosophy and Religion

## Division of Humanities and Fine Arts

Jennifer Benson, Chair

Matthew McCabe
Bin Song
Peter Weigel

Philosophy—traditionally at the center of the liberal arts—asks some of the most difficult and searching questions about human existence, the nature of the universe, right and wrong in human conduct, and the basis of our social and political arrangements. In so doing, it gives the mind the greatest possible leeway to doubt, probe, and criticize.

The courses of the Department of Philosophy and Religion have four main purposes: (1) to acquaint the student with some of the great philosophical questions of the past and present and with leading attempts to answer them; (2) to exhibit the connections between philosophy and such related areas as art, business, law, literature, medicine, science, religion, and the environment; (3) to develop the students' capacities for clear thinking and critical analysis; and (4) to provide the basis for reflecting on right versus wrong and good versus evil in the present-day world. These aims are pursued in the atmosphere of diverse philosophical interests and approaches found among the staff of the department. Typically, students also bring varied concerns to their own explorations in philosophy and move on to careers in many diverse fields.

## Academic Requirements

A major in philosophy includes ten courses in the department selected in consultation with the major advisor. Five courses are required: PHL 100, 108, 213, 214, and either 225 or 235. (The Department urges that PHL 213 be taken before PHL 214.) Among the five elective courses required for the major, at least one must be a 400-level seminar. Majors are encouraged to take PHL435 Philosophical Methods in the Fall semester of their Junior year.

Students wishing to minor in the program may elect either a philosophy minor or a religion minor. Philosophy minors are required to take six courses: PHL 100, either 213 or 214, plus four electives in philosophy. Religion minors are also required to take six courses: PHL 100, 111 and 112 (the Comparative Religion sequence), plus three courses in religion or courses having significant religious content, given either within the Department or outside of it with permission. Courses in religion may be counted among the elective courses for the philosophy major and minor.

Distribution credit for the Humanities Requirement will be given for any two courses taken in the Department with the exception of Philosophy 108. Distribution credit for the Quantitative Requirement will be given for Philosophy 108 to those students choosing only one course in the Quantitative area. An FYS course taught by a member of the philosophy department may, in
some cases, be used instead of PHL 100 anywhere in the program, except in a departmental distribution sequence.

## Senior Capstone Experience

In addition to the ten required courses, each philosophy major must also complete the Senior Capstone Experience (SCE) which can take the form of either a senior thesis or a set of comprehensive exams. In either case majors will work in close association with a department mentor; and those majors who do successfully complete the SCE will receive four credits toward graduation.

## Course Descriptions

## 100. Introduction to Philosophy

A study of selected systems of thought designed to acquaint the student who has no training in philosophy with basic philosophical concepts and with the techniques and advantages of a thoughtful and reflective approach to problems. Topics taken up vary with the individual instructor. Offered every semester.

## 102. Contemporary Moral Issues

This course will introduce students to the basic ideas behind the major ethical theories in Western Philosophy by studying their application to numerous moral issues, problems, and controversies in our time. Possible topics for discussion and writing assignments include but are not limited to: moral consideration of animals and the environment, respect for biodiversity, population and consumption, pollution, climate change, responsibilities to future generations, corporate social responsibility, workplace ethics, advertising ethics, whistleblowing, engineering ethics, cyber ethics, the ethics of globalization, the ethics of war, euthanasia, medical experimentation on human subjects, the physician-patient relationship, health care and social justice, reproductive assistance technology, and eugenics.

## 108. Logic

A systematic overview of the rules and methods of argument. The course has three parts. The first part examines the features of arguments one finds in everyday speech and writing. A second part covers Classical Aristotelian methods of syllogistic reasoning. The third part teaches the modern use of abstract symbols to represent and assess the formal structure of proofs. This last part involves the skills of formal and quantitative reasoning. Please note that this course can only combine with two natural science courses to fulfill Natural Science and Quantitative Distribution. It may not combine with a second quantitative course. No prerequisite.

## 111. Introduction to Comparative Religion: Western

This course offers an introductory study of the central ideas in living Western religions. The course concentrates on Judaism, Christianity, and Islam. The readings focus on the primary religious texts of each religion. Consideration is also given to philosophical issues common to Western religions. No prerequisite.

## 112. Introduction to Comparative Religion: Eastern

With a view toward developing better intercultural understanding, this course introduces students to the spiritual perspectives of Eastern cultures, and to the philosophical issues at play in them. Our readings will mostly be selected from primary classical texts dealing with Hinduism, Buddhism, Zen Buddhism, and Taoism. This course is reading, speaking, and writing intensive and the course format is interactive class discussion. Prerequisite: Eagerness to engage texts.

## 210. Introduction to Political Philosophy

Political philosophy applies the tools of philosophical analysis to the challenges of politics and social life. Most fundamentally, political philosophy seeks to answer the question, how should we organize our society? The course content may focus on such themes as rights, justice, equality, freedom, power, oppression, exploitation, multiculturalism, obligations of the State, and the duties of citizenship. Prerequisite: Philosophy 100, or permission of the instructor.

## 213. History of Philosophy: Ancient

A study of the historical development of Western philosophical thought in ancient times. The main emphasis of this course will be on the Pre-Socratics, and on works of Plato and Aristotle. Prerequisite: Philosophy 100.

## 214. History of Philosophy: Modern

A study of the development of Western philosophic thought from the early Modern period through Kant. The emphasis of this course will be on the works of major figures such as Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume, and Kant. Prerequisite: Philosophy 100.

## 215. Medieval Philosophy

This course examines medieval philosophical thought and argumentation from its origins in the Greco-Roman world through the early 15th century. Major figures from Judaism, Christianity, and Islam usually include: Philo, Augustine, Anselm, Avicenna, Averroes, Maimonides, Aquinas, Scotus, Ockham, and others. Topics include the problem of universals, faith and reason, God, ethics, political theory, and the rise of science. Prerequisite: Philosophy 100.

## 225. Ethical Theory

An examination of some of the major ethical theories in Western philosophy. Applications of these theories to concrete ethical problems will be considered. Special attention will be given to Consequentialist, Deontological, and Virtue theories. Readings will be drawn from classical and contemporary authors. Prerequisite: Philosophy 100.

## 226. Global Ethics

As we become a global community, the need for secular ethical discourse becomes increasingly important. This course will explore how international culture, policy, and standards impact ethical practices around the world. Current events, anecdotes, and personal experiences will be brought together to highlight ethical theory in action in today's global environment. General topics include: the Absolutism-Relativism debate, the Ethics of Globalization, Global Business

Ethics, Global Bioethics with emphasis on feminist issues, Global Environmental Ethics, and the Ethics of Warfare and Terrorism. Prerequisite: PHL 100, or permission of the instructor.

## 235. Foundations of Morality

An examination of the moral theories of some major philosophical positions from traditions East and West: for example, Aristotle and Kant from the Western philosophical tradition, as well as Buddha and Confucius from the Eastern tradition. The aim is to systematically explore the understanding of what these positions interpret the best or most moral life to be, and of what varying views of human nature are correlated with them. Moreover, this exploration will face the question of how one decides what is the best or most moral life, and also other central questions concerning the relationship of ethics to religion and science. No prerequisite.

## 240. Philosophy of Humor

This course will explore the questions: What is meant by claiming that something is humorous or funny and why? What is the relationship between humor, reason, and the emotions? How might one understand the ethics of laughter and humor? Insights from scholars including Plato, Aristotle, Hobbes, Kant, Schopenhauer, Spencer, Freud, Bergson and contemporary authors will be discussed in a seminar-style class setting. The application of theory to everyday life will be examined and discussed through the presentation of non-philosophical examples of humor and jokes in both print and audio-visual mediums. Prerequisite: Philosophy 100.

## 245. Metaphysics and Epistemology

This course examines classic debates in metaphysics and the nature of knowledge. Close attention is given the study of philosophical argumentation and methods. Topics usually include: knowledge, mind, reality, universals, identity, time, God, and freedom. Prerequisite: Philosophy 100.

## 300. Business Ethics

A seminar focusing on major ethical theories and principles as they apply to individuals, companies, corporations, and consumers in the business world. Typical issues treated are: corporate social responsibility, government versus self-regulation, employee and consumer safety, whistle-blowing, deceptive advertising, conflicts in accounting, the environment, insider trading, issues in international business, etc. Prerequisite: Philosophy 100.

## 303. Environmental Ethics

A study of the nature and history of the environmental movement and our ethical responsibilities with regard to such current issues as the preservation of species, animal rights, the value of ecosystems, ozone depletion, and "deep" or radical ecology. Prerequisite: Philosophy 100.

## 305. Philosophy of Religion

An examination of major philosophical discussions in the Western religious tradition. Among the topics dealt with are: the existence of God, faith and reason, religious language and experience, evil and suffering, science and religion, the afterlife, and the challenges of modernity to religious
belief. Prerequisite: Philosophy 100.

## 310. Philosophy of Science

This course will begin with an exploration of the nature of scientific revolutions, along with an examination of some case studies of such revolutions from the history of science. We will go on to examine some current theories concerning the evolution of microbial life, as well as issues associated with the Darwinian understanding of biological evolution. Our primary concern will be the philosophical presuppositions and implications of such theories. On the methodological side, we will treat such issues as induction, falsification, the hypothetical-deductive method, scientific facts, experimentation, etc. Prerequisite: Philosophy 100 or permission of the instructor.

## 325. Biomedical Ethics

Biomedical ethics explores the ethical problems that arise in the context of modern medical care and biomedical research. As such, biomedical ethics involves the lives and decisions of patients, family members, doctors, nurses, and medical researchers. The course content focuses on the application of ethical theories to problems such as the rights of patients, duties of physicians, the distribution of resources, conflicts of interest in the managed care system, assisted suicide, euthanasia, end of life decisions, abortion, nature of disease, the use of human subjects in research, and the use of genetic and reproductive technologies. Prerequisite:
Philosophy 100, or permission of the instructor.

## 335. Philosophy of Law

The course explores the philosophical issues surrounding a number of areas of the law including, the nature of law, constitutional interpretation, legal responsibility, punishment, capital punishment, and legal limits to personal liberty. Readings will be drawn from classical and contemporary authors. Prerequisite: Philosophy 100.

## 410. Existentialism

A survey of the major themes and thinkers identified with existentialistic philosophy in recent times. Major emphasis will be on such thinkers as Kierkegaard, Nietzsche, Jaspers, Sartre, Tillich, and Camus. Prerequisite: Two courses in philosophy or permission of the instructor.

## 414. Philosophy of Marxism

This course begins with a focus on Hegel's philosophy of history and goes on to explore various dimensions of Marx's own thought, such as: his philosophy of history, his conception of human nature, his analysis of the structural dynamics of the capitalist system, alienation, "positive freedom," and the nature of dialectical reasoning. The course will also critically examine the dominant interpretations of Marx. Prerequisite: Two courses in philosophy or permission of the instructor.

## 415. Seminar: Marx, Nietzsche, Buddha

This course will focus on three important and major philosophical positions that share a common concern about human suffering, but that have differing, although often complementary,
ways of attempting to explain the generation of such suffering, and of addressing and alleviating it. We will work to understand, and to critically assess, each of these philosophical perspectives taken separately; but we will also work to bring out the philosophical similarities, dissimilarities, and interconnections that obtain among them. Prerequisite: Two courses in philosophy or permission of instructor.

## 416. Philosophy of Buddhism

In this course we will range over the main schools of Buddhism. We will read and discuss both primary and secondary Buddhist texts associated with the Theravada Buddhist tradition, the Zen Buddhist tradition, and the Tibetan Buddhist tradition. The format for this course is class discussion. Regular response papers and a longer paper on each of the three major currents in Buddhism will be required.

## 418. Seminar in Epistemology and Metaphysics

A detailed examination of one or several systematic approaches to the problems of epistemology and metaphysics. The specific subject matter will vary from year to year and will focus on topics such as Plato's theory of ideas, Kant's Critique of Pure Reason, or the contemporary theories of knowledge. Prerequisite: Two courses in philosophy or permission of the instructor.

## 420. Analytic Philosophy

A study of the development of analytic philosophy and its characteristic methods. Major figures include C. S. Peirce, Frege, Russell, Moore, Wittgenstein, Carnap, Quine, and select contemporary thinkers. Prerequisite: Two courses in philosophy.

## 425. Seminar in Ethics

A seminar on one major moral philosopher, movement, or issue in ethics, such as Kant, Rawls, Utilitarianism, Natural Law, the Nature of Rights, etc. Prerequisite: Two courses in philosophy or permission of the instructor.

## 435. Philosophical Methods

The course studies the nature, aims, and methods of philosophical inquiry. Readings explore questions in meta-philosophy, what philosophy is and how it is done. Study of the technical practices of philosophizing and philosophical writing prepares students for advanced work in the major. Prerequisite: Two courses in philosophy.

## 194, 294, 394. Special Topics

A topic of special interest in philosophy or religion offered at the intermediate level. Prerequisite: Philosophy 100 or permission of the instructor.

## 494. Special Topics

A detailed consideration of selected problems and areas of philosophical interest. The course may be centered on a particular topic (e.g., Philosophy of Mind or Philosophy of Buddhism), on
a certain historical period (e.g., Pre-Socratic Philosophy or Nineteenth-Century Philosophy), or on the thought of a major philosopher such as Plato, Aristotle, Aquinas, Hume, Kant, Marx, Nietzsche, Heidegger, Krishnamurti, or Nishida. Prerequisite: Two courses in philosophy, or permission of the instructor.

190, 290, 390, 490. Internship

## 195, 295, 395, 494. On-campus Research

## SCE. Senior Capstone Experience

All philosophy majors must complete the Senior Capstone Experience. This will take the form of a senior thesis. Students will be given four credits for successful completion of their Senior Capstone Experience. Each senior philosophy major will work in close association with a faculty mentor from the Department of Philosophy and Religion. The association between student and mentor will be an intensive one spanning the whole course of development of the thesis-from the initial formulation of a thesis proposal in the spring of the student's junior year to the final completion of the thesis by the conclusion of the senior year.

## Physical Education

Jonathan Jenkins
Alexa Fry
John Kiser
Kimberly Lessard
Roy Dunshee

The courses in the Physical Education program are designed to develop capacities, knowledge, and carry-over skills in health and movement essential to daily life based on the needs, interests, and abilities of the students with an emphasis on scientific bases of exercise and wellness and to develop an appreciation for physical activity as a foundation for a healthy life. The variety of Physical Education courses provide the pertinent information so the student can guide himself/herself in this direction to develop sufficient skill and knowledge in several activities in which the individual may participate throughout life in order to maintain fitness and health, as well as to constructively and enjoyably utilize leisure time. The purpose of the program is to expose the student to numerous activities and to seek individual improvement in those he/she finds most suited to his/her specific goals and capabilities.

All full-time students may take theory and activity classes in Physical Education for academic credit. Students may receive a maximum of four credits -- two of which must be Basics of Strength and Conditioning. Theory courses and combined theory/activity courses (such as Lifeguarding/CPR and Scuba) yield two credits; activity courses are one half semester in length and yield one credit (see below). Classes may be taken for grades or on a pass/fail basis. While students may receive only the maximum of four credits in physical education, they may audit any class any number of times.

In order to receive the maximum total allowed of four credits in Physical Education, students must take one section of the CORE COURSE Basics of Strength and Conditioning (two credits)—and any other two credits in Physical Education. Without Basics of Strength and Conditioning, students may receive a maximum of two credits in Physical Education.

Theory class grades are judged on the basis of normal academic criteria, including reading assignments, composition, and class participation and testing. Activity credit is assessed on the basis of skill acquisition; skill analysis; knowledge of strategies, rules, techniques and required reading and testing.

While there is no major or a requirement in physical education, students are encouraged to take a variety of credit-bearing classes. The program offers activities in sports, fitness, dance, and aquatics, which serve to improve health and physical fitness, develop recreational and leisure-time skills, and facilitate functional and aesthetic body movement. The classes also impart knowledge of health and fitness, skills performance, game strategies and rules, sport
coaching, nutrition, and sport history as well as offering American Red Cross certification in Advanced Emergency Care, CPR/Lifeguarding Red Cross certification, NASM Personal Trainer certification and PADI certification in Scuba.

Students are also encouraged to take advantage of instructional and recreational opportunities available through the use of the Johnson Fitness Center, Cain Gymnasium, Casey Swim Center, and the waterfront facilities. Recreation and dance programs, club sports, and 16 intercollegiate sports are offered as extracurricular activities. Contact the Physical Education Department, Athletic Office, or Rec Sports Office for details.

## COURSE DESCRIPTIONS <br> Theory and Activity Classes in Physical Education

2. Bodyweight and Core Conditioning (one credit). The course is designed for conditioning of joints and muscle groups, strength, flexibility, coordination, and agility using one's own body weight. As well as garnering an understanding of the body's core musculature
3. Tennis (one credit). The course focuses on instruction in the sport's fundamental strokes: forehand, backhand, volley, and serve. The course also includes an explanation of the rules, as well as basic singles and doubles strategy.
4. Golf (one credit). The course offers instruction and practice in golf skills-chipping, pitching, full swing, putting, the rules of golf and golf etiquette.
5. American Red Cross Lifeguarding/CPR (two credits). The course stresses physical fitness and strength and endurance combined with the skills and techniques needed to be a certified lifeguard. Participants will take standard ARC test, and cards will be issued for successful completion of the course.
6. Sailing (one credit). The course offers instruction and practice in small sailboats on the Chester River. Students must be able to swim to take this course.
7. Basics of Strength Training and Conditioning and Human Movement (two credits). The course offers instruction, practice and lecture based learning on a variety of fitness concepts. Students will grasp the basic concepts of human movement, planes of motions, weight lifting techniques, strength and conditioning variables, cardiovascular exercise, flexibility, and mobility. Students will receive an extended orientation of the college's fitness center, equipment, and how to appropriately write and follow an exercise program based on their overarching fitness goals. Students needing accommodations will be asked to complete the theory portion of the class to its full extent. Based on the student's ability level, the practical application will be graded based on observation and discussion. Students will also learn alternatives methods of exercise based on their accommodation.
8. Horseback Riding (one credit). The course offers an introduction to riding in both English and Western disciplines. The course also includes basic skills and horsemanship, tack and application, equine anatomy, health and management as well as Equestrian techniques, theory and practice. The course provides an introduction to Washington College Equestrian Team opportunities. Additional fee of $\$ 650.00$ is required.
9. Pilates Mat Class (one credit). The Pilates Method helps to lengthen and strengthen muscles while building a uniformly developed body, focusing on core strength—abs, gluteus, and inner thighs. It is the perfect activity to tone and elongate muscles, rehabilitate from an injury, or train for an athletic event. Class will help with posture, alignment, breathing, control, balance, flow, and strength.

## 023. Introduction to Rowing (one credit)

The course offers instruction and practice in Rowing \& Sculling on the Chester River. Students will be taught proper technique through use of Washington College's Rowing Equipment \& Rowing Shells. Students will utilize both the Washington College's boathouse water tanks, classroom for video analysis, and the Chester River for all instruction. A swim-test is required to take this course. Students will meet 100 minutes per week for the $71 / 2$ week course.
025. Yoga (one credit). Hatha yoga exercises involve stretching, relaxation, and deep breathing to increase the circulation of the blood and the powers of concentration. Faithful practice can bring relief from tension and fatigue and will help develop poise, flexibility, balance, energy, vitality, and a firm figure. Course includes postures (asanas), breathing (pranayama) and yogic theories of movement and meditation.
026. Racquet Sports (one credit). The course offers instruction and practice in fundamentals of badminton, racquetball, platform tennis, and squash. The Course also includes an explanation of the rules and etiquette of each sport.
030. SCUBA (two credits). This PADI open water certified diver course would provide students with the knowledge and skills to visit the underwater world safely. Instruction includes two hours of classroom and two hours of pool time for six weeks plus a weekend open water dive.
Advanced Scuba also offered. Additional fee of $\$ 200.00$ is required for SCUBA, additional fee of $\$ 175.00$ is required for Advanced SCUBA.
031. Cycling (one credit). The course offers biking for aerobic exercise as well as the care, repair, and maintenance of bikes and techniques for safe riding.
034. Advanced SCUBA (zero credits; audit only). See description above.
047. Personal Training Certification (two credits) Washington College Physical Education Department has partnered with the National Academy of Sports Medicine to offer a certified personal trainer course. In this two credit seven week course students will follow an accelerated
learning of the human movement system, fitness assessment, integrated training and theory application, design of fitness programs, nutrition and exercise, lifestyle coaching and professional development. Taking the course does not guarantee a personal trainer certification. Students must schedule and pass the NASMCPT exam at a certified testing center outside of Washington College. An additional fee of $\$ 500.00$ is required for this course which covers the textbook, study guide, online content, practice exams and the NASM-CPT exam which must be taken at a certified testing center.
051. Methods of Coaching (two credits). The course is directed to those individuals who are interested in coaching team or individual sports. The course focuses on responsibilities of coaches, including organization, pre-, post-, and in-season workouts, teaching fundamental skills, developing team play, sports psychology, game or contest strategies and scouting.
052. Nutrition (two credits). The course concentrates on the study of foods and nutrients and their relationships to health and disease. Topics include vitamins, minerals, fats, carbohydrates, protein, water; additives and preservatives; diet and weight control; herbs; eating disorders; caffeine and alcohol.

## 094. Special Topics

# Physics <br> Division of Natural Sciences and Mathematics 

Karl Kehm, Chair<br>George Keiser<br>Derek Thuecks<br>Ed Tucholski

Physics is the most fundamental of sciences. Physicists seek to discover the laws that govern the behavior of material objects and waves, and the interactions between particles. Application of these universal laws to systems ranging from atoms and molecules to clusters of galaxies gives rise to challenging problems whose solutions require creative insight alongside logical rigor and mathematical reasoning.

The study of physics helps students to understand the scientific method and its implications-how to make rational inferences from data and how to test hypotheses critically. It also leads to an appreciation of the aesthetic dimensions of a scientist's work and the interrelationship of physics with other areas of knowledge and its technological applications. This aspect is particularly emphasized in courses intended for distribution.

Courses in the department are designed to develop the student's competence in those fundamental areas of classical and modern physics that have played an important role in the evolution of physics. Familiarity with the art of scientific experimentation is provided through laboratory work that complements the study of theoretical principles. Computation-the third mode of "doing physics"-is emphasized at all levels.

The Physics Department prepares its majors for any career where problem-solving skills are required. Popular post-graduation options include graduate study in physics or engineering, industrial research, secondary school teaching, and professional careers in engineering, medicine, information technology, and business.

Physics 100, 101, 102 and 105 are designed to serve the needs of students wishing to take a science course to meet distribution requirements. They do not assume any special mathematics or science preparation beyond high school algebra and trigonometry.

## Requirements for the Bachelor of Science in Physics

1. All of the following introductory courses are required:

PHY 111. General Physics I
PHY 112. General Physics II
PHY 211. Modern Physics
PHY 252. Scientific Modeling and Data Analysis
2. Three upper level theory courses are required, selected from the following:

PHY 321. Classical Mechanics
PHY 322. Quantum Mechanics
PHY 323. Thermodynamics and Statistical Mechanics
PHY 324. Electricity and Magnetism
Students planning to attend graduate school in physics or engineering are recommended to take all four upper level theory courses.
3. Both of the following courses in experimental physics are required:

PHY 352. Electronics
PHY 451. Advanced Physics Laboratory
4. All of the following courses in mathematics are required:

MAT 201. Differential Calculus
MAT 202. Integral Calculus
MAT 203. Multivariable Calculus
MAT 345. Differential Equations
Students planning to attend graduate school in physics or engineering are also recommended to take MAT 325 (Vector Spaces) and MAT 340 (Numerical Analysis).
5. One additional science course is required, selected from the following list: Any additional physics course at the 300+ level, PHY 240, CHE 220, or another course approved by the department.
6. Five semesters of the departmental seminar course are required (PHY 292, 391, 392, 491 and 492). Each seminar course is one credit hour. The seminar meets one afternoon each week. Students begin the seminar sequence during the spring semester of the sophomore year.
7. All students must fulfill the Senior Capstone Experience (SCE). The SCE is a year-long research project on a theoretical, computational or experimental topic completed during the senior year.

Students planning to major in physics should ideally take PHY 111, 112, MAT 201 and 202 in their freshman year. However it is possible to complete the major if students start major coursework during their sophomore year. A score of four or better on an Advanced Placement examination may, with the approval of the appropriate academic department, earn course credit toward graduation and make the student eligible to take upper-level courses in the department. Physics majors intending to become certified high school teachers should inform the Education Department as early in their college careers as possible to assure proper scheduling.

## Physics and Engineering Dual Degree with Columbia University

Students pursuing the Physics/Engineering Dual Degree Combined Plan Program receive a degree in Physics from Washington College and a degree in an engineering discipline at Columbia University. Admission to Columbia University requires that students complete general admission requirements for Columbia University's Combined Plan Program as well as any special requirements for the engineering subfield the students seek to pursue. Students work closely with an engineering advisor to plan course schedules to ensure that all requirements are met.

For the $3: 2$ combined physics and engineering degrees, students must complete Washington College's physics curriculum through the third year as well as the college's distribution and writing requirements. Specific course requirements for the physics portion of the dual degree are as follows.

## Requirements for the Bachelor of Science in Physics for Dual Degree Engineering Students (3:2 plan only)

1. All of the following introductory courses are required:

PHY 111. General Physics I
PHY 112. General Physics II
PHY 211. Modern Physics
PHY 252. Scientific Modeling and Data Analysis
2. Two upper level theory courses are required, selected from the following:

PHY 321. Classical Mechanics
PHY 322. Quantum Mechanics
PHY 323. Thermodynamics and Statistical Mechanics
PHY 324. Electricity and Magnetism
3. PHY 352. Electronics
4. All of the following courses in mathematics are required:

MAT 201. Differential Calculus
MAT 202. Integral Calculus
MAT 203. Multivariable Calculus
MAT 345. Differential Equations
5. Additional courses required by the Columbia Combined Plan program in engineering.
6. Three semesters of the departmental seminar course are required (PHY 292, 391 and 392).

Each seminar course is one credit hour. The seminar meets one afternoon each week.

## Requirements for the Minor in Physics

The minor in physics requires a total of six semester courses in physics: PHY 111, 112, 211,

252 and two additional courses in physics at the 300 level or higher. MAT 201, 202, 203 and 345 are also required.

## Courses In Physics

## 100. Concepts in Contemporary Physics

This course traces the evolving concepts of space, time, and motion through the main contributions of Galileo, Newton, Einstein, and Bohr. Topics include: sizing up the universe surrounding us, the kinematics and dynamics of motion, the great conservation laws, the unification of space-time and gravity in the theories of special and general relativity, the physics of black holes, and the quantum structure of matter. There will be laboratory sessions, class demonstrations, and exercises.

## 101. College Physics I

An algebra-based introduction to physics for life science majors. Kinematics in one and two dimensions, Newton's laws of motion, work-energy theorem, conservation of energy, conservation of linear momentum, collisions, rotational kinematics and dynamics, simple harmonic motion, Newton's law of gravitation, fluid mechanics, temperature, heat, kinetic theory and thermodynamics. One three-hour laboratory session per week. Prerequisite: High school algebra and trigonometry, or permission of the instructor. (Offered annually: Fall)

## 102. College Physics II

Second part of two-semester algebra-based introduction to physics for life science majors. Electric charge, electric field and potential, conductors, dielectrics, capacitors, electric circuits and power; magnetic fields, forces on moving charges and on current-carrying wires, fields of current-carrying wires, electromagnetic induction; wave motion, superposition, physical and ray optics; quantum physics of atoms and atomic nuclei. One three-hour laboratory session per week. Prerequisite: Physics 101 or permission of the instructor. (Offered annually: Spring)

## 105. Astronomy

A survey of the universe, beginning with the Earth, Moon, the planets, and the Sun, and continuing outwards to distant stars, galaxies, galactic clusters, superclusters, and large-scale structure. The emphasis will be on the interplay between physical theory and observation that leads to the modern astrophysical perspective of the universe. Topics include the origin and evolution of stars, formation of red giants, planetary nebulae, white dwarfs, neutron stars, supernovae, and black holes. We will explore the present state of our knowledge of these objects and how this knowledge is acquired. The course concludes with a discussion of quasars and the past, present, and future of the universe according to the Big Bang cosmology. There will be laboratory and observing sessions, demonstrations, and exercises.

## 111. General Physics I

A calculus-based introduction to physics for further study in the physical sciences and engineering. Mechanics: kinematics and dynamics of particles, conservation laws, the law of universal gravitation, oscillations, and fluids. Thermodynamics: internal energy, heat, work,
entropy and their statistical foundations. One three-hour laboratory session per week. Co-requisite: MAT 201, or permission of the instructor. (Offered annually: Fall)

## 112. General Physics II

Second part of two-semester calculus-based introduction to physics. Waves: wave propagation, superposition, interference, and physical and ray optics. Electric and magnetic fields: Coulomb's law, Gauss's law, electric potential, steady currents, magnetic forces, Ampere's and Faraday's laws. One three-hour laboratory session per week. Prerequisite: PHY 111, co-requisite: MAT 202, or permission of the instructor. (Offered annually: Spring)

## 211. Modern Physics

The first part of the course will explain the special theory of relativity: simultaneity, time dilation, length contraction, Lorentz's transformations, and relativistic dynamics. The second part of the course will introduce the fundamental ideas of quantum physics: Planck's hypothesis, Bohr's model of the hydrogen atom, wave-particle duality, Schrödinger's equation, and basic applications of the formalism to atomic and molecular physics. One three-hour lab session per week. Prerequisite: PHY 112, co-requisite: MAT 203, or permission of the instructor. (Offered annually: Fall)

## 240. Earth and Planetary Systems

This course features a detailed examination of the unique interaction between the Earth's geosphere, biosphere, hydrosphere and atmosphere, and how these systems contrast with those of the other planets in the solar system. The course includes a lecture and an integrated lab component. The lecture discussion and reading emphasizes the history of Earth systems, from the birth of the solar system and differentiation of the Earth, to the emergence of biological life, chemical evolution of the modern atmosphere, and the changes to the Earth's climate, ocean and lithosphere throughout geologic history. The lab will introduce students to important tools in Earth Science research, including radiometric dating, chemical studies of natural materials, remote sensing and database analysis. The course provides advanced students with the necessary scientific and intellectual background for pursuing further studies in Earth and planetary science, geography, and environmental studies. Includes three lecture hours per week plus lab. Prerequisite: ENV 140 and 141, or permission of the instructor.

## 252. Scientific Modeling and Data Analysis

This course serves as a focused introduction to programming for scientists and engineers. Topics include algorithm development, statistical tests, the fast Fourier transform (FFT), simulating the dynamics of systems represented by coupled ordinary differential equations (e.g. planetary motion via Runge-Kutta methods), numerical integration, root finding, fitting functions to experimental data, and the creation of publication-quality graphics. Students choose and complete an independent research project on a topic related to their major. This course enables students to integrate computation into advanced courses in theoretical and/or experimental science. Programming language: Python. Co-requisite: MAT 202.

## 321. Classical Mechanics

Kinematics and dynamics of particles and rigid bodies. Topics include: Conservation laws, central forces, motion in non-inertial frames, small oscillations, and Lagrangian and Hamiltonian equations of motion. Prerequisite: PHY 211, PHY 252 and MAT 345, or permission of the instructor.

## 322. Quantum Mechanics

An introduction to the fundamental principles of quantum mechanics: quantum states and the principle of superposition, probability distributions and expectation values, observables and operators, operator representations, and perturbation theory. There will be a discussion of selected applications of the theory to atomic, solid state, and nuclear physics. Prerequisite: PHY 211, PHY 252 and MAT 345, or permission of the instructor.

## 323. Thermodynamics and Statistical Mechanics

An in-depth presentation of the three laws of thermodynamics and their applications followed by a study of the statistical foundations that underpin these phenomenological laws. Additional topics include the theory of ideal gases, heat engines, statistical properties of systems of particles, the Boltzmann distribution, entropy, partition functions and quantum gases. Other topics may be included at the discretion of the instructor. Prerequisite: PHY 211, PHY 252 and MAT 345, or permission of the instructor.

## 324. Electricity and Magnetism

Electric and magnetic fields in vacuum. A survey of experiments and theory leading to Maxwell's equations. Topics include: electrostatics, electric currents, magnetic fields, electromagnetic induction, Maxwell's equations, and electromagnetic waves. Prerequisite: PHY 211, PHY 252 and MAT 345, or permission of the instructor.

## 352. Electronics

The study of electronics as it is used in the physical sciences. Theory, operation and applications of R-L-C electrical circuits, diodes, transistors, operational amplifiers, timers, analog, digital, mixed-signal and microprocessor circuits. The course comprises three lecture hours and one three-hour laboratory session per week. Prerequisite: PHY 211 and MAT 345 or permission of the instructor. Co-requisite: PHY 252.

## 451. Advanced Physics Laboratory

Advanced experiments in mechanics, electromagnetism, waves, physical and geometrical optics, thermal and statistical physics, atomic, and nuclear physics. Prerequisite: PHY 352 or permission of the instructor.

## 292, 391, 392, 491, 492. Physics Departmental Seminar

The departmental seminar consists of weekly meetings of students and faculty. Meetings include both formal presentations and informal discussion. Students solve problems in physics, conduct reviews of current scientific literature, deliver oral presentations, and develop writing
skills appropriate to the physics discipline. The physics seminar is also the venue for presentations of SCE projects. One credit per semester. The course is open for credit to physics majors and minors only.

## 190, 290, 390, 490. Internship

## 194, 294, 394, 494. Special Topics

## 195, 295, 395, 495. On-campus Research

A ten-week, on-campus summer research project guided by a faculty mentor. Based on mutual interests, the student and faculty mentor develop a research project supported by a reading list and involving theoretical, laboratory, or field investigations supervised by the faculty mentor. Participants produce a final report detailing the findings of their research. Selection of students will depend on academic background, scholastic achievement, and the results of a personal interview with the faculty mentor. The course may be taken twice for credit. Not offered as pass/fail. Prerequisite: Permission of the instructor.

## 196, 296, 396, 496. Off-campus Research

## 197, 297, 397, 497. Independent Studies

The study of areas of physics not covered in other courses. Instructor and student will meet weekly to discuss any progress made. Designed for the student interested in pursuing a professional career in physics or engineering. Available to physics majors and others by agreement of instructor. Prerequisite: Permission of the instructor.

## SCE. Senior Capstone Experience

The Senior Capstone Experience is required of all majors in Physics. It consists of an experimental, theoretical, or computational investigation of a current topic in physics under the guidance of a faculty mentor. Results of these investigations will be presented in the weekly Physics Seminar and may also result in conference posters or publication in professional journals. Academic credit equivalent to one semester course (four credits) is granted upon successful completion of the Senior Capstone Experience, and a grade of Honors, Pass or Fail will be recorded on the student's transcript along with the title of the investigation.

## Political Science

## Division of Social Sciences

Melissa Deckman, Chair (On Leave, Fall 2019)
Paulina Cossette (On Leave, Spring 2020)
Andrew Oros
Joseph Prud'homme
Carrie Reiling
Tahir Shad
Christine Wade

The political science major is designed to provide an understanding of the political forces, institutions, ideas, and problems of contemporary society. The curriculum prepares students for graduate studies and professional careers in law, politics, teaching, journalism, government, and international civil service. Our top faculty, our innovative teaching styles, and our emphasis on experiential learning set the study of political science at Washington College apart from other places. Political science students at Washington College benefit from the college's close proximity to our nation's capital as well as Annapolis, the Maryland state capital, and many of our students complete internships or volunteer to work for political parties, nongovernmental organizations or campaigns during election season.

Political science majors may become certified to teach secondary school social studies. To assure proper scheduling, students interested in this program should inform the chairs of both the Political Science and Education Departments as early as possible in their college careers. Due to the overlap in major requirements, students may not double-major in Political Science and International Studies

## The Major

Requirements for the major in political science are: (1) Political Science 102 (American Government and Politics) and 104 (Introduction to World Politics), to be taken in the freshman or sophomore year; (2) Political Science 201 (Theories of Peace and Conflict) or Political Science 202 (Justice, Power, and Political Thought), to be completed by the junior year, (3) Political Science 401 (Empirical Political Research), to be taken in the fall of senior year; (4) Political Science SCE, the Senior Capstone Experience; (5) completion of a department-approved experiential learning activity; and (6) seven additional department offerings, including one 300-level course from each of the three subfields offered at Washington College: American Government and Political Thought; Comparative Politics; and International Politics. Note: earning credit for BOTH the Model Diplomacy Program (POL 471) or a Model United Nations program (POL 473) together for a total of 4 credits will count as a complete International Politics course; students who complete only one of the model programs for credit or who participate in either program but do not earn credit are still required to complete a minimum of one International Politics course.

## Experiential Learning Requirement

All majors must complete one experiential learning activity, which the Political Science Department at Washington College envisions as a meaningful experience related to politics outside of the classroom, for a minimum number of 120 hours. We believe it is important for students to apply the theories and concepts that they have learned in a "real-world" setting. Majors may complete this requirement through one of the following ways:

- Completion of a relevant internship related to political science and approved by the political science faculty (either credit or non-credit bearing). Credit-bearing internships include formally structured programs such as the Maryland General Assembly Internship Program, The Washington Center Internship Program in Washington, DC and the Hansard Programme in London-all of which are competitive and have minimum GPA requirements (see course listings below for more information on these programs). Students may also participate in internship programs administered through the International Studies Program (see International Studies Program Director for more details). In addition, students may arrange their own political internship experience and work with political science faculty to develop course credit or may opt to complete an internship without a credit option. Please note: to earn college credit for a political internship, arrangements for credit, including the completion of a learning contract, must be made PRIOR to the start of the internship; please see department chair for more details.
- Participation in a Model Diplomacy Program (POL 471) or a Model United Nations program (POL 473) together with the two-credit course component. Please see Professor Tahir Shad, advisor to the Model UN programs, for more information for applying to participate.
- Participation in the Geographic Information Systems program that has a direct policy or political application.
- Completion of a substantial volunteer or political advocacy activity outside of class requirements that has been approved by a member of the political science faculty. Regular participation in student clubs, such as Student Government or College Democrats or Republicans, does not count.
- At least one semester or summer program of study abroad. The college currently participates in more than 30 study-abroad programs-including 15 programs in which courses are taught in English. Students who complete our summer Tanzania Seminar (see Professor Tahir Shad for more information) or the Oxford Research Seminar (see Professor Joseph Prud'homme for more information) will have this count for their
experiential learning activity. Please contact the Global Education Office and the International Studies Director, Professor Oros, for more information about other programs.

Students intending to major in political science are encouraged, but not required, to take Mathematics 109 (Statistics) as part of their freshman-sophomore distribution selections, so that some aspects of the most recent methodological developments in political analysis will be more readily understandable to them.

## Senior Capstone Experience

Political Science majors are required to write a thesis, which should be a minimum of 30 pages, and then present that research as a poster presentation as part of a required Senior Symposium. Each student works closely with a faculty advisor who guides and supports the project from beginning to end. Students may attempt an honors thesis in Political Science only if their GPA is 3.5 or higher in the major.

## The Minor

Requirements for the minor in political science are Political Science 102, 104 and four other courses in political science. Students who minor in political science must complete three courses at Washington College or in a Washington College program. Students majoring in International Studies may not minor in political science.

## Internships and Other Opportunities

Students in good standing are encouraged to participate in one of the internship opportunities administered through the Department and the International Studies Program, and they may earn course credit for doing so. Completion of such internships counts as part of their required experiential learning activity. For program details and eligibility requirements, see "Internships and Other Opportunities" in this catalog. Those of particular interest to political science majors include:

- Maryland General Assembly Internship (see also course listings below)
- The Washington Center Internship (see also course listings below)
- Hansard Scholars Programme in London (see also course listings below)
- The Tanzania Internship
- Internships with the Department of State
- The Washington Center

A number of special programs and student conferences are also of interest to majors. For details, see "Internships and Other Opportunities" in this catalog. Those of interest to majors include:

- Model Diplomacy and Model United Nations
- Naval Academy Foreign Affairs Conference
- Student Conference on United States Affairs at West Point
- PLEN Seminar on Women and Congress, Women and Public Policy, and/or Women in

Global Policy

## Course Descriptions

## Introductory Courses

## 102. American Government and Politics

A study of the foundations, institutions, processes, and policy issues of American government at the national level.

## 104. Introduction to World Politics

A general introduction to the study of world politics and international relations. The course focuses on the history and nature of the international system, the cold war and the post-cold war era, foreign policy behavior, arms control, conflict, nationalism, international political economy, environmental problems, terrorism, and human rights.

## 201. Theories of Peace and Conflict

The course reviews theoretical and philosophical approaches to understanding and explaining conflict and peace, including theories of violence and nonviolence. The first half of the course addresses the causes of conflict at the individual, group and systems level. We will also review modern thinking on the relationship between gender and conflict. The second half of the course addresses the theoretical considerations of peace, including positive and negative peace, and the realization of peace through strength, negotiations, justice and personal transformation.

## 202. Justice, Power, and Political Thought

This course will introduce students to the study of political philosophy by examining the ways many of the most influential political theorists have struggled to define the nature of justice, as well as developing an understanding of how theorists have approached the question of founding just regimes; ensuring that just systems of government operate legitimately once established; and assessing the major causes for the deterioration of regimes based on justice.

## Courses in American Politics and Political Thought

## 310. Parties and Interest Groups

This course examines the theoretical foundations, historical development, and current organization, structure, and activities of political parties and interest groups in the United States. The course will trace the history of U.S parties and the development of interest groups during the 19th and 20th centuries. Students will then consider the functions that parties and interest groups play in shaping elections and public policy today. Prerequisite: Political Science 102 or permission of the instructor.

## 311. Congress and the Legislative Process

This course is designed to introduce students to the legislative process in the U.S. Congress. The impact of the inputs (constituents, elections, interest groups, the bureaucracy, the Supreme Court, and the president) upon the congressional structure is discussed and analyzed, as well
as the structure itself (rules, norms, procedures, the committee system, party leadership, congressional staff). Finally, the outputs of the legislative process are examined (policy-making, representation, and legislative oversight). Throughout the course, students will participate in an ongoing simulation of the congressional legislative process so that they can experience the challenges of crafting legislation. Prerequisite: Political Science 102 or permission of the instructor.

## 312. The American Presidency

This course involves a systematic examination of the dynamic institution of the presidency. It includes a study of presidential power, character, leadership, domestic and foreign policy-making, the presidential-election process, as well as the interaction between the president and the media, and presidential-congressional relations. Prerequisite: Political Science 102 or permission of the instructor.

## 313. Elections and the Political Process

An examination of the idiosyncratic nature of the American electoral process with a focus on the role of political parties. The course includes an overview of American electoral history as well as a study of the factors influencing election outcomes, such as issues, ideology, party identification, candidate images, campaign finance, organization, and strategies. Prerequisite: Political Science 102 or permission of the instructor.

## 314. Religion and Politics in the U.S.

This course is designed to analyze the nature of the relationship between religion and various aspects of politics in the United States. The course considers why religion and politics are so thoroughly interwoven in the United States by examining the religion-politics relationship in historical and theoretical perspective. The course also analyzes how religion affects American politics at the mass and elite levels. Lastly, the course considers church-state conflicts in American jurisprudence by examining some of the most hotly contested Supreme Court cases dealing with First Amendment issues. Prerequisite: Political Science 102 or permission of the instructor.

## 317. State and Local Politics

This course focuses on the interactions among the three levels of government in the United States as well as on the institutional structures of state and municipal governments. It concentrates on the interaction among governments as a significant portion of the policy-making process. The course discusses the changing roles over time of different levels of government. Prerequisite: Political Science 102 or permission of the instructor.

## 319. Inequality and Politics

This course examines the causes and consequences of various forms of inequality in the United States. Students will examine the political processes that create and maintain systems of inequality in terms of race, gender, sexuality, and income. Prerequisite: Political Science 102 or permission of the instructor.

## 320. Law and Society

A study of the American system of criminal justice. The major emphases of the course are the operation of the institutions and processes of the system, the constitutional rights of those accused of crime, and the social goals and consequences of criminal punishment. Prerequisite: Political Science 102 or permission of the instructor.

## 321. Women and Politics

This course examines the role of women as voters, citizens, candidates, and leaders in American politics, grounded in theories of gender. Attention will also be given to the history of the women's movement and the current status of women's organizations. The course also focuses on how various public policies, including workplace issues, family issues, education issues and reproductive rights, affect women and their legal rights. Prerequisite: Political Science 102 or permission of the instructor.

## 323. Constitutional Law

An analysis of the distribution of power among the three branches of the federal government, and between the federal and state levels of government, as specified in major decisions of the U.S. Supreme Court. The Court itself will be studied as a political institution, with emphasis on its role in a democratic political system. The course also includes a study of the constitutional rights of individuals, as specified by the U.S. Supreme Court, with primary emphasis on issues of freedom and equality. Prerequisite: Political Science 102 or permission of the instructor.

## 324. American Political Thought

A study of the influence of values and ideologies upon the formation, evolution, and operation of the American constitutional and political system. In deference to the pragmatic character of American political thought, the course focuses on the writings of American statesmen as they confronted such continuing problems as the nature of the Union, the contest between economic power and democratic power, and the responsibility of government for individual and social welfare. The course concludes with a consideration of the relevance of American political doctrines for contemporary issues of public policy. Prerequisite: Political Science 102 or permission of the instructor.

## 331. History of Political Thought

A critical study of the enduring problems of political philosophy as treated by the major thinkers in the Western political tradition. The emphasis of the course is upon the fundamental choice of values which underlies the design of every system of government. The course thus examines how such writers as Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Burke, and Marx have formulated and attempted to resolve the conflicting demands of freedom and order, law and justice, authority and obligation, and the individual and the state. Prerequisite: Political Science 102 or 104 or permission of the instructor.

## 334. Media and Politics

This course will explore the role of the media in politics from various perspectives, providing an overview of the following: the history of the media in the United States; the legal issues that relate to the media; the impact that the media has on public opinion; the substance (or lack of substance) of the media's coverage of the news, government and elections; biases of the news media; political campaign advertising; alternative and newly developing forms of media; and the increasing conglomeration of the news media through mergers. Throughout the course, these issue areas will be discussed in a larger context involving questions of freedom, representation, and political participation. Prerequisite: Political Science 102 or permission of the instructor.

## 335. Environmental Politics

This course explores public policy and the policy process in American politics, and specifically focuses on the development and enactment of environmental policies over the past several decades in the United States. Attention is given to how political actors have responded to environmental problems, what creates a favorable landscape for environmental policies to be implemented, and how effective such policies are at achieving their goals. Political Science 102 or permission of the instructor.

## Courses in Comparative Politics

## 341. Politics of Development

This course focuses on the political and economic challenges confronted by developing countries, including democratization, gender, nationalism and regional integration, trade, foreign investment, and sustainable development. The course also examines issues of development theory and practice in developing countries of Latin America, Asia and Africa. Prerequisite: Political Science 104.

## 342. Revolutions and Revolutionary Movements

This course examines revolutions as a means of political and social change through the study of competing theories about the causes, processes, outcomes and aftermath of revolution. These theories and approaches are then applied to cases of social revolutions of the 20th century, wars of anti-colonial struggles, and their anti-global successors. The course concludes with a discussion about the future of revolution in the modern world, including whether revolution through democracy and non-violence can be achieved, the influence of globalization, and the effect of the September 11 attacks on would-be revolutionary movements. Prerequisite: Political Science 104 or permission of the instructor.

## 344. Comparative Government: Western Europe

A comparative study of the governmental structures and organizations, as well as the political cultures and processes, of the diverse states of Western Europe, with special focus on the United Kingdom, France, and Germany. Also included will be study of the European Union and its process of expansion into Central Europe. Prerequisite: Political Science 104 or permission of the instructor.

## 345. Comparative Government: East Asia

This course provides a broad overview of the different governmental structures and organizations, as well as history and political cultures, of a range of states in East Asia, including Japan, the Koreas, China, and the countries of Southeast Asia. Particular attention will be paid to the link between governmental structure and economic development. Prerequisite: Political Science 104 or permission of the instructor.

## 346. Japanese Politics and Foreign Policy

This course provides a broad introduction to Japan of the early 21st century, considering its role in the world and its unclear domestic agenda after successfully "catching up with the West." Study of Japan's post-Second World War political and economic development will provide the basis for deeper study of demographic, social, economic, and diplomatic challenges facing Japan today. Prerequisite: Political Science 104 or permission of the instructor.

## 347. Chinese Politics and Foreign Policy

This course provides an introduction to the vast political challenges facing China today, which requires an examination of China's governmental structure, social development, and the effect of communism under Mao Zedong and other Chinese leaders. Emphasis will be placed on political reform currently underway, the possibility of democracy's arising, and China's economic and diplomatic linkages to the outside world. Prerequisite: Political Science 104 or permission of the instructor.

## 348. Latin American Politics

An introduction to the politics of Latin America. Attention is given to the historical and cultural context of political institutions and behavior, the roles of traditional and emerging groups and forces, political instability, and the decision-making process under different types of regimes. Case studies of individual countries are selected on the basis of their contemporary importance and representativeness of general political problems. Prerequisite: Political Science 102 or permission of the instructor.

## 351. Politics, Religion, and Ethnicity in South Asia

This is a survey of contemporary politics in South Asia (Afghanistan, India, Nepal, Pakistan, and Sri Lanka). It examines the impact of British colonialism on state formation, the internal politics since the 1940s, and the relationship of these countries to each other and with the major external powers (U.S., Russia, and People's Republic of China) influencing the region. Prerequisite: Political Science 104 or permission of the instructor.

## 356. Civil War and Violence in Africa

This course provides an analytical approach to the study of civil wars in post-independent sub-Saharan Africa. The course divides into four parts. The first provides a broad overview of the challenges that Africa confronts. The second part of the course investigates the causes of civil wars: what conditions permit civil war? Why do dissidents or governments choose violence instead of peaceful means of resolving disputes? Is civil war politics by other means or a means
of wealth acquisition? The third explores the processes of civil war: why do people join insurgencies? And why do some conflicts become more violent than others? We will conclude the course by examining mechanisms for resolving conflicts. We will explore why the international community intervenes to stop genocide in some wars but not others; what takes it so long to act, if it acts at all; how the prospect of military intervention affects the military strategies of combatant parties in civil wars; and whether outsiders help or hinder the resolution of civil wars. Prerequisite: Political Science 104 or permission of the instructor.

## Courses in International Politics

## 371. International Politics

A study of an integrated theoretical framework for analyzing the behaviors of nation-states in the international political arena, as well as of selected critical issues and areas in contemporary international politics. Normally included in the study are nuclear weapons systems and their implications in international politics; nuclear arms negotiations and agreements; East-West relations; the triangular relationship among the United States, the former Soviet Union, and China; the Arab-Israeli conflict; the Third World's non-alignment movement, and the North-South tensions. Students who have taken Political Science 302 at Rhodes University will not receive credit for this course. Prerequisite: Political Science 104.

## 373. Human Rights and Social Justice

This course is designed to provide an introduction to the history, philosophy and major debates on human rights and social justice. Students will consider the philosophical and political positions underlying the debates that are central to the promotion of human rights, including gender, universalism and cultural relativism. The course also covers contemporary issues in the international human rights and social justice movement, including the right to development and freedom from poverty, women's human rights, minority rights, torture, slavery and genocide. Group work and the creation of a public awareness campaign are required course assignments. Prerequisite: Political Science 104 or permission of the instructor.

## 374. International Organization and Law

A study of organized human efforts made throughout history to promote international cooperation and peace. Special attention is given to the principles and rules of international law regulating national conduct in international affairs, the League of Nations, the United Nations, and contemporary blueprints for world federation and government. Prerequisite: Political Science 104 or permission of the instructor.

## 375. International Political Economy

This course is a study of the relationship between international politics and economics. It examines theories of international political economy, including Liberal, Mercantilist, and Radical. Using these themes, the course will analyze the history of political economy, the relationship between economics and politics, trade, foreign investment, economic aid, development, dependency, interdependency, and the role of the United States in the global political economy. Prerequisite: Political Science 104 or permission of the instructor.

## 380. American Foreign Policy

A brief historical survey of American diplomacy and analytical study of factors conditioning American foreign policy; the constitutional basis of U.S. foreign relations; the concept of American national interest and goals; the structure and processes of decision-making and policy-execution; the organization of, and relations among, the White House, Department of State, Department of Defense, other Executive organs, and Congress; and America's current involvement in world affairs. Prerequisite: Political Science 102, Political Science 104 or a year of American history.

## 382. U.S.-Latin American Relations

A study of U.S. foreign policy and Latin America since the Monroe Doctrine. Attention is given to the interests of Latin American nations in their relationship with each other and with other areas of the world, with special emphasis on the post-World War II period. Prerequisite: Political Science 104 or permission of the instructor.

## 384. The International Relations of East Asia

The course seeks to expand student knowledge of important past political events and contemporary political issues related to the international relations of East Asia, including U.S.-East Asia relations; to introduce students to a new terminology based in international relations theory, including the contentiousness of some terms, major thinkers associated with these terms and theories, and how general international relations theory has been applied to the case of East Asia; and, to assist students in applying their new knowledge of terminology and theory to better understand past and contemporary political interactions in East Asia.
Prerequisite: Political Science 104 or permission of the instructor.

## 386. Comparative Peace Processes

This course focuses on contemporary conflicts and efforts at peace-building in a comparative perspective. Drawing on cases such as Bosnia, Northern Ireland, and East Timor, the course will examine the roots of conflict, theories of peace, methods of peace-building, reconciliation, and international cooperation. Simulations will be used to enable students to understand the dynamics of the peace process. Prerequisite: POL 104 or permission of the instructor.

## 388. U.S. Foreign Policy in the Middle East

In recent decades, the Middle East has proved to be one of the most troubling as well as important parts of the world. The war in Iraq, the standoff with Iran, the regular failure to find a diplomatic solution to the Israeli-Palestinian conflict and the continuing danger posed by AI Qaeda all testify to the intractability of the region's problems. This course focuses on US foreign policy in the Middle East. The United States has grappled with the region's persistent and cross cutting conflicts, and confronted fundamental questions about the use of force, the role of allies and international law. Prerequisite: POL 104 or permission of the instructor.

## Courses in Research Methods and Experiential Learning

## 401. Empirical Political Research

An introduction to current research techniques and methodology in political science, taken by majors in the fall semester of the senior year. The course includes a discussion of the use of theory building, hypothesis testing, survey research, statistics, and computers in empirical political inquiry. Much of the class will be interactive, as students learn basic data analysis techniques using statistical software. Students will work in groups to develop, administer, and analyze their own survey of the political attitudes of the student population of Washington College. Prerequisite: Political Science 102 and 104, or permission of the instructor. This course is required for Political Science majors.

## 419. Maryland General Assembly Internship

Students enrolled in this program spend two days per week as state legislative interns in Annapolis during the three-month legislative session. They also meet and do assignments for a weekly academic seminar on campus. Students may enroll in this program only by application to the Director (Dr. Deckman), and applicants must have a 3.0 GPA. Eight credits. (Note: this program counts as two political science courses.) Prerequisite: Political Science 311 or 317, or permission of the Director.

## 427. Washington Center Internship

A full-time, semester-long internship in Washington, DC, with a federal government, political, or non-profit agency. Depending upon their interest and internship placement, students may attend hearings, conduct policy research, draft correspondence, monitor legislation, lobby members of Congress, and write analytical reports. Students will create an in-depth portfolio of their internship experience. Prerequisite: Political Science 102, 2.8 cumulative GPA, permission of an instructor, and successful application to The Washington Center for Internships and Academic Seminars. This course is normally open only to juniors and seniors. Twelve credits. The internship package of Political Science 427, 428, and 429 yields 16 credits towards graduation and 8 credits towards the political science major or minor.

## 428. Washington Center Seminar

Washington Center Interns participate in an evening seminar selected from a variety of topics offered during the semester. Students engage in class discussion and may also research seminar topics, prepare written assignments, and take examinations. Required of and limited to students enrolled in Political Science 427. Three credits.

## 429. Washington Center Forum

Washington Center Interns participate in lectures, site visits, small group discussions, briefings, and other required events designed to help them understand the connection between their academic and professional goals and the special educational opportunities available through living and working in Washington, DC. Evaluations of these experiences are included in the student portfolio. Required of and limited to students enrolled in Political Science 427. One credit.

## 471. Model Diplomacy

This two-credit course is offered as a complement to required delegate training for participation in an off-campus model diplomacy simulation. The course goes beyond the basics of delegate preparation (public speaking, model procedure, and familiarity with committee topics) to offer a broader framework for understanding the evolution of the practice of diplomacy, principal challenges facing diplomats today, and the role of diplomacy and the diplomat in the modern world. As part of the course, students are offered individualized feedback on their committee research for a model simulation, background information on important developments in international affairs and major international organizations, and the opportunity to reflect on the linkage between the model experience and the actual practice of international organizations in the $21^{\text {st }}$ and previous centuries. Two credits. Prerequisite: application and acceptance into a Model Diplomacy program.

## 473. Model United Nations

This two-credit course is offered as a complement to required delegate training for participation in an off-campus model United Nations simulation. The course goes beyond the basics of delegate preparation (public speaking, model procedure, and familiarity with committee topics) to offer a broader framework for understanding the evolution of the United Nations since its founding in 1945, principal challenges it faces today, and the role of diplomacy and the diplomat in the modern world. As part of the course, students are offered individualized feedback on their committee research for the model simulation, background information on important developments in international affairs and major international organizations, and the opportunity to reflect on the linkage between the model experience and the actual practice of international organizations in the $21^{\text {st }}$ and previous centuries. Two credits. Prerequisite: application and acceptance into a Model United Nations program.

## 190, 290, 390, 490. Political Science Internship

Students may receive course credit for an individualized internship at a political organization, under the supervision of a faculty advisor. The details of the internship and associated academic requirements will be specified in a learning contract drawn up by the student and advisor.

## 194, 294, 394, 494. Special Topics in Political Science

The department occasionally offers a course on a special topic in political science that is not a part of the regular course offerings.

## 197, 297, 397, 497. Independent Study

Students may receive credit for an individualized course of reading and writing under the supervision of a faculty advisor. The requirements of the course will be specified in a learning contract drawn up by the student and advisor.

## 195, 295, 395, 495. On-campus Research

## 196, 296, 396, 496. Off-campus Research

## SCE. Senior Capstone Experience

The Senior Capstone Experience is an independent research project on a topic of the students choosing, culminating in a thesis of at 30 pages and the presentation of the research in a poster session as part of the Senior Symposium. Thesis proposals are generated as part of the work of the required course on Empirical Political Research, although thesis advisors will be determined in the spring semester, junior year. Candidates for honors must employ primary sources, contribute some element of original research, analysis, or interpretation, and must present their findings publicly at the Senior Symposium. Candidates must have a GPA of 3.5 in their major courses to be considered for honors status. This project is required of all majors in political science.

## Courses offered in the Washington College Abroad Programs

Students enrolled in Rhodes University Program in South Africa take the following courses:

## 402. International Politics

This course examines the dynamics of post-World War II international political economy, financial institutions, the North-South debate, debt, development, democracy, Africa and the New World Order. Five classes per week, including one tutorial. Students who have taken Political Science 361 will not receive credit for this course. offered at the Rhodes University, South Africa, program only, in the spring semester. Prerequisite: Political Science 104. Eight credits.

## 404. Introduction to South African Politics

This course will study the process of transformation and transition to democracy in South Africa by looking at external and domestic factors which have shaped the present reality. Particular attention will be given to the issues of democratic consolidation and policy implementation after 1994. The course will provide an historical context with which to examine the challenges facing the new democracy from gender to economic policy and international relations. At least three classes per week. offered at the Rhodes University, South Africa, program only, in the spring semester. Prerequisite: Political Science 104. Four credits.

## 406. Government and Politics in Africa

Case studies in selected African countries looking at political economy, development, and democratization. At least three classes per week. Students who have taken Political Science 356 will not receive credit for this course. offered at the Rhodes University, South Africa, program only, in the spring semester. Prerequisite: Political Science 104. Four credits.

## 408. International Relations

This course examines contemporary theories, issues and debates in the study of international relations. At least three classes per week. offered at the Rhodes University, South Africa, program only, in the spring semester. Prerequisite: Political Science 104. Four credits.

## Students enrolled in The Hansard Scholars Programme in London take the following courses:

## 470. Hansard Internship

Hansard Scholars are assigned to work in most cases as research assistants to Members of the House of Commons and the House of Lords, or to the political parties and other politically-related organizations. Students write speeches, research political issues, prepare briefs, and take part in constituency work. Six credits.

## 472. Politics and Parliament

This course examines the constitutional and political process in Britain with special reference to the student's internship programs. External lecturers include leading British politicians, political commentators, and lobbyists. Three credits.

## 474. Politics and Public Policy

This course analyzes current policy issues, seen in their historical context and in a European dimension. Topics include the economy, social policy, education, the role of the media, and ethnic and regional problems. Three credits.

## 476. Supervised Research Project

Each student works on an individually designed research project leading to a substantial paper of between 8,000 and 12,000 words. Usually, this is based on research undertaken during the internship. Three credits.

# Pre-Law Preparation 

Rachel Durso, Program Advisor

Joseph Prud'homme, Program Advisor

Admission requirements at law schools normally include the completion of a baccalaureate degree program at an accredited institution, a distinguished overall average, and a competitive score on the Law School Admission Test (LSAT). Standards concerning grade averages and LSAT scores vary from school to school. Law schools do not specify a particular undergraduate curriculum or major as preparation for a legal education. Legal study draws on many fields of knowledge in the social sciences, natural sciences, and humanities. Potential law students should elect courses sufficiently diverse to acquire the basic ideas and methodologies of a number of disciplines, and to develop their skills of critical analytical thinking and effective written and oral expression. The pre-law advisors are available to help in this process. They counsel individual students with respect to course selection, how to prepare for the LSAT, the law school application process and provide periodic programs and workshops of interest to pre-law students.

The regular course distribution requirements at Washington College, which provide the student with a broad foundation in the liberal arts and sciences, are part of the general preparation for law school. The pre-law student is urged to consider taking some of the following courses, either as part of the distribution requirement or as electives. The pre-law advisors particularly recommend those courses marked with an asterisk: logic because it is helpful in preparing for the LSAT, political science courses because they prepare students for the study of cases in law school, business law because it introduces topics like contracts and torts, philosophy of morality and ethics courses because these are issues central to the profession, and sociology and justice, law and society courses since these courses explore domestic and global crime and justice issues.

## Recommended Courses

*particularly recommended for pre-law students

## BUS 112. Introduction to Financial Accounting

An introduction to the accounting principles and procedures used for collecting, recording, summarizing, and interpreting financial information. Students will learn to read and interpret financial statements. Special emphasis is placed upon the concepts of internal control over resources and transactions. Computerized spreadsheets are integrated into the course.

## BUS 303. The Legal Environment of Business*

Study of the various legal environments in which business operates, including the legal/political systems of major trading areas abroad. American government regulation of business will be
examined in detail, as well as the international legal environment, to appreciate varying legal requirements affecting foreign trade. Ethics and corporate responsibility will be compared to the differing standards in foreign countries.

## ECN 111. Principles of Macroeconomics

An introduction to principles of economic analysis, economic institutions, and issues of economic policy. The course examines factors determining national income, price, and employment levels as well as the international position in the U.S. economy.

## ECN 112. Principles of Microeconomics

An introduction to the principles of economic analysis, economic institutions, and issues of economic policy. Principal topics covered include commodity and factor price determination under various market structures, and resource allocation and income distribution through a pricing system.

## ECN 416. Law and Economics

The course describes how legal rules, e.g. property rights or contract law, should be designed in order to encourage economic efficiency. The human response to the prices imposed by laws on different kinds of behavior is analyzed. Applications to land use legislation, consumer products liability, the criminal justice system, and medical malpractice are included. Prerequisite:
Economics 112.

## HIS 201, 202. History of the United States

A basic course designed for students wishing to supplement their knowledge of general American history. The first semester covers the period from the European backgrounds of colonization in the New World to 1865; second semester, the period from 1865 to the present.

## MAT 109. Statistics

Introduction to the appropriate methods for analyzing data and designing experiments. After a study of various measures of central tendency and dispersion, the course develops the basic principles of testing hypotheses, estimating parameters, and reaching decisions.

## PHL 100. Introduction to Philosophy

A study of selected systems of thought designed to acquaint the student who has no training in philosophy with basic philosophical concepts and with the techniques and advantages of a thoughtful and reflective approach to problems. Topics taken up vary with the individual instructor. Offered every semester.

## PHL 108. Logic*

An introduction to informal logic (especially informal fallacies), formal sentential logic, and the application of logic to arguments found in ordinary language.

## PHL 225. Ethical Theory*

An examination of some of the major ethical theories in Western philosophy. Applications of these theories to concrete ethical problems will be considered. Special attention will be given to Consequentialist, Deontological, and Virtue theories. Readings will be drawn from classical and contemporary authors. Prerequisite: Philosophy 100.

## PHL 300. Business Ethics

A seminar focusing on major ethical theories and principles as they apply to individuals, companies, corporations, and consumers in the business world. Typical issues treated are: corporate social responsibility, government versus self-regulation, employee and consumer safety, whistle-blowing, deceptive advertising, conflicts in accounting, the environment, insider trading, issues in international business, etc. Prerequisite: Philosophy 100.

## PHL 335. Philosophy of Law*

The course covers three areas: (1) the nature of law, (2) the relation between law and morality, and (3) the nature and justification of punishment. Legal philosophers of various viewpoints will be covered. The class will meet with the judge of the Second Maryland Circuit in his courtroom and make an all-day field trip to one or more Maryland prisons. Prerequisite: Philosophy 100.

## POL 102. American Government and Politics

A study of the foundations, institutions, processes, and policy issues of American government at the national level.

## POL 323. Constitutional Law*

An analysis of the distribution of power among the three branches of the federal government, and between the federal and state levels of government, as specified in major decisions of the U.S. Supreme Court. The Court itself will be studied as a political institution, with emphasis on its role in a democratic political system. The course also includes a study of the constitutional rights of individuals, as specified by the U.S. Supreme Court, with primary emphasis on issues of freedom and equality. Prerequisite: Political Science 102.

## POL 407. Law and Society*

A study of the American system of criminal justice. The major emphases of the course are the operation of the institutions and processes of the system, the constitutional rights of those accused of crime, and the social goals and consequences of criminal punishment. Prerequisite: Political Science 102 or permission of the instructor.

## SOC 240. Criminology*

Study of the nature, causes, and social significance of crime. Prerequisite: Sociology 101.

## SOC 341. Variant Behavior*

An exploration of behavior that has been socially defined as "deviant." The nature, sources, and consequences of this definition will be discussed. Prerequisite: Sociology 101 and one additional course in sociology.

## Premedical Program

Kathleen Verville, Chair, Premedical Committee

The Premedical Program is designed for students interested in pursuing a career as a physician, dentist, veterinarian, podiatrist or optometrist. The Premedical Program, under the guidance of the Premedical Committee, assists students with pre-professional planning and applications to the health professions schools that grant degrees in allopathic medicine (MD), osteopathic medicine (DO), dentistry (DDS, DMD), veterinary medicine (DVM), podiatry (DPM), and optometry (OD). Premedicine is not a major. Although many premedical students major in one of the Natural Sciences, any major offered by the College may be pursued.

Premedical Committee members include Professors Kathleen Verville (Committee Chair; Biology), Anne Marteel-Parrish (Chemistry), George Keiser (Physics), Lauren Littlefield (Psychology), and Matthew McCabe (Philosophy).

Premedical students should consult members of the Premedical Committee early in their academic careers and notify the Premedical Committee Chair of their interest in considering a career in medicine.

To become aware of expectations, requirements, procedures, and deadlines, premedical students should read the advising information found on the College's premedical website and Canvas site and in the college catalog. They should also attend all premed meetings, including the meeting held during first-year student orientation. In addition, individual advice should be sought from Premedical Committee members.

Students may plan to attend professional school in the academic year following graduation, but are encouraged to consider taking additional time. Taking a year or more between college graduation and entrance to these professional schools (taking one or more gap years) is common across the nation. The benefits of a gap year are many, including additional time for experiential learning opportunities, additional time to prepare for exams such as the MCAT or to make an application more competitive, and increased flexibility in the timing of courses. The earlier this decision to take a gap year is made, the greater its positive impact on a student's ability to have flexibility in curriculum design.

Students seeking a Committee Letter from the Washington College Premedical Committee, which is required/recommended by the majority of medical schools, must be aware of the need to complete a file with the Premedical Committee, the file requirements and file completion deadline (the last business day in February of the Junior year for students who plan to attend a health professions school in the academic year following graduation from Washington College), and the procedures for obtaining a Committee Letter. This information is provided and
discussed at premed meetings.

## Course Selection

In addition to the courses required for the chosen major and for graduation from Washington College, students will need to take those courses that are required for admission to health professions schools and needed to provide an academic background for admissions tests. Many of these courses also satisfy some of the requirements of various majors, especially majors in the Natural Sciences, and some satisfy college distribution requirements.

Because some of the courses needed for admission for the health professions programs have one or more prerequisites--and because students who want to attend professional school in the academic year after graduation from Washington College will normally need to complete the courses necessary for professional school admission by the end of the Junior year--students should begin to map their future coursework during their first academic advising meeting. The timing of the chemistry courses (a 5 -course/ 5 -semester series, from Chemical Principles of Organic Molecules through Biochemistry) is especially important.

The courses required for professional school admission vary depending on the type of medical program (e.g., veterinary medicine vs. allopathic medicine) and from school to school. The required courses (admission prerequisites) most commonly include the following:

- General Biology I and II w/lab (BIO 111, 112)
- Chemical Principles of Organic Molecules (CHE 120)
- Reactions of Organic Molecules (CHE 140)
- Quantitative Chemical Analysis (CHE 220)
- Chemistry of the Elements (CHE 240)
- Biochemistry w/lab (BIO 409/CHE 309)
- College Physics I and II w/lab (PHY 101, 102) or General Physics I and II w/lab (PHY 111,112)
- Two Math courses (see additional information below)
- Two English courses (ENG 101 is recommended)
- Social Science courses (see additional information below)
- Humanities courses.

Given the variation in required courses from program to program and school to school (some schools have additional requirements; some have fewer requirements; some recommend certain courses), students should consult the appropriate websites for each area of medicine (aamc.org, aacom.org, aacpm.org, aavmc.org, adea.org, opted.org) and for individual schools. They should also consult those documents that list professional school requirements: Medical School Admission Requirements for U.S. and Canadian Medical Schools (MSAR); Osteopathic Medical College Information Book (CIB); Veterinary Medical School Admission

Requirements (VMSAR); and ADEA Official Guide to Dental Schools). Many of these are available online.

Those students who plan to attend a health professions program in the academic year following graduation from Washington College (without one or more gap years) must be aware that the hierarchical nature of the chemistry courses needed for admission to professional schools and for many of the admissions tests such as the MCAT requires them to take CHE 120/140 in the first year, CHE 220/240 in the second year, and Biochemistry (BIO 409/CHE 309) in the fall of the third year. Students who elect not to take Chemistry in the first year will normally not be able to apply to medical school without taking a gap year.

The chemistry courses CHE 120/140/220/240 are the equivalent of Organic Chemistry and General Chemistry.

Students may fulfill the physics requirement for health professions schools by taking either the algebra-based physics course [College Physics I and II (PHY 101, 102)] or the calculus-based physics course [General Physics I and II (PHY 111, 112)]. Those students planning a major in Physics or in Chemistry with ACS certification need to take the calculus-based physics sequence (PHY 111, 112), as PHY 101/102 will not satisfy the requirements for their major.

Math requirements can vary depending on the program. Statistics (MAT 109) is strongly recommended. Since many medical schools require or recommend Differential Calculus (MAT 201) and the course is required for the major in Biology, Chemistry, and Physics, students should normally plan to take MAT 201. The next course in the calculus series, Integral Calculus (MAT 202), is required for some majors (e.g., physics, and chemistry) but is not required for admission to most health professions schools. Students opting to take the calculus-based General Physics course (PHY 111, 112) should note that MAT 201 is a corequisite for PHY 111 and MAT 202 is a corequisite for PHY 112. Note that, based on placement test scores, some students may need to take the two-semester Stretch Differential Calculus rather than Differential Calculus.

In addition to fulfilling prerequisites for admission, the content of many of the above courses is included on the tests required for admission [Medical College Admission Test (MCAT), the Dental Admission Test (DAT), and the Optometry Admission Test (OAT)]. The MCAT tests critical analysis and reasoning skills as well as knowledge of general biology, general chemistry, organic chemistry, biochemistry, physics, statistics, psychology, and sociology. Therefore, students planning to enter programs that require the MCAT (allopathic medicine, osteopathic medicine, many podiatric medicine programs) should consider fulfilling the social science distribution requirements with General Psychology (PSY 111, 112) and Introduction to Sociology (SOC 101). Knowledge of statistics for the MCAT can also be gained from Statistics and Research Design I and II with lab (PSY 209, PSY 309). Professional schools may vary in terms of whether the psychology statistics courses count as required math courses.

Note that many programs require or recommend additional biology courses beyond General Biology. These biology classes are also important for students who ultimately opt for programs in related health fields such as Physician Assistant programs instead of medical school, as those programs require certain upper level biology courses.

Students who do not major in one of the sciences are strongly encouraged to take more than the minimum required science classes.

Students are encouraged to seek breadth in their course selections and pursue their academic passions. Ethics courses [e.g. Ethical Theory (PHL 225), Foundations of Morality (PHL 235), Biomedical Ethics (PSY 325)] as well as health-related courses such as Introduction to Public Health and Global Health Disparities are examples of courses that may be of interest to students seeking careers in healthcare.

Students are especially encouraged to seek courses that enable them to explore their interests and expand their horizons, and the required/suggested courses named above should not prevent that.

A table of sample schedules for various majors that allows for completion of required courses by the end of the Junior year is shown below. However, because there are many other possible course arrangements and because students differ in academic background and preparedness, each student is encouraged to seek individual advice about course planning. The course schedule presented is rigorous and for this and many other reasons may not be appropriate for every student.

Students with Advanced Placement credit in required premedical courses should seek advice from the Premedical Committee, as some professional schools do not accept AP credit for required courses. Those schools typically ask students either to retake the course at a four year college or to take additional upper level courses in the discipline(s) in which the AP credit was received.

Those students planning to study abroad should seek advice about coursework planning and should take required science premedical courses in the United States.

Courses required for medical school admission should not be taken Pass/Fail. In addition, professional schools normally impose minimum grade requirements on required courses. Most commonly, grades of $C$ minus and below are not accepted. (Although grades of $C$ and above allow a course to be counted as a prerequisite, students should be aware that $C / C$ plus/B minus are not competitive.)

All required science classes should be " majors level" or those intended for pre-health students. They should also have a laboratory component.

Sample Course Schedules For Students Who Plan to Enter Medical/Professional School The Academic Year Following College Graduation*

| Biology Major | Chemistry Major | Physics Major | Psychology Major | Other Major |
| :--- | :--- | :--- | :--- | :--- |


| First Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| FYS 101, ENG 101 | FYS 101, ENG 101 | FYS 101, ENG 101 | FYS 101, ENG 101 | FYS 101, ENG 101 |
| BIO 111, 112 | CHE 120, 140 | PHY 111, 112 | PSY 111,112 | Introductory Sequence for Major |
| CHE 120, 140 | BIO 111, 112 | CHE 120, 140 | BIO 111, 112 | BIO 111, 112 |
| MAT 201, Math | MAT 201, 202 | MAT 201, 202 | CHE 120, 140 | CHE 120, 140 |
| Second Year |  |  |  |  |
| CHE 220, 240 | CHE 220, 240 | CHE 220, 240 | CHE 220, 240 | CHE 220, 240 |
| Advanced Biology | PHY 111, $112 \ddagger$ | PHY 211, 252 | PSY 209, PSY 309 | Advanced Course for Major |
| English | English | MAT 203, 345 | Advanced Psychology | English |
| Distribution or Elective | Distribution or Elective | BIO 111, 112 | MAT 201, Math | MAT 201, Math |
| Third Year |  |  |  |  |
| BIO 409/CHE 309 | BIO 409/CHE 309 | BIO 409/CHE 309 | BIO 409/CHE 309 | BIO 409/CHE 309 |
| Advanced Biology | Advanced Chemistry | Advanced Physics | $\begin{aligned} & \text { PHY 101,102 or } \\ & \text { PHY 111, } 112 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { PHY 101,102 or } \\ & \text { PHY 111, } 112 \end{aligned}$ |
| $\begin{gathered} \hline \text { PHY 101,102 or } \\ \text { PHY 111,112 } \end{gathered}$ | Advanced Chemistry | English | Advanced Psychology | Advanced Course for Major |
| Distribution or Elective | Distribution or Elective | Distribution or Elective | English | Distribution or Elective |
| Fourth Year |  |  |  |  |
| Advanced Biology | Advanced Chemistry | Advanced Physics | Advanced Psychology | Advanced Course for Major |
| Advanced Biology | Advanced Chemistry | Advanced Physics | Advanced Psychology | Advanced Course for Major |
| Distribution or Elective | Distribution or Elective | Distribution or Elective | Distribution or Elective | Distribution or Elective |
| Distribution or Elective Course | Distribution or Elective Course | Distribution or Elective Course | Distribution or Elective Course | Distribution or Elective Course |

$\ddagger$ PHY 111,112 is required for students seeking an ACS-certified degree in chemistry. Other chemistry majors may take PHY101, 102 or PHY 111,112.
*These sample schedules allow for a professional school application in the summer between the junior and senior years, the approximate application timing for students who plan to enter professional school in the year following college graduation. We strongly encourage students to consider taking at least one additional year before applying to professional school. Please note that these sample schedules should not be used without also reading the accompanying text, which provides additional explanation. As there are many course combinations that can allow this same application timing, students should seek out individual advice regarding course planning. When planning courses, students should be aware that the required courses for professional school admission normally need to be completed before the application is submitted and that many of the required courses are also necessary for strong performance on admission tests (e.g., MCAT), which students should plan to complete before the application is submitted. Students should also be aware of course prerequisites and the hierarchical nature of the biology and chemistry courses that lead to Biochemistry.

## Additional Information

The appropriate test (MCAT, DAT, OAT, GRE) should be taken before applying to professional school. Advice about which test is required for particular programs, when to take these tests, and how to prepare for them should be sought from the Premedical Committee. Along with a strong GPA, strong test score are important for a successful application to these highly competitive programs. The exams should not be taken without adequate and extensive preparation, and students should plan to take the test one time only, earning an exceptional score the first time. All scores are normally visible to and considered by professional schools.

Although many of the information above pertains to academic requirements, students should be aware of the importance of factors such as communication skills, ability to work in a team, cultural competence, community service, campus involvement, leadership, character, and experience in and knowledge of medicine.

Students who do not have U.S. citizenship or permanent residency should seek out early advice about career planning and be aware that it is very difficult (although not impossible) for non-U.S. citizens/permanent residents to gain entry into U.S. medical schools and to finance their medical education.

## Psychology

Division of Natural Sciences and Mathematics

Tia Murphy, Chair<br>Michael Dooley<br>Cynthia Gibson<br>Michael Kerchner<br>Lauren Littlefield<br>Kevin McKillop<br>Audrey Weil

Psychology addresses the fundamental premises of human behavior and the brain's complex role in determining who we are. Students are kept abreast of the latest scientific advances and research methods in this burgeoning field. The department offers a bachelor of arts degree in experimental psychology, as well as two specialized programs: a bachelor of arts concentration in clinical/counseling and a bachelor of science concentration in behavioral neuroscience.

The curriculum in psychology is designed to provide a strong background in the biobehavioral sciences and to prepare students for entry into graduate programs in experimental psychology, clinical/counseling psychology, neuroscience, medicine, and related fields. The course offerings reflect both the basic scientific content of psychology and its application in the clinical setting or in the business world. The department heavily stresses faculty-student interaction through laboratories and internships. A psychology club is open to all interested students, and a chapter of Psi Chi, the international honor society in psychology, hosts speakers and supplementary activities.

The curriculum is three-tiered. Students first survey the domain through a year-long general psychology course sequence (tier 1) and then progress through a two-semester methods sequence in statistics and research design while they broaden and deepen their understanding through lab-oriented coursework (tier 2). Students preparing for graduate or professional school are encouraged to work with faculty in a mentor-apprentice fashion no later than their third year; such work often culminates in faculty/student presentations at conferences or co-authored professional publications. Junior seminar (PSY 399) helps students prepare for the senior year as well as consider post-graduate plans. In their last year, majors design and conduct an original research project or write a theoretical review to address some unanswered question in the field under the guidance of a faculty mentor (tier 3). The conceptualization of the senior capstone project is typically proposed during the spring of the junior year. In addition to the written thesis, the results are presented in poster format during the second semester of the senior year. Senior Capstones judged by the departmental faculty to be outstanding earn honors status, and the author of one exceptional project per year can be granted the Psychology Department Senior Capstone Award.

The Virginia Conner '85 Prize is given annually to the graduating psychology major "who has demonstrated outstanding ability and achievement in the biobehavioral sciences." (See College Honors and Awards in this Catalog for additional honors and awards given by the department.) Recent graduates have earned their Ph.D. or M.D. from such universities as Toronto, Columbia, Purdue, Delaware, Drexel, South Carolina, Maryland, and Virginia Commonwealth.

Grants awarded to the department by the National Science Foundation and the Jessie Ball duPont Fund have provided state-of-the-art laboratory instrumentation within our renovated facility. The Daniel Z. Gibson/John A. Wagner Psychology Department Fund provides honoraria for prominent speakers. Money is also available to support student travel to professional conferences.

Teaching and research facilities include: computerized labs in biostatistics, biofeedback/psychophysiology, cognition, and sensation and perception; developmental and social labs with digital video capabilities, a psychometric testing lab complete with personality and cognitive instrumentation, a neuroscience lab with histology and surgery capabilities, and transcranial doppler and topographic EEG machines to map brain functioning.

Qualified students may spend a semester or two in their junior and/or senior year in which they earn academic credit and clinical experience providing psychological services. A wide array of internship and practicum experiences in local settings is available. Working closely with a therapy team, student interns participate in all aspects of treatment. A junior year abroad program allows students to broaden their horizons at approved institutions; if possible, Psychology majors are encouraged to choose the fall semester of the junior year to go abroad because Junior Seminar is offered each spring.

## First-Year And Sophomore Courses

Psychology 111 and 112, the General Psychology sequence, count toward Social Science distribution requirements. PSY 111 is not a prerequisite for PSY 112; they can be taken in any order.

Students interested in pursuing psychology beyond the introductory sequence should complete PSY 209, Statistics and Research Design I, by the end of their sophomore year. Many 300- and 400-level offerings have PSY 209 as a prerequisite.

## Writing in the Major Courses

Statistics and Research Design II (Psychology 309) and Junior Seminar (Psychology 399) focus on psychological research. Together, these two courses refine reading, writing, and thinking skills necessary for performing research. Written components of these courses are specifically designed to hone students' ability to write in APA style and create succinct research proposals.

## Senior Capstone Experience

Students majoring in psychology must satisfy their requirements for the degree by completing either an empirical research project or a theoretical review paper. Specific guidelines for the Senior Capstone Experience (SCE) are available online, complete with downloadable SCE resources, such as the syllabus with annual deadlines and formatting examples: http://psychology.washcoll.edu/seniorcapstoneexperience.php. The SCE in Psychology is graded as any other course and gets factored into the student's GPA. In addition to proposing, writing, and defending the SCE, an additional component of the SCE is an assessment of knowledge and skills in the field of psychology. This assessment may vary between the ETS Psychology Major Field Test, skill-based testing using rubrics/ratings, and development of a portfolio. All seniors in a given year will be assessed through the same mechanism.

Students with a dual major in Psychology and another discipline who wish to pursue an integrative capstone project must declare this intent early in the first semester of their senior year and secure an agreement from the relevant departments and faculty mentors before commencing their capstone project. The department cannot guarantee that an integrated project acceptable to both departments can be implemented in all instances.

## Major Requirements For The B.A. In Experimental Psychology

For broad exposure to many disciplines within psychology, courses in the major emphasize empirical testing of theoretical psychological models. The broad Experimental Psychology major is especially recommended for those students who wish to double major in psychology and another field or for those who are not interested in the clinical/counseling concentration or the behavioral neuroscience concentration.
A. Two-semester introductory sequence in the natural sciences: Take one of the following sequences:
BIO 111 and 112 - General Biology
CHE 120 - Chemical Principles of Organic Molecules andCHE 140 - Reactions of Organic Molecules
PHY 111 and 112 - General Physics
B. The Psychology Core: All of the following psychology courses are required:

PSY 111 and 112 - General Psychology
PSY 209 - Statistics and Research Design I
PSY 309 - Statistics and Research Design II
PSY 399 - Junior Seminar
PSY SCE - Psychology Senior Capstone Experience
C. Laboratory Requirement: Majors must complete five of the following courses. Three of these must be laboratory courses (+ indicates a laboratory course), and there must be at least one course from each of the three disciplinary areas:

Experimental<br>PSY 202 - Lifespan Development<br>PSY 220 - Human Sexuality<br>PSY 221 - Social Psychology<br>PSY 231 - Personality<br>PSY 302 - Advanced Developmental Psychology +<br>PSY 316 - Cognitive Neuroscience +<br>PSY 321 - Experimental Social Psychology +

## Applied/Clinical

PSY 233 - Psychopathology I
PSY 234 - Psychopathology II
PSY 304 - Theories \& Processes of Counseling
PSY 313 - Learning and Applied Behavioral Analysis with Lab +
PSY 320 - Health Psychology +
PSY 333 - Psychological Testing
PSY 433 - Child Assessment +

## Biological

PSY 205 - Drugs and Behavior
PSY 210 - Biopsychology +
PSY 305 - Psychopharmacology +
PSY 317 - Sensation and Perception +
PSY 319 - Comparative Psychology +
PSY 410 - Neuroscience Research Methods +

## Major Requirements For The B.A. In Psychology With A Clinical/Counseling Concentration

Concentration Advisor: Dr. Littlefield

This concentration is designed to prepare students interested in the helping professions and human services. Coursework provides students with a foundation for graduate work in counseling, school psychology, clinical psychology, and the allied health fields. Students are also prepared for entry-level positions in human resources, management, child care or school settings as well as work as clinical/counseling assistants or research assistants.
A. Two-semester introductory sequence in the natural sciences: Take one of the following sequences:
BIO 111 and 112 - General Biology
CHE 120 - Chemical Principles of Organic Molecules and CHE 140 - Reactions of Organic Molecules
PHY 111 and 112 - General Physics
B. The Psychology Core: All of the following psychology courses are required:

PSY 111 and 112 - General Psychology
PSY 209 - Statistics and Research Design I
PSY 309 - Statistics and Research Design II
PSY 399 - Junior Seminar
PSY SCE - Psychology Senior Capstone Experience
(SCE topic must be pre-approved by a clinical/counseling concentration advisor)
C. Counseling/Clinical Core - Four (4) of the following courses are required:

Lifespan Development (PSY 202)
Personality (PSY 231)
Psychopathology I (PSY 233)
Psychopathology II (PSY 234)
Theories and Processes of Counseling (PSY 304)
Psychological Testing (PSY 333)
Special Topics in Clinical/Counseling/Community Psychology (PSY 294, 394, 494)
Psychology Internship (PSY 490, 491)
D. Counseling/Clinical Lab Courses- Choose two of the following, only one of which can be Advanced Developmental Psychology or Experimental Social Psychology:
Advanced Developmental Psychology (PSY 302)
Learning and Applied Behavioral Analysis with Lab (PSY 313)
Health Psychology (PSY 320)
Experimental Social Psychology (PSY 321)
NRM: Human Neuropsychology (PSY 410)
Child Assessment (PSY 433)
Advanced Problems (PSY 440); with prior approval of the Counseling/Clinical Faculty FOR DUAL CC and BN CONCENTRATORS: Only one of the courses above may be applied toward the requirements for both concentrations.
E. Biological Courses- Choose one of the following:

Drugs and Behavior (PSY 205)
Biopsychology (PSY 210)
Psychopharmacology (PSY 305)
Sensation \& Perception (PSY 317)
Discuss areas of potential interest with your academic advisor. Consider a double major or a minor in Biology, Business Management, Human Development, Public Health, or Sociology.

## Major Requirements For The B.S. In Psychology With A Behavioral Neuroscience Concentration

Concentration Advisor: Dr. Gibson

The concentration in behavioral neuroscience is designed for students with a focused interest in the biological bases of behavior and thought. The concentration is well suited for students who are contemplating professional or research careers in medicine, pharmaceuticals, veterinary medicine, animal science, neurology, and neuroscience. Because BN concentrators have additional laboratory requirements beyond other Psychology majors, students in the BN track earn a Bachelors of Science (B.S.).
A. BN students are required to complete all of the following two-semester sequences in the natural science:
BIO 111 and 112 - General Biology
CHE 120 - Chemical Principles of Organic Molecules and CHE 140 - Reactions of Organic Molecules
B. The Psychology Core: All of the following psychology courses are required:

PSY 111 and 112 - General Psychology
PSY 209 - Statistics and Research Design I
PSY 309 - Statistics and Research Design II
PSY 399 - Junior Seminar
PSY SCE - Psychology Senior Capstone Experience
(SCE topic must be pre-approved by the BN concentration advisor)
C. The Behavioral Neuroscience Core: The following two laboratory courses are required:

PSY 210 - Biopsychology
PSY 410 - Neuroscience Research Methods
D. Additional Laboratory Courses: Three of the following courses are required, with at least one from group D1 and one from group D2:
Group D1
PSY 305 - Psychopharmacology
PSY 313 - Learning and Applied Behavioral Analysis with Lab
PSY 319 - Comparative Psychology
With advance approval of the BN concentration advisor, one of the following can be chosen: on-/off-campus research; Advanced Problems (PSY 440); or one upper-level laboratory course in Biology, Chemistry, or Physics. If choosing this option, one additional course must also be chosen from D1.

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Group D2
PSY 316 - Cognitive Neuroscience
PSY 317 - Sensation & Perception
PSY 320 - Health Psychology
E. Fundamental Psychology: One of the following courses is required:
PSY 202 - Lifespan Development
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PSY 221 - Social Psychology
PSY 233 or 234 - Psychopathology I or II
PSY 333 - Psychological Testing

NOTE: Students in the BN concentration are encouraged to take additional 300- and 400-level PSY courses, as well as other upper-level BIO and CHE courses. Those students planning to apply to graduate neuroscience programs, medical, or veterinary schools should also consider MAT 201, MAT 202, PHY 111, PHY 112, and CHE 309/BIO 409. Such students should consult with the pre-medical advisor or their behavioral neuroscience advisor.

## Minor Requirements

The following courses fulfill the requirements for a minor in psychology. Four of the six courses must have the PSY prefix and be completed at Washington College.
PSY 111 and 112 - General Psychology
A Statistics course (either BUS 109, ECN 215, MAT 109, or PSY 209)
Any psychology lab course (not including PSY 209 or PSY 309)
Any two additional elective courses in psychology

## Course Descriptions

## 111, 112. General Psychology

An introduction to the scientific study of behavior and mind, embracing all aspects of human experience. Topics include the anatomical and functional organization of the nervous system, consciousness, learning, memory, development, emotion, social interactions, psychopathology, and society and culture. This course surveys the methods and major findings of the various fields of psychology. PSY 111 introduces the student to the cognitive, neurological, and biological aspects of psychology in addition to basic research methodologies. PSY 112 covers the clinical/counseling, developmental, personality, and social aspects of psychology.

## 202. Lifespan Developmental Psychology

This course will provide a broad overview of human growth and development from infancy to old age. Changes in biological, cognitive, emotional, and social domains will be discussed at each period of the lifespan. Topics will include heredity, learning, emotional development, temperament, attachment, gender development, developmental disorders, peer relationships, families, and aging. Recent research and current issues will be highlighted.

## 205. Drugs and Behavior

A survey of human physiological and behavioral responses to commonly used drugs. Special emphasis is placed on nonprescription drugs (nicotine, alcohol, caffeine), psychotherapeutic agents (anti-anxiety drugs, anti-depressant medications, anti-psychotic drugs), and other psychoactive drugs (opiates, hallucinogens, marijuana). Societal issues related to illicit and therapeutic drug use, abuse, legislation and policies will also be topics of exploration and discussion.

## 209. Statistics and Research Design I with Lab

Consideration of sampling theory, the design of experiments, and the analysis and presentation of data with emphasis on correlation, t -test, chi square, and the analysis of variance. Attention is given to parametric and non-parametric procedures. Students learn both to hand calculate and to use a simple computer analysis package to analyze data. Prerequisite: Psychology 111, 112.

## 210. Biopsychology with Lab

The study of the biological bases of human and non-human behavior. The emphasis is on the organization of the nervous system as it relates to behavior and conscious thought. Specific topics may include: structure and function of the nervous and endocrine systems; mechanisms of neurotransmission; neurologic disorders; feeding; reproduction; aggression; sleep and dreaming; functional organization of sensory and motor systems; lateralization of function and language disorders; learning and memory; and the biological bases of emotion and psychopathology. Prerequisite 111, 112 or Biology 111, 112.

## 220. Human Sexuality

A biological approach to the study of human sexuality. This course emphasizes topics such as the anatomy and physiology of the human reproductive system, conception and contraception, STDs and infertility and then continues on to discuss the influences that shape sexual attitudes as well as the values and behavior systems that influence human sexual behavior. An overview of attitudes towards sexuality across cultures is included.

## 221. Social Psychology

The course surveys the major topics and theories of social psychology, such as social perception, attitudes, altruistic behavior, aggression, attraction, social cognition, as well as applied areas of social psychology and the legal system and the social psychology of health behavior. Special emphasis is placed on original research and recent developments in the field.

## 231. Personality

Discussion of the major approaches to personality from the psychodynamic approach of Freud to the contemporary cognitive approaches of Kelly, Bandura, and Mischel. Research regarding major personality attributes (need for achievement, authoritarianism, intelligence) may also be discussed.

## 233. Psychopathology I

Evaluation of the etiology of various forms of behavior disorders (anxiety, mood, substance abuse, psychotic), their symptoms, and treatment. These disorders will be considered in relation to clinical theories, research, and practice. Prerequisite: Psychology 111, 112.

## 234. Psychopathology II

Evaluation of the etiology, symptoms, and treatment of behavior disorders within the broad areas of childhood/developmental disorders and medical/organically-induced abnormal behavior. Specific topics include disorders of personality, impulse-control, eating, sleep, sex,
and neurocognition. Disorders will be considered in relation to clinical theories, research, and practice. Prerequisite: Psychology 111, 112. Psychopathology I is NOT a prerequisite.

## 302. Advanced Developmental Psychology with Lab

This course will explore and discuss the primary literature on the theory and research of childhood social development. The specific topic within social development to be covered will vary based on current research goals. Students will have opportunity to engage in research projects in natural or laboratory settings, which may require additional time outside of class. Must have taken or must be taking PSY 202 and PSY 209; permission of the instructor is needed to override this requirement.

## 304. Theories and Processes of Counseling

An examination of the major theories of counseling (psychoanalytic, rational-emotive, client-centered and behavioral), an examination of the major ethical and legal issues, and an opportunity to acquire practical counseling process skills such as listening, problem-solving, vocational counseling and goal setting. Prerequisite: Psychology 111, 112, or two semesters of sociology.

## 305. Psychopharmacology with Lab

An in-depth study of the chemistry and pharmacology of the nervous system. Laboratory exercises will emphasize the use of laboratory animal models in pharmacological research. The actions of pharmacological agents on both the central nervous system and the peripheral nervous system will be explored. Laboratory exercises emphasize the use of behavioral measures used by pharmaceutical researchers to assess dose effects, drug tolerance, withdrawal, and drug interactions. Prerequisite: Psychology 210 or Biology 111, 112.
Psychology 209 is recommended.

## 309. Statistics and Research Design II with Lab

A survey overview of appropriate research designs employed in psychological research. Emphasis will be on evaluation and application of scientific methods and data analysis in inferential statistics. Specific topics include factorial designs and analysis of variance, appropriate group comparison tests of significance, prediction and multiple regression, and an overview of other advanced research designs and analyses. Examples will be drawn from a wide range of behavioral sciences. Principles relating to the planning, implementation, and ethics of psychological research will be examined and emphasis will be placed upon critical evaluation of published research. A significant portion of the course will be devoted to instruction in SPSS, a computer-based statistical package. Prerequisite: Psychology 111, 112 and Psychology 209.

## 313. Learning and Applied Behavioral Analysis with Lab

Reviews of theoretical and empirical research related to classical, operant and cognitive aspects of learning. Emphasis in lectures and the laboratory will be on the use of these theoretical contributions within the discipline of Applied Behavioral Analysis. Prerequisite: Psychology 111,

## 316. Cognitive Neuroscience with Lab

Cognitive neuroscience investigates the biological bases of higher order cognition and complex human behavior. Topics include the methodologies of cognitive neuroscience as well as the neural underpinnings of cognitive processes including perception, attention, memory, language, and executive function. The laboratory portion will provide opportunities to demonstrate and experience cognitive and neural phenomena. Prerequisites: Psychology 111, 112, and Psychology 209. Recommended course: Psychology 210.

## 317. Principles of Sensation and Perception with Lab

A survey of the methods by which humans detect and process external stimuli and the brain pathways involved in creating meaningful perceptions out of sensory information. Special attention is directed to sensory physiology, perceptual illusions and deficits in each sensory modality, including vision, audition, olfaction, taste, and touch. Laboratory demonstrations and simulations are intended to provide concrete examples and provide a mechanism for exploring each sensory modality. Prerequisites: Psychology 111, 112.

## 319. Comparative Psychology with Lab

An approach to the study of behavior that includes comparisons across the wide diversity among animal species and stresses the interaction between behavioral and cognitive adaptations and the demands of the environment. The emphasis in the lab will be on the methods and skills needed for quantification and analysis of behavioral data in naturalistic and laboratory settings. Prerequisite: Psychology 111, 112 or Biology 111, 112; and Psychology 209.

## 320. Health Psychology with Lab

An examination of the psychological effects of health behavior, physical effects of psychological experiences, and theories of health behavior. Applies social psychological perspectives to such topics as stress-related diseases, placebo effects, doctor-patient interactions, dying, and the hospital environment. Additionally, covers theories and research on preventive health behavior; adherence to medical treatment; health lifestyles; substance use and abuse; and anxiety and depression in medical illness. Laboratory component is a qualitative study of individuals' health experiences. Prerequisite(s): Psychology 111, 112, and either PSY 209 or MAT 109

## 321. Experimental Social Psychology with Lab

Thorough and critical examination of current social-psychological thought and theory through discussion of primary experimental reports and review articles. The issues addressed in this course vary from year-to-year, but have included social exclusion, self-regulation, lying and detecting deceit, gossip, violent video games, sexism, racism, humor, terror management, happiness, awe and humility. The laboratory component involves student-initiated research in laboratory or natural settings. Prerequisite: Psychology 111, 112 (or two semesters of sociology).

## 323. Industrial/Organizational Psychology

Examines work and organizational behavior from psychological, business science, and sociological viewpoints. Topics include personnel psychology, job motivation, and job satisfaction, and other job attitudes are examined along with organizational culture, group process, leadership, and organizational development. Concepts are appropriate for application to corporations and small businesses as well as community groups and nonprofit organizations. Prerequisite: Psychology 111, 112 OR two semesters of Business Management OR two semesters of Sociology.

## 333. Psychological Testing

An analysis of the construction, interpretation, and application of various psychological tests and measurement tools. Personality, intelligence, vocational, achievement, and aptitude tests will be evaluated. Prerequisite: Psychology 111, 112. Psychology 209 is recommended but it can be a co-requisite.

## 399. Junior Seminar

This required 2-credit course, normally taken during the second semester of the junior year, teaches foundational skills that are essential to psychology as a profession, such as ethics certification, writing in the discipline, and proposal development. By taking this seminar, students will have the opportunity to clarify achievement goals and develop academic and career plans.

## 410. Neuroscience Research Methods with Lab

This course is recommended for students who are preparing for graduate study in neuroscience or medicine and combines seminar and lab work. The topics discussed in the seminar vary from year to year (e.g., Psychopharmacology of Mood Disorders, Animal Models of Mental Illness, Traumatic Brain Injury, Cognitive \& Neurological Assessment) and may be repeated with permission of the concentration advisor. During the final portion of the course, students design and conduct a pilot research project. The project should be a means for the student to hone skills (e.g., perfect a specific surgical procedure) or apply specific research techniques (e.g., neural tract-tracing, histochemistry, clinical neurological assessment, animal behavioral assessments, or topographic EEG mapping) available to students in the department laboratories for his or her senior thesis project. Prerequisite: Psychology 111, 112 or Biology 111, 112; and Psychology 209; or permission of the instructor.

## 433. Child Assessment with Lab

This course provides the student with knowledge and experience in the clinical assessment of children. In addition to clinical report writing, students will learn observational techniques, interviewing skills, behavioral/emotional scales, and measures of cognitive assessment that are specific to children and adolescents. Prerequisite: Psychology 333.

## 490, 491. Psychology Internship

## Internship Coordinator: Dr. Littlefield

Supervised experience in an agency providing some aspect of psychological services. The class includes seminar sessions designed to help students achieve a fuller understanding of their placement experiences. A large variety of placements are available. A total of eight internship credits can be accrued. PSY 490 is used for 2 and 4 credit experiences. PSY 491 indicates that 6 or 8 credits were earned during a summer experience. Prerequisite: Psychology 111, 112, junior/senior standing, and permission of instructor.

## SCE: Senior Capstone Experience

The culmination of student academic experiences, the SCE in Psychology is intended to provide each student with an opportunity to deeply explore a research topic in psychology. In consultation with a faculty mentor, a process of active inquiry is facilitated that requires critical thinking, integration of acquired knowledge and skills, and mastery of intellectual accomplishment beyond the classroom. A theoretical review of a problem/question in the field or a data-driven research project is completed by each student.

## Special Courses

## 490, 491. Psychology Internship

## 194, 294, 394, 494. Special Topics in Psychology

The study of topics in psychology that are not regularly offered in the curriculum. Courses may be interdisciplinary in nature. Prerequisite: Psychology 111, 112.

## 195, 295, 395, 495. On-campus Research

A ten-week on-campus research project to be guided by a faculty mentor. Based on mutual interests, the student and faculty mentor will develop a research project, supported by a reading list and involving theoretical, laboratory, or field investigations supervised by the faculty mentor. Participants will produce a final report detailing the findings of their research. Selection of students will depend on academic background, scholastic achievement, and the results of a personal interview with the faculty mentor. Not offered as pass/fail. Prerequisite: Permission of the instructor.

## 196, 296, 396, 496. Off-campus Research

Guided research under the supervision of a faculty mentor. Based on mutual interests, the student and faculty mentor will develop a research project, supported by a reading list and involving laboratory or field investigations supervised by a faculty mentor. Participants will produce a final report dealing with the finding(s) of their research. Selection of students will depend on academic background, scholastic achievement, and the result of a personal interview with the faculty mentor. Not offered as pass/fail. Prerequisite: Permission of the instructor and psychology department chair.

## 197, 297, 397, 497. Independent Studies in Psychology

An in-depth study of an area of particular interest to a student and faculty member not regularly
covered within the curriculum. Not offered as Pass/Fail. Prerequisite: Permission of the faculty mentor and psychology department chair.

## 440. Advanced Problems

Advanced independent research under the direction of a faculty mentor. The interested student must petition the psychology department chair for this course and show evidence of the maturity required for its completion. Prerequisite: Psychology 395, 396 or 397 and consent of the faculty mentor.

# Public Health Interdisciplinary Minor 

Dr. Elizabeth Yost, Director

Public health encompasses a diverse array of fields, reflected in the interdisciplinary nature of all public health programs. Careers in public health focus on major health concerns such as infectious diseases/pandemics, antibiotic resistant bacteria, nutrition/obesity, drug and alcohol addiction, mental health, bio-terrorism, environmental health issues related to water/food/air quality, food (in)security, STDs, women's health, and health concerns related to poverty/health care disparities both nationally and internationally. Gaining an interdisciplinary understanding of the physical, social, and cultural aspects of health and medicine prepares students for success in career planning, graduate training, and careers of passion in medical and health fields.

This minor is designed to help students become familiar with the multidisciplinary nature of public health work, increase their awareness of the opportunities available in this diverse field, and inspire them to discover lives of purpose and passion through careers in health and medicine.

Students interested in pursuing the Public Health minor should consult with the Director, Dr. Elizabeth Yost (eyost2@washcoll.edu), on their course selections and should be aware that internship opportunities in public health are available.

The minor in Public Health consists of six (6) courses. Students are required to take Introduction to Public Health and Global Health Disparities courses. The remaining four courses are split between electives in Natural Science \& Public Heath (List A below) and electives in Social, Cultural and Behavioral Aspect of Public Health (List B below). Students may request that special topics courses or pre-approved study abroad courses count toward fulfillment of either List A or List B courses, as appropriate. Credit for such courses may be granted only with the approval of the Director of the Public Health minor. Students who are sociology majors may not double count the Intro to Public Health course or the Global Health Disparities course toward their sociology major.

## Required Courses

SOC171 - Introduction to Public Health (no prerequisite)
SOC271 - Global Health Disparities (prerequisite: Introduction to Public Health)

## Elective Courses

Students must take a combination of four (4) additional courses from List A and B, below. The courses must be from at least three (3) different departments, and two courses must be from each list.

Note: Courses from Lists A and B may have prerequisite courses that must be taken prior to enrollment. See course descriptions below for further information.

List A. Natural Sciences and Public Health
BIO 100 - Microbes and Your World
BIO 203 - Microbiology
BIO 209 - Genetics
BIO 301 - Comparative Vertebrate Anatomy
BIO 302 - Developmental Biology
BIO 317 - Pathophysiology
BIO 404 - Immunology
BIO 424 - Comparative Animal Physiology
CHE 110 - Chemistry of the Environment
CHE 210 - Environmental Chemistry
CHE 309/BIO 409 - Biochemistry or CHE 303 Chemistry of Biological Compounds
CHE 310 - Greener and Sustainable Chemistry
CHE 320 - Introduction to Medicinal Chemistry

List B. Social, Behavioral, and Cultural Aspects of Public Health
PSY 112 - General Psychology
PSY 202 - Lifespan Development Psychology
PSY 205 - Drugs and Behavior
PSY 220 - Human Sexuality
PSY 233 - Psychopathology I
PSY 234 - Psychopathology II
PSY 320 - Health Psychology w/Lab
ENV 101 - Introduction to Environmental Studies
SOC 221 - Social Inequalities
SOC 370 - Environmental Sociology
SOC 382 - Introduction to Social Welfare
POL 373 - Human Rights and Social Justice
PHL 225 - Ethical Theory
PHL 226 - Global Ethics
PHL 325 - Biomedical Ethics
ECN 394 - Health Economics

## Course Descriptions

## BIO 100. Microbes and Your World

You have heard the terms: Superbugs, Microbiome. Bioterrorism. Probiotics. Bioremediation. Beer. Beer? This course examines microbes in your world. From what they are to what they do, we will examine their impact on your food, your health and possibly your future. Lectures, readings and discussion will consider how bacteria, fungi and viruses impact human health and society, addressing topics found in today's headlines. Six hands-on labs supplement the lecture portion of the course.

## BIO 203. Microbiology with laboratory

A study of microorganisms (viruses, bacteria, fungi, and protists). Topics include microbial physiology, metabolism, growth, and genetics; infectious diseases; interaction of the microbe and host; and environmental microbiology. The laboratory portion of the course emphasizes staining techniques; culture methods; environmental, food, and medical microbiology; identification of unknown bacteria; and an independent research project.
Prerequisite: Biology 111-112.

## BIO 209. Genetics with laboratory

A study of heredity in cells, individuals, and populations, and of the molecular expression of genes. The course emphasizes genetic analysis in both lab and lecture. Topics in the laboratory include experiments in transmission, population, cellular, and molecular genetics using a variety of organisms as models.
Prerequisite: Biology 111-112

## BIO 301. Comparative Vertebrate Anatomy with laboratory

A comparative study of the major body systems of vertebrates, with emphasis placed on system structure, function, and evolutionary modification across vertebrate phylogeny. Laboratory work consists of detailed systems-level examination and comparative dissection in numerous representative vertebrates.
Prerequisite: Biology 111-112 and one 200-level biology course.

## BIO 302. Developmental Biology with laboratory

Examines embryo development, focusing on cellular and regulatory mechanisms that guide the process. We will cover the events of development from fertilization through organogenesis in a range of animal systems including sea urchins, Drosophila, amphibians, chickens and mammals. This course will also examine the role of developmental biology in medicine including stem cells. The laboratory portion is an investigative approach to the study of animal development, emphasizing cellular and molecular techniques that will complement many of the topics covered in lecture using sea urchin and chicken animal models.
Prerequisite: Biology 111-112 and one 200-level biology course. Biology 205 recommended.

## BIO 317 - Pathophysiology

This course introduces the physiological basis of common human diseases through laboratory, lecture, clinical case study, and analysis of primary scientific literature. Topics include diseases of the nervous, cardiovascular, renal, immune, and endocrine systems. Laboratories will expose students to techniques commonly used in clinical settings. Prerequisite: Biology 111-112 and one 200 level biology course.

## BIO 404 - Immunology

An examination of the specific defense system of mammals. Topics include leukocyte characteristics and their responses to antigen; antigen characteristics; antibody structure, diversity, function, genetics, and synthesis; the major histocompatibility complex; vaccines; and disorders of the immune system. The laboratory focuses on animal handling, antibody purification, and detection of antigen-antibody interactions. Prerequisite: Biology 111-112 and one 200-level biology course. Corequisite: Chemistry 112 or 140

## BIO 424. Comparative Animal Physiology with laboratory

A comparative study of physiological processes in animals. Topics will include gas exchange, circulation, water and ion balance, and excitable cells. As a comparative study, we will examine a variety of animals that are adapted to function in diverse environments. A weekly laboratory illustrates physiological principles.
Prerequisite: Biology 111-112 and two 200-level biology courses.

## CHE 110. Chemistry of the Environment

This introductory course focuses on the chemical dimensions of current environmental problems such as global warming, ozone depletion, water and soil contamination, and energy production. Fundamental principles of chemical bonding, reactions, and energy are studied as they arise in connection with each environmental issue. Interdisciplinary aspects are explored to further understand the multiple dimensions of the problems. Intended for students planning to major outside the sciences. Three hours of lecture and one hour and $3 / 4$ of laboratory each week.

## CHE 210. Environmental Chemistry

The cycling of natural chemical species and pollutants in the water, soil and air of our earth system is a major component of our complex ecosystem. In this environmental chemistry course, students will develop an understanding of the transport and reactions controlling natural chemical species in our environment, as well as the cycling of pollutants. Students will study current issues of water, soil and air pollution, and how society is working towards reducing the movement of pollutants through our environment. In the laboratory portion of the class, students will investigate the water quality of local water bodies, including the Chester River, as well as conduct hands-on experiments related to the environmental topics studied in class. Three hours of lecture and three hours of laboratory each. Prerequisites. Chemistry 120 and CHE 220

CHE 309. Biochemistry

An examination of living systems at the chemical level. Topics will include structure and function of macromolecules, cellular energetics, cellular respiration, and photosynthesis. A laboratory will be conducted weekly to introduce students to experimental techniques. Prerequisite: Biology 111 and Chemistry 202, or Chemistry 120, 140, 220, and 240

## CHE 310. Greener and Sustainable Chemistry

Greener and Sustainable Chemistry Environmentally friendly scientists are increasingly conscious about the need to make chemistry "greener." The goal of this course is to present a different perspective regarding chemistry and its applications in academia and industry worldwide. This course will cover both the theoretical and practical aspects of green and sustainable chemistry. The introduction will include the foundations of green chemistry and sustainability as well as a description of the tools and principles it employs. There will be an in-depth study concerning the evaluation of methods and tools in designing environmentally benign reactions and chemicals. Real-world examples will be used to illustrate the goals of green chemistry. Throughout the semester students will have the opportunity to enhance their writing and oral presentation skills and improve their communication and discussion abilities. Three hours of lecture each week. Prerequisite or co-requisite: Chemistry 140.

## CHE 320. Introduction to Medicinal Chemistry

This course is an introduction to the field of Medicinal Chemistry and will focus heavily on the chemistry of pharmacological agents as well as their synthesis. Attention will also be placed on enzyme mechanisms and how bioactive molecules affect their activity. This course meets three hours each week. Prerequisite. Chemistry 202 or Chemistry 120, Chemistry 140, and Chemistry 220.

## ENV 101. Introduction to Environmental Studies

This course is an introduction to the discipline of environmental studies. A multidisciplinary, international view of human responsibility toward the natural world will be emphasized, focusing on significant contemporary environmental issues. Topics to be covered include environmental literature (both historical and current), economic and ethical environmental concerns, scientific methods of assessment and analysis of environmental problems, and possible solutions to representative environmental problems. The laboratory/recitation section will be utilized for field trips, guest lectures, demonstrations, and discussions. This course is a prerequisite for all upper-level courses entitled environmental studies. The course should be completed by the end of the sophomore year if it is going to be counted toward the major.

## PHL 225. Ethical Theory

An examination of some of the major ethical theories in Western philosophy. Applications of these theories to concrete ethical problems will be considered. Special attention will be given to Consequentialist, Deontological, and Virtue theories. Readings will be drawn from classical and contemporary authors. Prerequisite: Philosophy 100.

## PHL 226. Global Ethics

As we become a global community, the need for secular ethical discourse becomes increasingly important. This course will explore how international culture, policy, and standards impact ethical practices around the world. Current events, anecdotes, and personal experiences will be brought together to highlight ethical theory in action in today's global environment. General topics include: the Absolutism-Relativism debate, the Ethics of Globalization, Global Business Ethics, Global Bioethics with emphasis on feminist issues, Global Environmental Ethics, and the Ethics of Warfare and Terrorism. Prerequisite: PHL 100, or permission of the instructor.

## PHL 325. Biomedical Ethics

Biomedical ethics explores the ethical problems that arise in the context of modern medical care and biomedical research. As such, biomedical ethics involves the lives and decisions of patients, family members, doctors, nurses, and medical researchers. The course content focuses on the application of ethical theories to problems such as the rights of patients, duties of physicians, the distribution of resources, conflicts of interest in the managed care system, assisted suicide, euthanasia, end of life decisions, abortion, nature of disease, the use of human subjects in research, and the use of genetic and reproductive technologies. Prerequisite: Philosophy 100, or permission of the instructor.

## POL 373. Human Rights and Social Justice

This course is designed to provide an introduction to the history, philosophy and major debates on human rights and social justice. Students will consider the philosophical and political positions underlying the debates that are central to the promotion of human rights, including gender, universalism and cultural relativism. The course also covers contemporary issues in the international human rights and social justice movement, including the right to development and freedom from poverty, women's human rights, minority rights, torture, slavery and genocide. Group work and the creation of a public awareness campaign are required course assignments. Prerequisite: Political Science 104 or permission of the instructor.

## PSY 112. General Psychology

An introduction to the scientific study of behavior and mind, embracing all aspects of human experience. Topics include the anatomical and functional organization of the nervous system, consciousness, learning, memory, development, emotion, social interactions, psychopathology, and society and culture. This course surveys the methods and major findings of the various fields of psychology. PSY 111 introduces the student to the cognitive, neurological, and biological aspects of psychology in addition to basic research methodologies. PSY 112 covers the clinical/counseling, developmental, personality, and social aspects of psychology.

## PSY 202. Lifespan Developmental Psychology

This course will provide a broad overview of human growth and development from infancy to old age. Changes in biological, cognitive, emotional, and social domains will be discussed at each period of the lifespan. Topics will include heredity, learning, emotional development,
temperament, attachment, gender development, developmental disorders, peer relationships, families, and aging. Recent research and current issues will be highlighted.

## PSY 205. Drugs, Society and Behavior

A survey of human physiological and behavioral responses to commonly used drugs. Special emphasis is placed on nonprescription drugs (nicotine, alcohol, caffeine), psychotherapeutic agents (anti-anxiety drugs, anti-depressant medications, anti-psychotic drugs), and other psychoactive drugs (opiates, hallucinogens, marijuana). Societal issues related to illicit and therapeutic drug use, abuse, legislation and policies will also be topics of exploration and discussion.

## PSY 220. Human Sexuality

A biological approach to the study of human sexuality. This course emphasizes topics such as the anatomy and physiology of the human reproductive system, conception and contraception, STDs and infertility and then continues on to discuss the influences that shape sexual attitudes as well as the values and behavior systems that influence human sexual behavior. An overview of attitudes towards sexuality across cultures is included.

## PSY 233. Psychopathology I

Evaluation of the etiology of various forms of behavior disorders (anxiety, mood, substance abuse, psychotic), their symptoms, and treatment. These disorders will be considered in relation to clinical theories, research, and practice. Prerequisite: Psychology 111, 112.

## PSY 234. Psychopathology II

Evaluation of the etiology, symptoms, and treatment of behavior disorders within the broad areas of childhood/developmental disorders and medical/organically-induced abnormal behavior. Specific topics include disorders of personality, impulse-control, eating, sleep, sex, and neurocognition. Disorders will be considered in relation to clinical theories, research, and practice. Prerequisite: Psychology 111, 112. Psychopathology I is NOT a prerequisite.

## PSY 320. Health Psychology with Lab

Examines psychological effects of health behavior, physical effects of psychological experiences, and theories of health behavior. Course emphasizes psychological theories of various health processes that can be broadly applied to various disciplines such as community health promotion and prevention, organizational and workplace health programming, medical professions, and clinical and counseling interventions. The cultural context of health experiences is emphasized throughout. Laboratory component is a qualitative study of individuals' health experiences. Students will develop original research topics related to the qualitative investigation of people's health experiences and learn skills for conducting this research. Laboratory. Prerequisite: Psychology 111, 112 OR two semesters of Sociology.

## SOC 221. Social Inequalities

The nature of the systems of social stratification and racial inequality as well as the interaction between social class and race in the United States. Personal consequences of the various forms of inequality and perceptions of the legitimacy of social systems based on race are considered. Prerequisite: Sociology 101.

## SOC 370. Environmental Sociology

This class explores the human dimension of ecosystem science. Use of environmental sociology as a framework for understanding the dynamic relationship between humans and the environment, trends in environmental policy and public opinion, environmentalism as a social movement, human-induced environmental decline, and environmental justice. Students will explore how changes in ecosystems influence the achievability and sustainability of societal values such as security from natural disasters, health, good social relations, and freedom to pursue personal and cultural interests. Prerequisites: SOC 101 and one additional sociology course or permission of the instructor.

## SOC 382. Introduction to Social Welfare

This course will offer students a broad understanding of contemporary social problems and the social welfare policies, programs and services designed to address them. The history, individual and social consequences, and programmatic approaches to the amelioration of each social problem area will be explored. A primary goal of this course is to introduce students to the profession of social work: its fields of practice, values and ethics. This course integrates core social work competencies and has particular relevance to students considering practice, administrative or policy careers in the helping professions. No prerequisite

## Sociology

## Division of Social Sciences

Erin Anderson, Chair

Erin Clark
Rachel Durso
Nicholas Garcia
Benjamin Kohl
Elizabeth Yost

The Department of Sociology offers a major and a minor in sociology as well as concentration in Social Work. Sociology courses are also foundational for the interdisciplinary minors in Public Health and in Justice, Law and Society.

## Sociology

Sociology is the study of human social interaction. Courses in sociology help students gain a general understanding of human society, understand how individuals' lives are shaped by social forces, develop theoretical and analytic skills appropriate for graduate or professional school programs, prepare for careers in social service or allied fields, and acquire theoretical and practical knowledge for careers in business and industry. Recent graduates have gone on to professional or graduate schools in sociology, law, criminology, social work, and education. Graduates have found employment in those fields as well as counseling, corrections, law enforcement, the armed services, banking, public relations, human resources management, and other corporate and nonprofit positions.

## The Sociology Major

Sociology 101 is the prerequisite for the major in sociology. Additionally, prospective majors should complete at least two additional sociology courses by the end of their sophomore year, and the major's statistics requirement in advance of taking the Research Methods course. Students should plant to take the Research Methods and Social Theory courses in their junior year in preparation for using those skills throughout work on the Senior Capstone Experience.

## The Senior Capstone Experience

Through the Research Methods course students will learn about constructing research proposals and the steps to carrying out their own research and analysis in preparation for completing the Senior Capstone Experience. During the senior year, each sociology major completes a major independent research project which integrates the diverse learning that students have accomplished throughout their undergraduate years, not only within the major, but also across the liberal arts and sciences. The range both of topics and methods is broad. The Capstone Experience is based on a topic of the student's choosing, with the guidance of a faculty member to assure that it is both significant and capable of completion in the time available. Work on the Sociology Capstone is supported by some of the work of the Sociology

Senior Seminars, SOC 491, taken during the fall semester and SOC 492 taken during the spring semester. Course credit for this project is awarded through registration, in the spring semester, for SOC SCE.

## Required For The Major In Sociology

Ten courses: Sociology 101, 303, and 306, the statistics requirement (MAT 109, BUS 109, or PSY 209), the Senior Capstone Experience, five additional courses in sociology; and Sociology 491-492. (Students with a double major in sociology and psychology and who complete a research methods course or sequence in psychology may omit Sociology 306, but must then take a sixth sociology elective.)

## Required for the Minor in Sociology

Six courses, of which Sociology 101, 303, 306, and the statistics requirement (MAT 109, BUS 109, or PSY 209) are required; and two additional courses in sociology. (Students with a major in psychology and who complete a research methods course or sequence in psychology may omit Sociology 306, but must then take a third sociology elective.)

## The Statistics Requirement

This requirement, a prerequisite for Research Methods in Sociology, may be met by taking either MAT 109, PSY 209 or BUS 109.

## Social Work Concentration

Students who complete this concentration will be well-prepared for entry-level positions in the field, and for graduate work in social work and social policy. Students wishing to achieve official recognition of the concentration must complete a minimum of four courses. Sociology 382, 483, and 484 are required. In addition, students will complete at least one of the following courses: Sociology 212, 240, 341, or Psychology 304.

Students planning to do graduate work in sociology should take the following courses: Sociology 221 and 262. All students, of course, should strive for insight into the nature of human society. Additional courses in the program should be planned in consultation with the student's advisor to meet individual needs and interests. Sociology majors may become certified to teach social studies in secondary schools. To assure proper scheduling, students interested in this program should inform the chairs of both the Sociology Department and the Education Department as early as possible in their academic careers.

## The Distribution Requirement in Social Science may be satisfied by

Sociology 101 and any 200-level course in Sociology.

To satisfy the requirement of a third (unpaired) course for social science distribution students may take Sociology 101.

## Courses In Sociology

## 101. Introduction to Sociology

Introduction to basic concepts and theories in sociology concerning the nature of society, culture, and personality. Consideration of social processes, groups, and institutions found in modern American society. Specific topics include deviance and social control, social networks, bureaucracy, families, education, race, social class and gender.

## 171. Introduction to Public Health

Public Health is concerned with identifying and acting on the factors that shape the health and diseases of populations. This course introduces the major concepts, tools, and debates of Public Health through an exploration of issues in this interdisciplinary field including health inequities, historical and ongoing strategies for control of communicable and noncommunicable diseases, and connections between social structures and the distribution of disease from a Public Health perspective. Students will acquire basic knowledge, attitudes, and skills that are important for Public Health practice. This course is one of the two required courses for the Public Health minor. Prerequisites: None (cross listed as PHS 171).

## 194. Introductory Topics in Sociology

Contents vary. (No prerequisite.)

## 212. Sociology of the Family

This course studies historical aspects of family formation and function as well as contemporary patterns of the institution and individual experiences. Theory and research dealing with courtship, marriage, children and parenting, and disorganization of the modern family is examined. Prerequisite: Sociology 101 (cross listed as GEN 212).

## 213. Sociology of Gender

Course examines sex, gender, sexuality, and their intersections with other statuses. The effects of gender on individuals' statuses and opportunity structures is considered as are the impacts of interactions and institutional patterns. Focus on contemporary American responses to sex and gender. Prerequisite: Sociology 101 (cross listed as GEN 213).

## 221. Social Inequalities

This course examines the structure of social stratification in the U.S. from various perspectives and from micro- and macro-levels of analysis. This course is based on the seven statuses (race, social class, gender, physical/mental ability, religion, sexual orientation and age) that most significantly determine "who gets what" in American society. Historical and contemporary examples highlighted in readings and discussion range from medicine, law, education, the family, the military, housing, food security, and other. Prerequisite: Sociology 101 (cross listed as GEN 221 and BLS 221).

## 240. Criminology

This course serves as an overview of how scholars of sociology and criminology analyze and
understand the frequency of crime, criminal patterns, characteristics of criminal offenders, and the nature of different types of crime. Students will be exposed to the most respected theories regarding crime and criminal behavior. This course covers the core concepts related to criminological study, the nature and frequency of crime, patterns of criminal offending, victims, public fear of crime, criminological theory, and the critical evaluation of different types of crimes including violent, economic, public disorder, and terrorism. Prerequisite: Sociology 101.

## 262. Self and Society

Examines reciprocal relationships of society and the individual, and of the nature of face-to-face human interaction. Introduces key concepts, theories, and methodologies of sociological social psychology. Students read, analyze, and perform research that explores the ways in which society affects individuals and groups; how individuals and groups, reciprocally, influence society; how individuals interpret and negotiate the social world; and the influence individuals and groups have on others. Prerequisite: Sociology 101.

## 271. Global Health Disparities

Global Health Disparities offers a cross cultural comparative analysis of the definitions of health and health care delivery, as well as an overview of specific chronic and acute health issues. The course addresses global health broadly and focuses on global health disparity through analyses using multidisciplinary perspectives and evaluation of the political, economic, and sociocultural aspects of health inequality. This course is one of the two required courses for the Public Health minor. Prerequisites: Sociology 171 (cross listed as PHS 271).

## 294. Special Topics in Sociology

Contents vary. Prerequisite: Sociology 101 or permission of instructor.

## 303. Social Theory

The study of the leading social thinkers from 1800 to the present and the associated theoretical perspectives with an emphasis on contemporary applications of sociological theory. Prerequisites: Sociology 101 and one additional course in Sociology or permission of the instructor.

## 306. Research Methods in Sociology

Introduction to the methods used in studying society. Selection of a research topic, experimental design, sampling, methods of data collection, statistical analysis of findings. Prerequisites:
Sociology 101, and completion of the statistics requirement (MAT 109 or PSY 209).

## 340. Victimology

This course is designed to introduce students to the multifaceted issue of victimization in the U.S., including theories of victimization, trends in criminal victimization, treatment of victims in the criminal justice system, victim support issues, and the victimization of certain subgroups in the population. As a relatively new and complex discipline, victimology broadens criminological
scholarship by focusing primarily on the victims, rather than the perpetrators of crime. This course, grounded in the history and development of victimology, will provide an in-depth study of key areas in the field including theories of victim precipitation, measurement of victimization, victims' rights, and substantive topics such as hate crimes, intimate partner violence, and restorative justice. Prerequisites: Sociology 101 and Sociology 240, or permission of instructor.

## 341. Variant Behavior

This course will introduce students to the sociological aspects of varieties in human behavior and deviance. We regard deviance not as bad behavior, but as behavior contrary to norms. Deviance will be examined as a conceptual category that is socially constructed by interactions and reactions to certain types of behavior be they biological, social, or both. As such, we will examine the processes and social agencies that define, detect, and sanction variant behavior over time. Utilizing a sociological perspective, motivations for deviant behavior-as well as the nature of deviance-will be discussed. This class explores variant behavior in a variety of contexts including crime, body modifications, gender and sexual identity, and health behaviors. Prerequisite: Sociology 101 and one additional course in sociology.

## 342. Sociology of Punishment

This course will examine four major questions associated with punishment in the United States:
1.) Why do we punish? 2.) Who do we punish? 3.) How do we punish? 4.) What are the consequences of punishment? To answer these questions, students will explore ideas related to sociology, criminology philosophy, law, history, to assess the ethics and utility of punishment and the problems punishment creates for society and offenders. Prerequisite: Sociology 101 and either Sociology 221 or Sociology 240.

## 343. Women, Crime, \& The Criminal Justice System

This course places women at the forefront when examining all facets of crime, victimization, and the institutions that handle both victims and offenders. To fully explore the issue, this course is split into four units that explore women as victims, women as perpetrators, women who are in custody of the criminal justice system, and women who work in the criminal justice system. Prerequisite: Sociology 101 and either Sociology 213, Sociology 221, or Sociology 240.

## 344. Sociology of Gangs

This course will explore a broad range of topics related to gang activity in the United States and abroad. Topics include: historical, theoretical and socioeconomic processes leading to gang formation, gang activities and typologies, gang membership and organization, gender roles within gangs, and social problems associated with gangs. Prerequisite: Sociology 101 and either Sociology 221 or Sociology 240.

## 347. Juvenile Delinquency

This course offers a sociological exploration of youth, crime, and the juvenile justice system in the United States. A wide variety of topics are covered, including the history, philosophy and contemporary context of the juvenile court, shifting patterns and trends relative to juvenile
offending and crime, sociological theories accounting for involvement and deterrence from juvenile delinquency, the application of the "rule of law" to juvenile offending, and the effectiveness of rehabilitative programming in response to youthful offenders. The course covers the history of adolescence, youth culture, explanations for delinquency, the effects of race, class, and gender on delinquency, the relationship between institutions, particularly family and school, and delinquency and the interaction between juveniles and the criminal justice system. Prerequisites: Sociology 101 and at least 2 of the following: Sociology 212, 240, 303, 341, 382; or prior permission of the instructor.

## 370. Environmental Sociology

This class explores the human dimension of ecosystem science. Use of environmental sociology as a framework for understanding the dynamic relationship between humans and the environment, trends in environmental policy and public opinion, environmentalism as a social movement, human-induced environmental decline, and environmental justice. Students will explore how changes in ecosystems influence the achievability and sustainability of societal values such as security from natural disasters, health, good social relations, and freedom to pursue personal and cultural interests. Prerequisites: SOC 101 and one additional sociology course or permission of the instructor (cross listed as ENV 370).

## 382. Introduction to Social Welfare

This course will offer students a broad understanding of contemporary social problems and the social welfare policies, programs and services designed to address them. The history, individual and social consequences, and programmatic approaches to the amelioration of each social problem area will be explored. A primary goal of this course is to introduce students to the profession of social work: its fields of practice, values and ethics. This course integrates core social work competencies and has particular relevance to students considering practice, administrative or policy careers in the helping professions. Prerequisites: SOC 101 or PSY 112.

## 394, 494. Special Topics in Sociology

Contents vary. Prerequisite: two prior sociology courses or permission of instructor.

## 413. Work and Gender

This course examines the expectations, opportunities, and rewards as well as the limitations that men and women face in paid and unpaid labor. The historical contexts of work, the intersection of race and gender, the balancing of paid and unpaid labor, and global patterns of work with respect to gender will be studied. Prerequisites: SOC 101 and one additional sociology course or permission of the instructor.

## 462. Sociology of the Body

An examination of bodies as a source of power, repression, and subjugation, a medium for expression, and an entity to be controlled. This course investigates how the body is influenced by social forces, the meanings attached to the body and particular body parts, the ways in which we experience our own bodies in contemporary society, and the significance of the body for the
discipline of sociology. Includes study of characteristics such as body size, physical ability, race, and sex as well as various forms of elected or forced body modification. Prerequisites: Sociology 101 and one additional course in sociology, or permission of the instructor.

## 483-484. Field Experience in Social Welfare

A study of the organization and operation of social agencies. Students gain field experience in welfare work under professional supervision. Prerequisites: Sociology 382 and prior permission of the instructor or department chair.

## 290, 390, 490. Sociology Internship

The department encourages students with prior courses in sociology to develop, with a member of the department, internship opportunities. Students interested in pursuing internships should read "Internships and Other opportunities," in this Catalog. In addition to the requirements listed there, interns should expect to write a paper describing their experiences, as relevant to sociology, and connected to a reading list to be developed and agreed upon by the intern and the supervising faculty member. Prerequisite: Sociology 101 and permission of the department chair.

## 295, 395, 495. On-campus Research

## 296, 396, 496. Off-campus Research

## 297, 397, 497. Independent Study

Junior and senior students with a strong interest and background in sociology may, working with a faculty member in the department, develop either a research project or a course of study in order to pursue a subject or topic within the discipline not a covered by the department's regular offerings. The student and faculty member will agree upon a reading list, and either a formal research project or a substantial paper. The student should expect to meet regularly with his or her instructor to demonstrate progress in, and knowledge of, the readings; and to discuss, and to receive guidance on the project or paper. (Note that students may not use independent study courses to gain academic credit for work on their Senior Capstones.) Prerequisites: Sociology 101 and two additional courses in sociology.

## 491-492. Senior Seminar

Seniors will meet for 75 minutes each week in each semester of the senior year for general guidance in the Capstone process, for integration of the undergraduate educational experience, and for guidance in the transition from undergraduate study to employment and to post-BA academic work. Participation in SOC 491 in the fall of senior year and SOC 492 in the spring semester is a requirement of the major.

## SCE. Senior Capstone Experience

The Senior Capstone Experience in sociology is a significant piece of independent research, generally in the form of a thesis, undertaken by each senior with the guidance and mentorship
of a department faculty member. A successful SCE will demonstrate the student's ability to answer a significant sociological question using the tools of both sociological theory and methodology. A student who successfully completes the SCE will receive a grade of Pass or Honors, and will earn four credits in her or his final undergraduate semester. A more extensive description of the SCE is available from the department chair. Discussion of a joint thesis, undertaken by a student with two majors, can be found in the section "Double Majors, Minors, and Concentrations/Specializations" within the Academic Program portion of this Catalog.

## Theatre and Dance

## Division of Humanities and Fine Arts

Laura Eckelman, Interim Chair

Dale Daigle
Michele Volansky
Brendon Fox
A.T. Moffett

Polly Sommerfeld
Hannah D'Elia

The Department of Theatre and Dance embraces the principles of a liberal arts education. To that end, we emphasize-both in our curricular and co-curricular activities-the full breadth of such an education. Our students routinely double major, pairing majors/minors in Theatre and Dance with disciplines as similar as English and as different as Environmental Studies or Chemistry. Indeed, we look for these kinds of intersections.

That being said, the department is also conscious of representing a tradition that has been central to the intellectual life of world civilization for over 2500 years; we aim to ensure that students taking Theatre and Dance courses in any area become aware of the weight and splendor of that tradition. This is our hedge against the pleasing seductions of vocationalism and a "show-biz" aesthetic.

## The Theatre Major

A total of ten courses are required for the major in Theatre:

- THE 101 (Drama, Stage and Society I)
- THE 102 (Drama, Stage and Society II)
- THE 211 (Introduction to Acting)
- THE 221 (Introduction to Directing)
- THE 231 (Theatre Technology)
- THE 241 (Introduction to Theatrical Design)
- THE 381 (Junior Seminar)
- Three additional 4-credit Theatre courses, at least one of which must be a 300/400 or Special Topics course in dramatic history/literature/theory

Theatre majors must also successfully complete:

- Three different Practicum courses (THE/DAN 181-186, for credit or audit)
- Four semesters of THE 400 (Elements of Production)


## The Theatre Minor

The minor program in Theatre consists of a minimum of five courses:

- THE 101 or 102 (Drama, Stage and Society I or II)
- THE 211 (Introduction to Acting) or THE 221 (Introduction to Directing)
- THE 231 (Theatre Technology) or THE 241 (Introduction to Theatrical Design)
- Two additional 4-credit Theatre courses

Theatre minors must also successfully complete:

- Two different Practicum courses (THE/DAN 181-186, for credit or audit)
- Two semesters of THE 400 (Elements of Production)


## Senior Capstone Experience

A student may satisfy the Senior Capstone Experience in Theatre in one of three ways:

- a production thesis in directing, dramaturgy, design, stage management, or performance;
- a playwriting thesis in which the student writes a play that is presented in either a staged (rehearsed) reading;
- a traditional research thesis in the areas of theatrical criticism, theory, or history.

Full details for all SCE options-including timelines, expectations, and written
requirements-are available on the department's website.

## SCE Honors

The Senior Capstone Experience in Theatre is graded pass, fail, or honors. SCE Honors will be conferred on those projects that achieve an exceptional level of creative, artistic, and scholarly conception and realization. A grading rubric is available from the faculty.
(More information about the Dance minor is printed below, under Dance.)

## Distribution

** Students electing Theatre as part of their Fine Arts distribution requirement may choose any course except THE 181-186, THE 275, THE 285, or THE 400.

## Departmental Policy on Student Production Work

Students may work on no more than 2 departmental theatre/dance productions in a single semester (in any capacity, including crew, performance, design, dramaturgy, stage management, directing, etc.) Students are strongly discouraged from working on 2 consecutive productions and should consult with a faculty member if they plan to do so.

## Theatre Course Descriptions

## THE 101. Drama, Stage and Society I

This theatre history course will examine the development of (primarily) Western drama against a backdrop of historical and social change. Students will read a variety of plays and discuss theatre history, dramatic theory, and criticism representing the major currents in (primarily) Western theatre from its origins to the 18th century CE. We will frequently employ one or more of the following "lenses" or viewpoints to focus our lectures and discussions: the physical theatre (how the material artifacts of theater-buildings, documents, etc.-tell the story of theatre history and influence dramaturgy); the social theatre (how the theatre relates to its social context, including consideration of the audience); and the performing theatre (the plays themselves and how they were/are performed). Students will be encouraged to draw connections between the material we cover in this course and the many intellectual and aesthetic parallels to be found in contemporaneous trends in history, philosophy, literature, and the arts. Theatre Majors and Minors may not take this class pass/fail or as an audit.

## THE 102. Drama, Stage and Society II

This theatre history course will examine the development of (primarily) Western drama against a backdrop of historical and social change. Students will read a variety of plays and discuss theatre history, dramatic theory, and criticism representing the major currents in (primarily) Western theatre from the 18th century to 1992. We will frequently employ one or more of the following "lenses" or viewpoints to focus our lectures and discussions: the physical theatre (how the material artifacts of theater-buildings, documents, etc.-tell the story of theatre history and influence dramaturgy); the social theatre (how the theatre relates to its social context, including consideration of the audience); and the performing theatre (the plays themselves and how they were/are performed). Students will be encouraged to draw connections between the material we cover in this course and the many intellectual and aesthetic parallels to be found in contemporaneous trends in history, philosophy, literature, and the arts. Theatre Majors and Minors may not take this class pass/fail or as an audit.

## THE 201. Ancient Greece, and Rome

The study of the foundations of Western theater and drama with emphasis on dramatic forms and the interrelationship between theater and society.

## THE 205. Shakespeare I

## (cross-listed with ENG)

This course examines some of Shakespeare's best known earlier plays (those written before the death of Queen Elizabeth in 1603) both in the context of early modern English culture and as play scripts/performances. Using films and live productions (when available) it considers the plays as they have been and could be interpreted for performance.

## THE 206. Shakespeare II

## (cross-listed with ENG)

This course examines some of Shakespeare's best known later plays (those written after the death of Queen Elizabeth in 1603) both in the context of early modern English culture and as play scripts/performances. Using films and live productions (when available) it considers the plays as they have been and could be interpreted for performance.

## THE 211. Introduction to Acting

Analysis and application of basic acting techniques with a concentration on scene study and character analysis.

## THE 221. Introduction to Directing

Study of the basic principles and practices of directing, including interpretation, structural analysis, and investigation of basic staging techniques.

## THE 231. Theater Technology

Investigation of methods and materials used in the theatrical production process. Laboratory hours will be required. This course is designed primarily for those who plan to participate in future theatrical productions.

## THE 241. Introduction to Theatrical Design

This course offers a broad look at all aspects of theatrical design, including scenery, properties, costume, lighting, and sound, with an emphasis on cross-disciplinary skills such as close reading (of texts and images), research, and clear communication (written, visual, and aural). Students will learn to approach theatrical questions from a variety of angles, and will develop a basic understanding of all design elements and how they fit together.

## 281. Creative Process

(cross-listed with ART 231)
In this studio course students learn how to develop an idea over time. Students are expected to focus on one concept and develop it more fully each week as the semester progresses. All media and art forms are acceptable, including the written word, video, performance, painting, photography, sound, construction, etc. Though centered upon the student and their ability to be objective about their work, it also demands they help others to see the values, problems, and potentials in their work. Thoughtful class participation in the form of discussion during weekly presentations and critiques is expected from each student. Prerequisite: One course of Studio Art, Music, Theatre, or Creative Writing, or permission of the instructor.

## THE 302. Renaissance Drama

## (cross-listed with ENG 312)

This course examines early modern English drama, exclusive of Shakespeare, from the 1580s through the 1630s in its unique cultural, historical, and theatrical context. It explores plays by prominent dramatists including Thomas Kyd, Christopher Marlowe, John Lyly, Thomas Dekker,

Thomas Heywood, Ben Jonson, Thomas Middleton, William Rowley, John Webster and John Ford. Key issues will include the following: playing conditions (theatres and theatre companies), the relationship of the stage to the monarchy, the importance of the city (London), the relationship of the stage to dominant religious beliefs and practices, the impact of Puritanism and anti-theatricality, the effect of censorship and licensing, the role of gender and cross-dressing in theatrical representation and the staging of desire.

## THE 304. The Modern Age

The study of experimentation and innovation in dramatic writing and theatrical convention in Europe and America from 1875 to 1950 with emphasis on the principal reactions to naturalism: symbolism, impressionism, expressionism, theatricalism.

## THE 306. American Musical Theater

The study of musical theater in America from the turn of the century to the present with emphasis on the form itself and its history. The course will explore the structure of the musical and the dramatic functions of score, lyrics, and libretto as well as the political, societal, musical, and theatrical reasons for changes in the form.

## THE 308. After Angels: American Theater since 1992

This course will study the plays and significant theatrical movements which have occurred since 1992 and the production of Tony Kushner's landmark play Angels in America. Students will read new works (both published and non-published) by established and emerging American playwrights, with a special focus being placed on the theatrical and social context out of which these works emerged.

## THE 311. Advanced Acting: Shakespeare

Advanced development of acting techniques to explore classical texts. In addition to finding the emotional truth, students will use tools such as scansion to diagram and speak Shakespeare and other classical writers with clarity, specificity, and passion. Prerequisite: THE 211.

## THE 317. Theatrical Improvisation

The course will examine the history, theory, and practice of theatrical improvisation as practiced in the United States and Canada since 1950. The class will meet once a week for $21 / 2$ hours. Prerequisite: THE 211.

## THE 351. Introduction to Playwriting

Analysis and practical application of techniques and styles employed in writing for the stage.

## THE 358. Dramaturgy

Analysis and discussion of the theoretical and practical aspects of dramaturgy, with particular emphasis placed on script analysis and historical research. This course is not recommended for first-year students.

## THE 361. Performance Studies: Adaptation

This course explores the theory and practice of adapting non-dramatic literature for the stage. Students examine the form through writing and staging short story adaptations, whose size and scope allow students to learn and explore various approaches to this kind of theatrical storytelling. The course provides students with a strong introduction to the theoretical and critical body of knowledge in the area of adaptation of literature in the field of Performance Studies. In addition, students will develop skills in acting, directing, writing, and dramaturgy.

## THE 381. Junior Seminar

The course prepares theatre majors for the SCE through script analysis, critical thinking, synthesis of textual and performance analysis, research, readings, discussion, writing, and engagement with guest artists. Over the semester, students develop stronger oral and written communication skills, develop the leadership and management skills necessary for effective creative collaboration, and expand their own imaginative tools and resources. Students spend part of the semester writing and revising chapters for the written SCE Production Book. (Learning objectives may vary slightly from student to student, depending on the needs of each SCE project.) This course is required for all theatre majors, and must be taken in the spring of the junior year.

## THE 371. Stage Management

This course provides a thorough exploration of the roles and duties of the theatrical stage manager, from pre-production through closing night and beyond. Using a mix of readings, discussion, paperwork assignments, and lab activities, students develop both hard skills (such as document design, scheduling, and preparedness) and soft skills (such as communication, leadership, management, and collaboration). By the end of the semester, students will be well prepared to stage manage a fully-produced show. This course has no curricular prerequisite, but requires a baseline understanding of the rehearsal and production process; accordingly, enrolled students should have some experience working in the theatre (as an actor, designer, crew member, etc.).

## THE/DAN 375. Arts Administration

## (cross listed with ART, DAN, MUS, and BUS)

This course explores various aspects of leadership, management, and entrepreneurship for the visual and performing arts. Students will learn how arts organizations define themselves, make decisions, and plan for the future. Topics may include: leadership \& governance, mission \& strategy, program planning \& evaluation, intellectual property \& contracting, marketing \& public relations, and/or budgeting \& fundraising. This course has no curricular prerequisite, but requires a baseline interest in and understanding of the arts.

## THE 401. Dramatic Theory

Throughout history, thinkers have been variously excited, enraged, bothered or bored by theater. Through the rigorous study of the writings and historical context of the major thinkers in the evolution of theater (from Aristotle to Ehn), students will come to a greater understanding of
the various changes, permutations and responses to theater in the Western World. This course is offered at the Honors Level.

## THE 415. Theories of Acting

The course will examine the history, theory, and practice of actor training in the 20th and 21st centuries. Prerequisite: any 4-credit THE class.

THE 190, 290, 390, 490. Internship
Students will be placed with a professional theater company for one full semester or an entire summer season. Permission of the department and acceptance by the professional theater are required. Open only to Theatre majors.

THE 194, 294, 394, 494. Special Topics Intensive study of a selected figure, movement, period, form, or other topic.

THE 197, 297, 397, 497. Independent Study
Advanced study in a selected area under departmental guidance.

## THE 195, 295, 395, 495. On-campus Research

THE 196, 296, 396, 496. Off-campus Research

## Co-Curricular Theatre \& Dance Practica

## THE/DAN 181. Theatre/Dance Practicum: Crew

This course provides an opportunity for student technicians (lighting/sound/projection operators and backstage/wardrobe/run crew) of departmental theatre \& dance productions to receive credit for their work. Technicians typically must participate in load-in, technical rehearsals, performances, and strike; specific duties are determined based on the needs of each production. Technicians should expect to devote a total of 20-50 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. Student technicians will be automatically enrolled (either for credit or as auditors) after their production closes. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 1 credit, pass/fail.

## THE/DAN 182. Theatre/Dance Practicum: Performance

This course provides an opportunity for student performers in departmental theatre \& dance productions to receive credit for their work. Performers typically must participate in auditions, callbacks, rehearsals, load-in, technical rehearsals, performances, and strike; specific duties are determined based on the needs of each production. Performers should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends,
holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## THE/DAN 183. Theatre/Dance Practicum: Design

This course provides an opportunity for student designers of departmental theatre \& dance productions to receive credit for their work. Designers typically must participate in a production orientation workshop (scenery, props, costumes, lighting, or sound), a design meeting with the departmental faculty, production meetings, load-in, technical rehearsals, and strike; specific duties are determined based on the needs of the production. Designers should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## THE/DAN 184. Theatre/Dance Practicum: Dramaturgy, Direction, \& Devising

This course provides an opportunity for student dramaturgs, assistant directors, and devisers of departmental theatre \& dance productions to receive credit for their work. Students in these positions typically must participate in production meetings, rehearsals, load-in, technical rehearsals, and strike; specific duties are determined based on the needs of the production. Students in these positions should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## THE/DAN 185. Theatre/Dance Practicum: Assistant Stage Management

This course provides an opportunity for student assistant stage managers of departmental theatre productions to receive credit for their work. Assistant stage managers typically must participate in production meetings, rehearsals, load-in, technical rehearsals, performances, and strike; specific duties are determined based on the needs of the production. Assistant stage managers should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken
for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## THE 186. Theatre Practicum: Choreography

This course provides an opportunity for student choreographers (movement/dance/fight) of departmental theatre productions to receive credit for their work. Students in these positions typically must participate in production meetings, rehearsals, load-in, technical rehearsals, and strike; specific duties are determined based on the needs of the production. Students in these positions should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## DAN 186. Dance Practicum: Choreography

This course provides an opportunity for students to gain experience in creating original choreography for the annual departmental dance concert. Working collaboratively with their dancers, faculty and guest choreographers, concert director, and production personnel will help students develop their choreographic and leadership skills. To enroll, students must complete a Student Choreographer Application. Dance faculty and guest artists will review applications and select the student choreographers. Student choreographers must participate in auditions, weekly rehearsals, works-in-progress showings, technical rehearsals and performances. Choreographers should expect to devote a total of 60-100 hours over the course of the production. Prerequisite: DAN233 (Dance Composition). DAN 184 may be taken for credit only once, but may be audited multiple times. 2 credits, pass/fail.

## THE 285. Advanced Theatre Practicum: Stage Management

This course provides an opportunity for student stage managers of departmental theatre productions to receive credit for their work. Stage managers typically must participate in weekly roundtable discussions with the faculty, auditions, callbacks, production meetings, rehearsals, load-in, technical rehearsals, performances, and strike; specific duties are determined based on the needs of the production. Stage managers should expect to devote a total of 120-200 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 4 credits, pass/fail. Prerequisite: THE 185, or coursework in stage management, or permission of the instructor.

## DAN 285. Advanced Dance Practicum: Stage Management

This course provides an opportunity for student stage managers to receive credit for their work on the annual departmental dance concert. Student dance stage managers must participate in works-in-progress showings, weekly production meetings, technical rehearsals, and performances; dance stage managers are also invited to participate in weekly SM Roundtable discussions with the faculty and other student stage managers. Specific duties are determined based on the needs of the production, but typically include: planning \& executing concert logistics, creating organizational production documents, calling lighting \& sound cues, and working closely with the artistic and production managers to ensure a successful production. Stage managers should expect to devote a total of 60-100 hours over the course of the production, some of which may be during college breaks, weekends, holidays, late evenings, and other unusual times. This course is open to dance minors and non-minors. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail. Prerequisite: Any 100-level Theatre/Dance practicum course (THE/DAN 181-185), or coursework in stage management, or permission of the instructor.

## 400. Elements of Production

This course provides hands-on experiential learning for intended Theatre majors and minors through participation in ushering, work calls, load-ins, and strikes for departmental productions, as well as relevant instructional workshops. Course requirements and policies will be posted by the instructor at the beginning of each semester. Students must enroll themselves in this course; nobody will be automatically registered. Majors must pass the course four times; minors must pass it twice. Students are strongly encouraged to start early and plan ahead, anticipating busy semesters and study abroad. 0 credits, pass/fail.

## Dance

## Minor, Division of Humanities and Fine Arts

A.T. Moffett, Program Director<br>Michele Volansky

The Dance Program offered at Washington College is designed to train dancers in the areas of performance, choreography, and teaching. These domains of dance creative practice are seen as mutually dependent and interactive. Choosing a Dance Minor allows students to explore and refine their interests in the field through curricular and co-curricular experiences in these three areas. Fundamental to the training of the dancer is the cultivation of artistry, technique, as well as the ability to articulate this knowledge through movement and writing.

The Dance Minor Program welcomes students from across campus who are interested in incorporating embodied learning within their college experience as a complement to their major field of study.

## The Dance Minor

All minors must take:

- DAN 101 Introduction to Dance in Culture and Society
- DAN 233 Dance Composition
- DAN 305 Introduction to Teaching Dance
- DAN 381 Dance Portfolio (1 credit)
...plus two courses in technique, at least one of which must be at the intermediate level:
- DAN 227 Beginning Modern Dance
- DAN 327 Intermediate Modern Dance
- DAN 212 Beginning Ballet
- DAN 312 Intermediate Ballet
...and 4 credits worth of electives.
Dance Minor students will earn credit for participation in co-curricular departmental productions. To complete practicum requirements, students must enroll (for credit or audit) in two different DAN or THE Practicum courses:
- DAN/THE 181 Dance/Theatre Practicum: Crew
- DAN/THE 182 Dance/Theatre Practicum: Performance
- DAN/THE 185 Theatre Practicum: Assistant Stage Management
- DAN/THE 186 Dance Practicum: Choreography
- DAN/THE 285 Advanced Dance/Theatre Practicum: Stage Management


## Distribution

** Students electing Dance as part of their Fine Arts distribution requirement may choose any course except DAN 181-186, DAN 275, or DAN 285.

## Departmental Policy on Student Production Work

Students may work on no more than 2 departmental theatre/dance productions in a single semester (in any capacity, including crew, performance, design, dramaturgy, stage management, directing, etc.) Students are strongly discouraged from working on 2 consecutive productions and should consult with a faculty member if they plan to do so.

## Course Descriptions - Required

DAN 101. Introduction to Dance in Culture and Society (4 credits)
Dance in Culture and Society is an introduction to the study of dance in the academy. This survey course will introduce students to dance as both an aesthetic and cultural experience. The aim is to present the breadth of the field, specifically where dance happens, the diverse functions it serves, and ways of making meaning of the dance experience. Through movement laboratories, readings, videos, observations, and discussions students will explore the dance discipline.

DAN 305. Introduction to Teaching of Dance (4 credits)
Research shows that nearly $90 \%$ of dancers who stay in the field past college teach at least part time. Introduction to Teaching Dance will provide students with a practical and theoretical introduction to teaching dance technique classes. Emphasis will be placed on designing and implementing developmentally appropriate and kinesthetically sound lesson plans for students PreK-12. Course readings will include philosophies of early dance education pioneers and current best practices in the field of dance education as expressed through the National Core Arts Standards. Through observation, peer teaching practicums, field experiences, and written reflection, students will gain experience planning, teaching, and evaluating dance technique classes.

DAN 212. Beginning Ballet (4 credits)
Beginning Ballet is an introduction to the fundamentals of ballet technique as well as ballet terminology, traditions, and etiquette. Ballet class begins at the ballet barre and progresses to ballet centre adagio, and allegro combinations, all of which emphasize clarity of line, movement efficiency, range of motion, and artistry. Readings, videos, reflective and analytical writing, and live performance will contextualize the in-class work.

DAN 312. Intermediate Ballet (4 credits)
Intermediate Ballet is a progression of Beginning Ballet. Special emphasis will be placed on working in optimal alignment, building both strength and flexibility, and negotiating stability and mobility. Intermediate Ballet emphasizes clarity of line, movement efficiency, range of motion, and artistry. Readings, videos, reflective and analytical writing, and live performance will contextualize the in-class work.

DAN 227. Beginning Modern Dance (4 credits)
Beginning Modern Dance is an introduction to basic principles of modern dance as a creative art form. Special emphasis is placed on body awareness, alignment, and artistic expression. The class structure includes a full body warm-up, center movement studies, traveling sequences and
an extended modern dance phrase made up of both choreography and improvisation. Readings, videos, reflective and analytical writing, and live performance will contextualize the movement practice.

DAN 327. Intermediate Modern Dance (4 credits)
Intermediate Modern Dance is a progression of Beginning Modern Dance. Students work to develop a keen awareness of their bodies in order to build clarity, movement efficiency, grounded-ness, and dynamism. Special emphasis is placed on working in optimal alignment, building both strength and flexibility, and negotiating control and abandon. The focus is on technical development as it relates to inviting forward artistry and physical mastery of the body. Readings, videos, reflective and analytical writing, and live performance will contextualize the movement practice.

DAN 233. Dance Composition (4 credits)
Dance Composition is an introduction to the craft of making dances. It is designed to allow students to experience the process of discovering, creating, and performing original movement. Students utilize choreographic theories and compositional devices to develop solo and small group works. Students are encouraged to create in a range of vocabularies. The course emphasizes the development of self-expression, creative inquiry, and critical awareness. Research, writing, and discussion required.

DAN 381. Dance Portfolio (1 credit)
Dance Portfolio culminates the dance minor. Students submit a digital portfolio of their work for faculty review. Upon declaring a dance minor, students schedule a meeting with the dance minor director to discuss the dance portfolio submission guidelines. Students maintain chronological digital files of their artistic work including choreographic, performance, teaching, and footage and photos. In addition to compiling work samples from class work and outside departmental activities, students will write an Artist Statement, Teaching Philosophy, and Dance Resume. Dance Portfolio is done as an independent study with 4 scheduled meetings with the dance minor director during the spring semester of senior year.

## Course Descriptions - Electives

## DAN 203. Dance History I: Concert and Theatrical Dancing (4 credits)

An in-depth historical exploration of the development of theatrical dance in the Western world (ballet, modern dance, and theatrical dancing in Europe and America) with a special emphasis on the relationship between dance and other performing arts. The course examines the cultural forces affecting the development of these forms, their origins in Greek theater and Roman spectacle to the Renaissance, the Golden Age of Ballet, and through the 20th century, and the contributions of the major figures (choreographers, dancers, teachers, etc.) in the field.

DAN 204. Dance History II: Global Dance Survey (4 credits)
An exploration of specific traditional and ancient cultures as well as contemporary world dance forms and their historical and cultural contexts, including pre-christian civilizations - the African diaspora, America (Native American \& Hawaiian dance and Meso-America), Polynesia, Asia, the Far East, India, Egypt, and Europe prior to the Golden Age of Ballet, and early social dancing and the relationship of dance forms to society and patterns of culture. This course will
trace the role of dance as religious ritual, form of education, popular entertainment, and means of passing on a culture's history - viewing dance in relation to the social, geographical, and political context of each period and culture.

DAN 241. Jazz Dance (4 credits)
Jazz Dance offers an exploration of movement vocabularies of the American dance form Jazz, demonstrating its evolution as both an art form and vehicle for individual and group expression. Emphasis will be placed on rhythm, style, technical development, and self-expression. Students will experience a range of jazz vocabularies including Authentic Jazz Dance (ex. Lindy Hop), Classical Concert Jazz Dance (jazz dance originating at the time of Jack Cole), Musical Theatre Jazz Dance (Broadway), and Contemporary Jazz Dance (ex. Lyrical Jazz and Pop Jazz). Class structure includes isolation techniques, warm-up techniques, coordination techniques, traveling sequences, and an extended jazz dance phrase that integrates and builds upon concepts introduced earlier in class. Articles, videos, reflective and critical writing, and live performance will contextualize the movement practice.

## DAN/THE 375. Arts Administration

(cross listed with ART, MUS, THE, and BUS)
This course explores various aspects of leadership, management, and entrepreneurship for the visual and performing arts. Students will learn how arts organizations define themselves, make decisions, and plan for the future. Topics may include: leadership \& governance, mission \& strategy, program planning \& evaluation, intellectual property \& contracting, marketing \& public relations, and/or budgeting \& fundraising. This course has no curricular prerequisite, but requires a baseline interest in and understanding of the arts.

DAN 190, 290, 390, 490. Internship

DAN 194, 294, 394, 494. Special Topics

DAN 197, 297, 397, 497. Independent Study

## DAN 195, 295, 395, 495. On-campus Research

DAN 196, 296, 396, 496. Off-campus Research

## Co-Curricular Dance \& Theatre Practica

## DAN/THE 181. Theatre/Dance Practicum: Crew

This course provides an opportunity for student technicians (lighting/sound/projection operators and backstage/wardrobe/run crew) of departmental theatre \& dance productions to receive credit for their work. Technicians typically must participate in load-in, technical rehearsals, performances, and strike; specific duties are determined based on the needs of each
production. Technicians should expect to devote a total of 20-50 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. Student technicians will be automatically enrolled (either for credit or as auditors) after their production closes. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 1 credit, pass/fail.

## DAN/THE 182. Dance/Theatre Practicum: Performance

This course provides an opportunity for student performers in departmental theatre \& dance productions to receive credit for their work. Performers typically must participate in auditions, callbacks, rehearsals, load-in, technical rehearsals, performances, and strike; specific duties are determined based on the needs of each production. Performers should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## DAN/THE 183. Dance/Theatre Practicum: Design

This course provides an opportunity for student designers of departmental theatre \& dance productions to receive credit for their work. Designers typically must participate in a production orientation workshop (scenery, props, costumes, lighting, or sound), a design meeting with the departmental faculty, production meetings, load-in, technical rehearsals, and strike; specific duties are determined based on the needs of the production. Designers should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## DAN/THE 184. Dance/Theatre Practicum: Dramaturgy, Direction, \& Devising

This course provides an opportunity for student dramaturgs, assistant directors, and devisers of departmental theatre \& dance productions to receive credit for their work. Students in these positions typically must participate in production meetings, rehearsals, load-in, technical rehearsals, and strike; specific duties are determined based on the needs of the production. Students in these positions should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken
for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## DAN/THE 185. Dance/Theatre Practicum: Assistant Stage Management

This course provides an opportunity for student assistant stage managers of departmental theatre productions to receive credit for their work. Assistant stage managers typically must participate in production meetings, rehearsals, load-in, technical rehearsals, performances, and strike; specific duties are determined based on the needs of the production. Assistant stage managers should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## DAN 186. Dance Practicum: Choreography

This course provides an opportunity for students to gain experience in creating original choreography for the annual departmental dance concert. Working collaboratively with their dancers, faculty and guest choreographers, concert director, and production personnel will help students develop their choreographic and leadership skills. To enroll, students must complete a Student Choreographer Application. Dance faculty and guest artists will review applications and select the student choreographers. Student choreographers must participate in auditions, weekly rehearsals, works-in-progress showings, technical rehearsals and performances. Choreographers should expect to devote a total of 60-100 hours over the course of the production. Prerequisite: DAN 233 (Dance Composition). DAN 184 may be taken for credit only once, but may be audited multiple times. 2 credits, pass/fail.

## THE 186. Theatre Practicum: Choreography

This course provides an opportunity for student choreographers (movement/dance/fight) of departmental theatre productions to receive credit for their work. Students in these positions typically must participate in production meetings, rehearsals, load-in, technical rehearsals, and strike; specific duties are determined based on the needs of the production. Students in these positions should expect to devote a total of 60-100 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail.

## THE 285. Advanced Dance Practicum: Stage Management

This course provides an opportunity for student stage managers to receive credit for their work
on the annual departmental dance concert. Student dance stage managers must participate in works-in-progress showings, weekly production meetings, technical rehearsals, and performances; dance stage managers are also invited to participate in weekly SM Roundtable discussions with the faculty and other student stage managers. Specific duties are determined based on the needs of the production, but typically include: planning \& executing concert logistics, creating organizational production documents, calling lighting \& sound cues, and working closely with the artistic and production managers to ensure a successful production. Stage managers should expect to devote a total of 60-100 hours over the course of the production, some of which may be during college breaks, weekends, holidays, late evenings, and other unusual times. This course is open to dance minors and non-minors. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 2 credits, pass/fail. Prerequisite: Any 100-level Theatre/Dance practicum course (THE/DAN 181-185), or coursework in stage management, or permission of the instructor.

## THE 285. Advanced Theatre Practicum: Stage Management

This course provides an opportunity for student stage managers of departmental theatre productions to receive credit for their work. Stage managers typically must participate in weekly roundtable discussions with the faculty, auditions, callbacks, production meetings, rehearsals, load-in, technical rehearsals, performances, and strike; specific duties are determined based on the needs of the production. Stage managers should expect to devote a total of 120-200 hours, some of which may be during college breaks, adjacent semesters, weekends, holidays, and other unusual times. At the beginning of each semester, all students involved in departmental productions will be automatically enrolled as auditors in the relevant practicum course(s), and will be given an opportunity to request credit by contacting the instructor. Practicum courses may each be taken for credit only once, although students are encouraged to participate in as many departmental productions as they wish. 4 credits, pass/fail. Prerequisite: THE 185, coursework in stage management, or permission of the instructor.

# World Languages and Cultures <br> Division of Humanities and Fine Arts 

Cristina Casado Presa, Chair
Elena Deanda Camacho
Nicole Grewling, Associate Chair
John Hepler
David Hull
Katherine Maynard
Rebeca Moreno Orama
Pamela Pears
Martín Ponti
Luyang Wang

The Department of World Languages and Cultures offers majors in French Studies, German Studies, Hispanic Studies, and International Literatures and Cultures. Our courses prepare students to live and work in the global community of the 21 st century by giving them powerful tools for communicating and collaborating with people in the pluralist U.S. and abroad. Our courses have three main goals: 1. to foster critical thinking skills through an awareness of the power of language in its many contexts, 2. to provide linguistic training for students to develop proficiency in a modern language, and 3. to promote intercultural competence for students to communicate effectively across diverse cultural lines. Our graduates pursue successful careers in numerous fields, including (international) education, journalism, social services, (international) business, economics, government, (international) law, and applied and theoretical sciences.

The Department offers courses appropriate to majors and minors in French Studies, German Studies, and Hispanic Studies, as well as courses given in English in the field of International Literatures and Cultures. It also offers language courses in Chinese. All language courses offered may be used to satisfy the College's foreign language requirement. For more details on how to complete the foreign language requirement, please consult the section on distribution requirements found under the Academic Program heading of this catalog.

## COURSES THAT FULFILL THE HUMANITIES DISTRIBUTION REQUIREMENT

Courses on literature and film in a foreign language and courses in International Literatures and Cultures (ILC), given in English, may be used to fulfill the distribution requirement in the Humanities. In some cases, the department chair may approve the use of literature courses taught in the foreign language to fulfill the foreign language requirement. In that case, those courses may not be used in fulfillment of the distribution requirement in Humanities as well.

## LANGUAGE REQUIREMENT PLACEMENT POLICY

All Washington College students are required to fulfill the Language Requirement. In order to ensure consistent treatment of all students, each student must take the language survey and
the language placement test, if applicable. If the student decides to continue with the language of the placement test at WAC, they must register for the course indicated by the test.

There are some special cases to consider:

1. Students can also fulfill the Language Requirement with transfer credit from other institutions after approval of the Associate Chair of World Languages and Cultures.
2. Students who are native speakers of a foreign language have the option of waiving the requirement upon approval of the Associate Chair of World Languages and Cultures.
3. Native speakers cannot register for HPS 302 or FRS 302, which are conversation courses. For the rest of the courses, the instructor will determine if the native speaker is in the correct class and may move the student to a more appropriate level.

Very Important: We strongly recommend that students complete the Language Requirement in the first two years at WAC. Otherwise, they may find that their prior skills have deteriorated since completing the placement test or that the class they need is not offered, preventing them from graduating. In the exceptional case that the Department deems that a change of placement is appropriate, the placement will only be lowered by one level. Should the student still feel uncomfortable with their placement, they may start a new language at the 101 level.

## Language placement process

All incoming freshmen must take the language survey and, if they have studied one of the languages offered at WAC, the placement test in this language in order to determine their level. Incoming transfer students should take the language survey, and the placement test if required. Transfer students should refer to the Transfer Evaluation memo provided by Admissions and the Registrar to determine if the language placement test is required.
Even if you have never studied a language, you must take the language survey.
To access the language survey, please login to WebAdvisor and click on the "Students" menu. Under "Miscellaneous options," click on "Placement Survey and Test."

## How to complete the language requirement

- For students starting a new language or students placed in the 101 or 102 level: two semesters in the new or placement language.
- For students placing in 200-level or above in French, German, Chinese, or Spanish: one semester of study.
- Students who have achieved a score of 4 or 5 on the Advanced Placement test have satisfied this requirement.
- Students whose native language is not English may satisfy the language requirement with that language pending approval from the Associate Chair of World Languages and Cultures.
- Students who present appropriate documentation qualifying them for a foreign language substitution may be allowed to substitute two pre-approved courses to satisfy this
requirement.


## MAJORS IN FRENCH STUDIES/GERMAN STUDIES/HISPANIC STUDIES

To major in either French, German, or Hispanic Studies, the student must take at least eight courses ( 32 credits) at the 200, 300 and 400 levels and complete the Senior Capstone Experience.

The courses chosen for the FRS major must include:

- Either 301 or 302 (or an equivalent taken abroad)
- Either 303 or 304 , to be taken on the Washington College campus
- FRS 375 , if studying abroad
- At least two courses at the 400 level, one of which must be taken during the senior year on campus
- For those students beginning FRS at either the 100 or 200 level, FRS 201 and/ or 202 may count toward the major

The courses chosen for the GRS major must include:

- GRS 301 and GRS 302 (or an equivalent taken abroad)
- GRS 304 or GRS 305
- GRS 375 , if studying abroad
- At least one course at the 400 level, which must be taken during the senior year on campus
- For those students beginning GRS at either the 100 or 200 level, any GRS 200 level course may count toward the major

The courses chosen for the HPS major if the student studies abroad must include:

- HPS 301 or 302 (or an equivalent taken abroad)
- HPS 303 or 304 or 305 , to be taken on the Washington College campus
- HPS 375
- At least two courses at the 400 level, one of which must be taken during the senior year on campus
- Students may count up to one course given in English under the International Literatures and Cultures heading toward their major if their written work is done in Spanish
- For those students beginning HPS at either the 100 or 200 level, any HPS 200 level course at or above 202 will count toward the major

The courses chosen for the HPS major if the student is unable to study abroad must include:

- HPS 301 and 302
- Two courses from this list: HPS 303, HPS 304, HPS 305
- Two 400 level courses, one taken during senior year
- Students may count up to two courses given in English under the International Literatures and Cultures heading toward their major if their written work is done in Spanish
- For those students beginning HPS at either the 100 or 200 level, any HPS 200 level course at or above 202 will count toward the major

As a general rule, at least four of the courses presented for the major must be taken on the Washington College campus unless otherwise agreed upon by the faculty advisor.

The Department strongly encourages its majors in a foreign language to complete a semester of study abroad (or a summer program if previously approved by the Department) in the relevant language, and further recommends a year-long course of study. In some cases, study abroad may be necessary in order to complete all the coursework. As part of their study abroad experience, students complete a study abroad portfolio (FRS/GRS/HPS 375) to be turned in to the faculty advisor. Through exchanges coordinated by the Global Education Office, Washington College offers many options for study abroad to majors and minors in this department. Students are expected to consult the faculty when planning their study abroad experience to insure that the program they choose meets the needs of their major and that they have a well-balanced course of study while abroad, including classes that complement their course of study on campus. There are opportunities for language-related internships as well. Interested students are urged to consult the chair or other department faculty.

To improve fluency, enrich course work, and further their interest in the customs and cultures they are studying, language students are encouraged to speak the foreign language on a daily basis with the native French, German, and Spanish assistants. The language assistants are also available to students on a regular basis at informal coffee hours and meetings of the foreign language clubs throughout the year. All interested students are invited to participate in the cultural activities sponsored by the language clubs, Honor Societies, and the department itself.

The Department encourages students to enrich their knowledge of the foreign culture they are studying by taking related courses from other departments and in some cases, these courses may be counted toward the major. We also recommend that our majors study two years of a second foreign language.

## MINORS IN FRENCH STUDIES/GERMAN STUDIES/HISPANIC STUDIES

The Department offers minors in French Studies, German Studies, and Hispanic Studies. Students who begin a language with 101, 102, 200, or 201 must take a total of six classes in order to obtain the minor. Students who begin with 202 or above must take a total of five classes, at least one of which must be at the 400 level.

## THE SENIOR CAPSTONE EXPERIENCE

Majors must successfully complete the Senior Capstone Experience, which may consist of a comprehensive examination (in HPS only), an original research project, or a thesis based on a seminar paper. In each case, students will consult with the faculty advisor(s) in order to choose the most appropriate Capstone Experience, which must be approved by the faculty advisor(s). The Senior Capstone Experience will be graded Pass, Fail or Honors and should be taken during the semester in which the student plans to graduate.

## TEACHER TRAINING

Students planning to earn certification for secondary school teaching in a foreign language should consult with the Chair of the Department of World Languages and Cultures and with the Chair of the Education Program during their first year or no later than their sophomore year.

## Chinese Studies

David Hull
Luyang Wang

## 101, 102. Elementary Chinese

An introduction to Mandarin Chinese, this course offers an integrated approach to basic language skills: listening, speaking, reading, and writing. Class work is supplemented by laboratory periods that include engagement with native language via multimedia sources. Discussion of a graded series of cultural topics promotes students understanding of Chinese life and society and aids language learning. The class will meet three days plus two laboratory periods per week. Please note that this course is NOT appropriate for native speakers of Mandarin.

## 201, 202. Intermediate Chinese

This course will review and build upon language skills acquired in the introductory course to Mandarin Chinese. It offers an integrated approach to basic language skills: listening, speaking, reading, and writing. The class will meet three days per week, plus a laboratory period. The laboratory includes engagement with native language via multimedia sources. Graded readings on topics related to Chinese life and society serve as an aid to language learning and provide an introduction to Chinese culture. Prerequisite: Chinese 102 or the equivalent.

## 351. Chinese Cinema: Ideology and the Box Office

Taught in English. China is a growing producer of and market for the world's films. Chinese cinematography has a long and distinguished history. This course will examine that history and how the current state of Chinese film has come to be. The content units will deal with several broad topics rooted in some of the fundamental issues of any of the humanistic arts. The overall theme of the course will be the tension between Chinese identity and commercial success. The students will also explore the creation of proscriptive types in gender and ethnicity, the intersection between politics and film, Globalization and modernity, and the
applicability of western theory to the analysis of Chinese film. In addition to regular class periods, there is one mandatory film screening per week which will be listed as an accompanying lab.

## 375. Study Abroad Portfolio

This tutorial continues the development of specific listening, speaking, reading, writing, and critical thinking skills in the target language while students pursue a language-immersion study abroad program. Students will create a portfolio remotely with frequent consultation and feedback from a faculty advisor. The study abroad portfolio will be assessed for progress in the student's language learning skills and personal development.

## French Studies

Katherine Maynard
Pamela Pears

## 101, 102. Elementary French

Designed for beginning students and aimed at developing skill in listening, speaking, reading, and writing in French. Emphasis on communication through intensive aural/oral practice and awareness of cultural context. Three class meetings and one laboratory session per week.

## 200. Review of Introductory French

This course for high/advanced beginners reviews the material covered in FRS 101 and FRS 102 for those who need a refresher in the basics but have enough experience to progress to more advanced language production. The objective of this course is to expand basic proficiency in the four language skills--speaking, listening, reading and writing--as well as to help students interact with various elements of the culture from different French-speaking countries FRS 200 is only appropriate for those with no prior French experience at the university level who have had a minimum of 2 years and a maximum of 4 years at the high school level. Three class meetings and one laboratory session per week. Prerequisite: By placement exam or departmental approval only.

## 201, 202. Intermediate French

Continued emphasis on the four basic skills. Intensive aural/oral practice. Review of grammar, expansion of vocabulary, and their application in writing. Development of effective reading strategies in response to both expository and literary texts. Familiarization of the student with French life and the francophone world. Three class meetings and one laboratory session per week. Prerequisite: French 102 or 200 (for 201) or French 201 (for 202), appropriate placement score, or permission of the instructor.

## 301, 302. Advanced French

A sequence designed to deepen the student's skills reading, writing, speaking, and listening. 301 focuses on writing: Journalistic, cultural, and literary readings about contemporary French
life serve to develop the student's ability to analyze texts and to write clearly and persuasively in varied forms, such as the résumé, analysis, commentary, description, and short narrative. 302 focuses on speaking: Class discussion aims at stimulating fluent and spontaneous use of spoken French. The course includes instruction in phonetics as a guide to correct pronunciation as well as multimedia cultural activities intended to improve the student's linguistic and cultural knowledge. Theses courses prepare the student for upper-level literature and civilization courses and for study abroad in a Francophone country. Prerequisite: FRS 202, appropriate placement score, or permission of the instructor. FRS 302 may be taken before FRS 301.

## 303, 304. Introduction to French and Francophone Literature and Culture

A course designed to help students answer the questions, "How does one talk and write about literature?" and "What does it mean to read and give a reading to a text?" An exploration of selected works representing different genres both in relation to other literary movements and their historical contexts. Prerequisite: French 301 or 302 or permission of the instructor.

## 311. Contemporary France

Taught in English, this course provides an introductory historical and cultural study of contemporary France. Students will be provided tools for cultural interpretation via critical texts and the analysis of French films and their American remakes; they will then apply them to the cultural history of France. We will explore the impact of World War II, of the student protests of May '68, and of women's emancipation movements. We will examine France's position in the world-its past as a colonizing nation, its present post-colonial actions, and its multicultural identity enriched by different waves of immigration. We will study the political and economic roles of women, their place in the family, health concerns, and struggles for autonomy through works by women. This course counts toward the French major and minor if the journal entries, mid-term exam, and final paper are written in French.

## 312. The Contemporary Francophone World

Taught in English, this course provides an introductory historical and cultural study of the contemporary Francophone world. Designed as a survey of the non-European Francophone world, the course will offer for study both literary and cultural documents from the Caribbean, North Africa, Sub-Saharan Africa, and Canada. Initially they will be provided tools for cultural interpretation via critical texts, media analysis (including print and internet sources) and the analysis of Francophone films; they will then apply them to the cultural history of the Francophone world. We will explore French colonization, the process of decolonization, and subsequent independence movements. We will examine social, political, and economic roles of both women and men, changing gender roles, and contemporary divisions of labor. Finally, we will reflect on the political, historical, and sociocultural situations of post-colonial Francophone nations.

## 375. Study Abroad Portfolio

This tutorial continues the development of specific listening, speaking, reading, writing, and critical thinking skills in the target language while majors pursue their language-immersion study
abroad program. Students will create a portfolio remotely with frequent consultation and feedback from a faculty advisor. The study abroad portfolio will be assessed for progress in the student's language learning skills and personal development.

## 411. Love In the Middle Ages

An investigation of the various modes of representation used to define love during the Middle Ages in France. Readings will include Ovid, Andreas Capellanus, the troubadours, Chrétien de Troyes, Marie de France, and the letters of Heloise and Abelard. Prerequisite: French 303, 304 or permission of the instructor.

## 412. The Renaissance in France

Reading and discussion of works exemplifying the literary achievement of sixteenth-century France and its relation to the spread of printing, voyages of exploration, the rise of Humanism, the Reformation, and the Wars of Religion. Readings include works by Marot, Rabelais, Scève, Louise Labé, du Bellay, Ronsard, Marguerite de Navarre, and Montaigne. Prerequisite: French 303, 304 or permission of the instructor.

## 413. The "Grand Siècle"

A study of representative works of the "grand siècle," in which France achieved cultural ascendancy in Europe. Exploration of the development of classicism and its relation to the emergence of a centralized, autocratic régime. Readings will include dramatic works by Corneille, Racine, and Molière and selected non-dramatic writings: the poetry of La Fontaine, Madame de Lafayette's La Princesse de Clèves, and selected writings of Descartes, Pascal, and La Bruyère. Prerequisite: French 303, 304 or permission of the instructor.

## 414. Les Lumières

A study of letters and the history of ideas from the Regency to the Revolution, with emphasis on the philosopher's use of literature as a weapon to further their rationalistic, humanitarian ideas. The Pre-Romantic reaction to the Age of Reason as manifested in writing and painting. Readings include works by Prévost, Voltaire, Diderot, Rousseau, Beaumarchais, Bernardin de Saint-Pierre, and de Staël. Prerequisite: French 303, 304 or permission of the instructor.

## 415. Nineteenth-Century France: Romantics, Realists, Symbolists

An exploration of the nature of the different grands récits that shape this century and of how they relate to problems of colonialism, aestheticism, industrialization, class structures, feminism, publishing, and criticism. Examines as well the effects of the crise du roman. Prerequisite: French 303, 304 or permission of the instructor.

## 417. Twentieth Century Evolutions and Revolutions: 1900-1945

Evolutions and revolutions in French literature in their necessary relation to other artistic, social, philosophical, and psychoanalytical developments, criticism, the impact of the two World Wars and the interwar period. Emphasis on narrative and genre. Readings will include works by Apollinaire, Barthes, Colette, Proust, Sartre, and Surrealist writers. Prerequisite: French 303, 304 or permission of the instructor.

## 418. Post-World War II France

What are the voices of the post-war period, feminism, and anticolonialism? What is the nature of identity and nationalism? What was the impact of the Algerian War and Mai 68? What is the nouveau roman? Who are some of the critics that have helped shape the visions of this century? Readings will be drawn from works by de Beauvoir, Beckett, Césaire, Cixous, Duras, Fanon, Foucault, Ionesco, and Robbe-Grillet. Prerequisite: French 303, 304 or permission of the instructor.

## 419. Studies in Francophone Literature and Culture

This course will present the student with a number of aesthetic, cultural, historical, and political issues relevant to francophone literature. The particular national or regional focus will vary. Prerequisite: French 303, 304 or permission of the instructor.

## 451, 452. Senior Reading

The intensive study of an author or literary genre. Open to seniors; others by permission.

## 194, 294, 394, 494. Special Topics in French Studies

The intensive study of a selected author, movement, genre, or theme. Prerequisite: French 303, 304 or permission of the instructor for 394 and 494.

190, 290, 390, 490. Internship

195, 295, 395, 495. On-campus Research

196, 296, 396, 496. Off-campus Research
197, 297, 397, 497. Independent Study

## SCE. Senior Capstone Experience in French Studies

Majors must successfully complete the Senior Capstone Experience, which may consist of an original research project (open to students with a 3.5 GPA or higher in the major), or a thesis based on a seminar paper. In each case, students will consult with the faculty advisor(s) in order to choose the most appropriate Capstone Experience, which must be approved by the faculty advisor(s). The Senior Capstone Experience will be graded Pass, Fail or Honors and should be taken during the semester in which the student plans to graduate.

## German Studies

Nicole Grewling

## 101, 102. Elementary German

Designed for beginning students and aimed at developing skills in listening, speaking, reading, and writing in German. Emphasis on communication through intensive aural/oral practice and
awareness of cultural context. Three class meetings and one laboratory session per week. Student may not have taken/tested a higher level of German.

## 201, 202. Intermediate German

Continued emphasis on the four basic skills. Intensive aural/oral practice. Review of grammar, expansion of vocabulary, and their application in writing. Development of effective reading strategies. Authentic non-fictional and literary German texts provide the basis for discussion of a wide range of contemporary social, political, and cultural topics. Three class meetings and one laboratory session per week. Prerequisite: German 102 (for 201), German 201 (for 202), appropriate placement score, or permission of the instructor.

## 301, 302. Advanced German Proficiency

A pair of courses designed to enhance students' skills in reading, writing, speaking, and listening as well as their cultural knowledge. Engagement with contemporary cultural and literary texts serves to develop students' abilities to analyze texts and to express themselves clearly and according to genre-specific conventions in written and oral communication. These courses also include review of German grammar. Prerequisite: GRS 202, appropriate placement score, or permission of the instructor. GRS 302 may be taken before GRS 301.

## 304. German Civilization

A survey of German history, politics, and art from their beginnings to the present with special emphasis on the nineteenth and twentieth centuries. In addition, this course will focus on a close study of the geography and social structures of German-speaking countries. Use will be made of authentic sources. Students will continue to develop language skills, especially reading strategies and vocabulary building. Prerequisite: German 301 or 302 or permission of the instructor.

## 305. Introduction to German Literature

This course provides students with the analytic tools that will facilitate the reading and interpretation of German literature. Specific artistic accomplishments are discussed against the background of historical and social contexts. Text selections may range from the writings of Martin Luther to works by contemporary migrant writers. Particular emphasis will be placed on authors of the twentieth century. Students will continue to develop language skills, especially reading strategies and vocabulary building. Prerequisite: German 301 or 302 or permission of the instructor.

## 313, 314. Berlin - Symphony of a Great City. History, Culture and Identity in Germany's Metropolis

The course provides an overview of the cultural, sociological, political, and historical significance of Berlin. It presents a survey of its history and culture over the past century, examining how Berlin has come to stand as a symbol of the development of Germany as a whole. Discussion of selected (fictional and nonfictional) texts from specific moments in Berlin's history. Course may
be taught in English or German. Prerequisite: None if taught in English (313); GRS 301 or 302 or permission of the instructor if taught in German (314).

## 315, 316. Minorities in Germany: Reading at the Margins

The course provides an overview of the historical background to situate minorities in contemporary Germany, focusing on cultural productions (fictional, non-fictional texts, films) that contribute to the discussion about the situation of minorities in postwar Germany. We examine works that address minorities and their particular circumstances such as guest workers, the Turkish community, Black Germans, Jews, Muslims, Aussiedler, Russian immigrants. Course may be taught in English or German. Prerequisite: None if taught in English (315); GRS 301 or 302 or permission of the instructor if taught in German (316).

## 317, 318. German Cinema

Explores the history and cultural background of German cinema, its topics, forms of representation and relationship to main issues of German history; major themes, movements, and trends, and the construction of identity and difference with special focus on gender. Apart from the historical and narrative context of the films, we will also consider how movies produce meaning and how our perspectives as viewers are guided. While this course is not an introduction to Film Studies, it will give students a general idea how to think and write about film in a critical way. Films are screened outside of class; if students cannot attend the screenings, they must watch the films before the class discussion on their own time. Prerequisite: None if taught in English (317); GRS 301 or GRS 302 if taught in German (318).

## 375. Study Abroad Portfolio

This tutorial continues the development of specific listening, speaking, reading, writing, and critical thinking skills in the target language while majors pursue their language-immersion study abroad program. Students will create a portfolio remotely with frequent consultation and feedback from a faculty advisor. The study abroad portfolio will be assessed for progress in the student's language learning skills and personal development.

## 411. The Classical Age

Largely prevented from taking an active political role in the society of their day, late eighteenth-century German authors and intellectuals began what amounted to an artistic revolution-a revolution in thought and expression whose effects are still felt today. Focusing on key works by Kant, Goethe, Schiller, Mozart, Beethoven, and others, this course explores and critiques central concerns of the German Classical Age (e.g., enlightenment, tolerance, harmony, human perfectibility, etc.) Prerequisite: GRS 304 or 305 or permission of instructor.

## 412. Romantic Germany

Set against the backdrop of French/European revolution, German Romantic thought manifested two distinct but related modes. On the one hand, many romantics broke with traditional commonplaces about art, nature, and humanity, embracing forms of philosophical idealism, pantheism, and "Romantic Irony. " On the other hand, however, a number of artists and intellectuals also longed for a return to the past-to an "organic" society in which divisive
religious and political conflicts were as yet unknown. The course examines these and related trends as manifested in the literature, philosophy, painting, and music of the era. Prerequisite: GRS 304 or 305 or permission of instructor.

## 413. The Birth of Modern Germany

In many respects, modern German history may be said to have begun with the failed bourgeois revolution of 1848 . With the shattering of its democratic hopes, the German middle class largely turned away from political concerns, focusing instead on the pleasures of family life, the private accumulation of wealth, and the advancement of science and industry. At the same time, the German bourgeoisie also came to accept the autocratic state authority with which it would ever afterwards be associated. This course traces the often ambivalent artistic responses to German "modernity, " focusing on figures such as Fontane, Hauptmann, Nietzsche, Wagner, and Rilke, and the movements with which they are associated (Realism, Naturalism, Symbolism, and Expressionism.) Prerequisite: GRS 304 or 305 or permission of instructor.

## 417. Democratic and Totalitarian Germany

Few eras continue to fascinate as do those of Germany's Weimar Republic (1918-1933) and Third Reich (1933-1945). In the former, we find a fragile new democracy characterized at once by anxiety, inflation, and the destruction of values, as well as an explosion of creative energies in literature, film, music, the visual arts, and architecture. In the latter, by contrast, Germany's "Golden Twenties" come crashing to a halt; post-war anxieties, uncertainties, and freedoms are exchanged for the reactionary nationalism of Adolf Hitler and the Nazi Party. Drawing on key cultural artifacts from the periods in question, this course considers the troubled relationship between democracy and totalitarianism in German history. The course then concludes with an analysis of the divided Germany as it developed after 1945. Prerequisite: GRS 304 or 305 or permission of instructor.

## 418. The Culture of the Open Society

With the construction of the Berlin Wall in 1961, Germany's permanent separation seemed assured. In the east, the German Democratic Republic sought to realize a socialist state founded upon the principles of Marxism-Leninism. In the west, the Federal Republic of Germany embraced the model of a capitalist and politically "open" (pluralistic) society. This seminar focuses on this model, tracing social, cultural, and political developments from 1961 to the present. Topics of discussion will include Germany's "economic miracle," the social market economy, student, peace, and women's movements, terrorism, and German Reunification. Prerequisite: GRS 304 or 305 or permission of instructor.

## 194, 294, 394, 494. Special Topics in German Studies

The intensive study of a selected author, movement, genre, or theme in German culture studies.

## 190, 290, 390, 490. Internship

## 195, 295, 395, 495. On-campus Research

## 196, 296, 396, 496. Off-campus Research

## 197, 297, 397, 497. Independent Study

## SCE. Senior Capstone Experience in German Studies

Majors must successfully complete the Senior Capstone Experience, which may consist of an original research project or a thesis based on a seminar paper. In each case, students will consult with the faculty advisor(s) in order to choose the most appropriate Capstone Experience, which must be approved by the faculty advisor(s). Students are enrolled for four SCE credits usually in the spring of their senior year but the SCE is a year-long project that should be started at the end of the junior year. The Capstone receives a mark of Pass, Fail, or Honors.

## Additional Courses for German Studies

After consultation with the faculty in the German Program, students may take up to one course from outside the German Program for credit toward the major or the minor, if these courses contain substantial work done in German under the supervision of the German faculty. The following courses are recommended. This list is not exclusive.

## ART 315. Northern Renaissance Art

HIS 360. Modern Germany
MUS 204. History of Western Music: Classical to Romantic
PHL 414. The Philosophy of Marxism
POL 344. Comparative Government: Western Europe

## Hispanic Studies

Cristina Casado Presa
Elena Deanda Camacho
Rebeca Moreno Orama
Martín Ponti

## 101, 102. Elementary Spanish

Designed to develop basic proficiency in aural comprehension, speaking, reading, and writing. A native Spanish-speaking assistant serves as tutor for the course. Three class meetings and one laboratory session per week.

## 200. Review of Introductory Spanish

A review of the material covered in HPS 101 and HPS 102 for those who need a refresher in the basics but have enough experience to progress to more advanced language production. The objective of this course is to expand basic proficiency in the four language skills: speaking, listening, reading and writing, as well as to help students interact with various elements of the culture from different Spanish speaking countries. HPS 200 is only appropriate for those with no
prior Spanish experience at the university level who have had a minimum of 2 years and a maximum of 3 years at the high school level. Students who have completed HPS 101, HPS 102, or HPS 201 may not take this course. Three class meetings and one laboratory session per week. Prerequisite: Appropriate placement score, or permission of the instructor.

## 201, 202. Intermediate Spanish

Review and intensified practice of language skills. Readings cover a wide range of topics in Spanish and Spanish American culture and literature. A native Spanish-speaking assistant serves as tutor for the course. Three class meetings and one laboratory session per week. Prerequisite: HPS 102, 200, appropriate placement score, or permission of the instructor for HPS 201; HPS 201, appropriate placement score, or permission of the instructor for HPS 202.

## 301. Advanced Spanish Proficiency I

A course designed to improve reading and writing skills and to augment vocabulary through the use of literary and cultural texts, including film. Spanish grammar is thoroughly reviewed with emphasis on those elements of the structure of Spanish that are often the most troubling to non-native learners. Prerequisite: HPS 202, appropriate placement score, or permission of the instructor.

## 302. Advanced Spanish Proficiency II

This course is designed especially to improve speaking and listening comprehension skills, again through the use of cultural and literary materials, including film. Emphasis will continue to be placed on vocabulary building and the review of Spanish grammar. Prerequisite: HPS 202, appropriate placement score, or the permission of the Instructor. HPS 302 may be taken before HPS 301.

## 303. Introduction to the Literature and Culture of Latin America

An introduction to the literature of Latin America. This course provides students with the analytic tools that will facilitate the reading and interpretation of the literature of various Latin American countries and their representative authors. The course includes works of poetry, drama, short story, novel and film. Prerequisite: HPS 301 or 302 or permission of the instructor.

## 304. Introduction to the Literature and Culture of Spain

An introduction to Spanish literature. This course provides students with the analytic tools that will facilitate the reading and interpretation of the literature of Spain and its representative authors. The course includes works of poetry, drama, short story, novel, and film. Prerequisite: HPS 301 or 302 or permission of the instructor.

## 305. Introduction to the Literature of Spain and Latin America

An introduction to Spanish and Latin American literature. This course provides students with the analytic tools that will facilitate the reading and interpretation of the literature of Spain and Latin America and their representative authors. The course includes poetry, drama, short story, novel, and essay. This class combines key texts from HPS 303 and 304 and prepares HPS majors for
the Senior Capstone Experience. Prerequisite: HPS 301or 302 or permission of the instructor.

## 307. Spanish for International Business

Designed to give students a foundation in the vocabulary of business and international trade and in the expression of basic business concepts in Spanish. Practice in presenting oral reports on business and cultural topics, in reading business reports and other texts of a cultural nature, and in writing various kinds of business correspondence, including résumés, memos, and letters. All materials are presented within a cultural context intended to expand the students' knowledge and understanding of the manners and mores of Spain and the Spanish-speaking republics of Latin America, as well as of demographic, geographic, and other data related to those nations. Prerequisite: HPS 301 or 302 or permission of the instructor.

## 375. Study Abroad Portfolio

This tutorial continues the development of specific listening, speaking, reading, writing, and critical thinking skills in the target language while majors pursue their language-immersion study abroad program. Students will create a portfolio remotely with frequent consultation and feedback from a faculty advisor. The study abroad portfolio will be assessed for progress in the student's language learning skills and personal development.

## 194, 294, 394, 494. Special Topics in Hispanic Studies

The intensive study of a selected author, movement, genre, or theme in literature or film or a study of the culture of a particular period, region, or nation. Prerequisite: HPS 303, 304 or 305, or permission of the instructor.

## 401. The Civilization of Spain

The course begins with a look at the geography of Spain, followed by a study of the early cultures that contributed to the formation of Spanish character and civilization. It continues with the study of the evolution of Spain's civilization from the Middle Ages up to the present time. A major emphasis is on contemporary Spanish society, its institutions and forms of cultural expression. Prerequisite: HPS 303, 304 or 305, or permission of the instructor.

## 410. History of Spanish

A study of the evolution (phonological, morphological, semantic and syntactic of spoken Latin into Castilian through the reading and analysis of medieval texts. The class will also consider the major historical events (social and political that contributed to the formation of modern Spanish. Prerequisite: HPS 301 or 302, or permission of the instructor.

## 414. How to (Make) Love in Early Modern Spain

This course investigates different texts that were read and/or produced in Early Modern Spain around the topics of love, gender, and sex in order to reflect on how we have loved throughout history. It will look at manuals, treatises, and diverse literary genres (poetry, narrative, and theater) that aimed to describe and/or prescribe ways of loving and ways of knowing. The goal is for students to put into practice their literary analytical skills and to reflect on everyday issues that puzzle us, weaken us, and strengthen us: love, sex, and the Other. Prerequisite: HPS 303,

304 or 305, or permission of the instructor.

## 415. Studies in Early Modern Spanish Literature

Spanning the medieval era to the XVIII century, this course focuses on selective works of history, essay, poetry, prose, and theatre that are representative of literary periods such as Medieval, Golden Age, Baroque, and/or the Enlightenment. This class emphasizes close reading as well as contextual analysis, considering the major historical, social and political events that contributed to each period formation.
Prerequisite: HPS 303, 304 or 305, or permission of the instructor.

## 416. Studies in Colonial Latin American Literature

Spanning the pre-hispanic era to the XVIII century, this course focuses on selective works of history, essay, poetry, prose, and theatre that are representative of periods like Pre-Hispanic literature, Colonial Baroque, and/or the Enlightenment. This class emphasizes close reading as well as contextual analysis, considering the major historical, social and political events that contributed to each period formation.
Prerequisite: HPS 303, 304 or 305, or permission of the instructor.

## 417. Afro Latin America

This class will introduce students to the process of critical thinking through theoretical works on race and through selected historical and contemporary texts about the legacy of Africa in Latin America and the USA. This course will explore the effects of race on the relationship between language and the mind and will look at the intersections of race, gender, class and sexuality as socially constructed practices. Students will learn to read, think and write critically about different perspectives on being Afro-American, Afro-Caribbean, Afro-Mexican, etc. It will consider why race still matters in the so-called "post-racial America." Prerequisite: HPS 303, 304 or 305, or permission of the instructor.

## 418. Narratives of Mexico

An examination of modern Mexican society through representative works of cultural production, this course aims to enhance students' understanding of Mexican literature, film, art, history and politics, by focusing on critical analysis of narrative forms that derive from a wide range of aesthetic and ideological approaches, including the idea of Mexico, imagined communities, national consciousness, representations of stereotypes, border culture and migration, democracy, human rights, justice (environmental and social), the Mexican Revolution, free trade, the Zapatista Rebellion, and violence (gender-based and narco). Successful completion of this course will enhance proficiency in technical vocabulary for writing and speaking about cultural analysis. Prerequisite: HPS 303, 304 or 305, or permission of the instructor.

## 419. Weapons, Words, Images: Perspectives on the Spanish Civil War

Few events on the 20th century have ignited the imagination, caused ideological discussions, inspired historical studies and shaken more passions inside and outside Spain than the Spanish Civil War (1936-1939). This course analyzes this conflict in depth and shows how the Civil War
has been and continues to be the center of an extraordinary cultural energy and a center of reflection in popular culture, art, literature, politics and the society of Spain today. Prerequisite: HPS 303, 304 or 305, or permission of the instructor.

## 420. I Am No Angel: Post-Franco Literature Written by Women

Literary representations throughout the centuries reflect the belief that the aspirations of the Spanish woman must be subordinated to the roles of mother, saint, virgin...the prudente. This course explores representative literary works written by women after General Franco's death. In this moment of political change, a significant tendency is the emergent depiction of female characters that show a clear self-consciousness and express fully their thoughts, emotions and desires. Throughout the course we will examine poems, short stories and plays that allow us to consider the possibility of the production of new ideologies at a moment in which new models of "la mujer española" coexist and come into conflict with the old ones. Prerequisite: HPS 303, 304 or 305 , or permission of the instructor.

190, 290, 390, 490. Internship

195, 295, 395, 495. On-campus Research
196, 296, 396, 496. Off-campus Research

## 197, 297, 397, 497. Independent Study

## SCE. Senior Capstone Experience in Hispanic Studies

Majors must successfully complete the Senior Capstone Experience, which may consist of a comprehensive examination, an original research project (open to students with a 3.5 GPA or higher in the major), or a thesis based on a seminar paper. In each case, students will consult with the faculty advisor(s) in order to choose the most appropriate Capstone Experience, which must be approved by the faculty advisor(s). The Senior Capstone Experience will be graded Pass, Fail or Honors and should be taken during the semester in which the student plans to graduate.

## Other Courses

## ELL 101 English for Academic Purposes I

The purpose of this course is to assist matriculated English language learners (ELL) at Washington College in the development and improvement of listening, speaking, reading, writing, and critical thinking skills needed to be successful in post-secondary academic and professional settings. It prepares ELL students for the oral and written demands and expectations frequently encountered in college-level academic classes. Permission of the instructor or the Provost's Office required.

## ELL 102 English for Academic Purposes II

This course aims to develop specific listening, speaking, reading, writing, and critical thinking skills including preparing and executing group presentations, working with and synthesizing primary and secondary sources, creating and implementing peer-to-peer activities, leading peer-to-peer constructive discussions, and research-based writing projects. Permission of the instructor or the Provost's Office required.

## FLS 101, 102. Elementary Language Study

Students may enroll in this course to study a modern language that is not part of the regular curriculum of the Department of World Languages and Cultures. Permission to study the language under this independent study/tutorial arrangement depends upon the availability of an appropriate tutor for the language requested. Students who study a language in this way are strongly urged to follow up such study by participating in a study abroad experience in a country where the language is spoken. Permission of department associate chair required.

## FLS 194, 294, 394, 494. Special Topics in Foreign Language Studies

## FLS 490. Foreign Language Internship

Designed to provide students with pre-professional experience in fields in which their language proficiency is an essential asset. The specific internship experiences will vary. They include placement of Hispanic Studies students with public health and social service agencies, as well as in the local school systems as instructional aids with ESOL students. Interested students should consult the department chair.

