EXPLORE. ENGAGE. EXCEL.

PART 2

Recommended Courses for First-Year Students

This section provides a brief introduction to Dartmouth's academic departments and programs and recommended courses for first-year students.

The following pages include descriptions for selected courses that allow you to explore each academic department and program.

Course Designations

- Courses are offered during different terms. Please visit department websites for information regarding when courses might be offered.
- Distributive and World Culture codes assigned to each course (see page five for more information) are indicated after the course descriptions.
- Each academic department numbers courses differently. All courses listed in this guide are recommended for first-year students. Pick the courses that interest you, regardless of the number.

Please note: Course listings are subject to change; you need to be proactive in regularly consulting department and program websites for updated information.

The courses in this section do not represent an exhaustive list; please make sure to explore department and program websites, especially if you know that you are interested in that particular discipline.

As you immerse yourself in these intriguing course descriptions, please keep the following "big ideas" in mind:

- You are embarking on a liberal arts education – one that offers a broad understanding of the world with mastery of at least one field; the capacity to think critically and creatively; powerful communication skills; an ease at working in teams; scientific literacy; the ability to engage the arts and humanities; and the development of principled leadership skills.
- Take full advantage of this curriculum, from the very beginning. Let this first exploration of course offerings be the start of the "breadth" of your liberal arts education.
- There is no wrong class – each class that you take will provide an opportunity for growth, exploration, and increased knowledge.
- Expect to be challenged personally, intellectually, and socially. And reach out for support from the many resources on campus, especially the ones introduced in this guide.
- Your job this summer is to explore, reflect, and envision. We hope that you end this period of reflection with confidence and excitement about your transition to Dartmouth.
- We'll be in touch at several points during the next few months with further instruction, inspiration, and important information. Until then … we wish you well!

African and African American Studies (AAAS)

The African and African American Studies Program at Dartmouth College originated in 1969, making it one of the oldest programs of its kind in the nation. Utilizing innovative theoretical and empirical investigations, students explore questions and issues that shape the historical, social, political, and cultural dimensions of African, the African Diasporic, and African American worlds and experiences within a global context. We have core faculty based in AAAS as well as affiliated faculty situated in programs and departments across campus. The multidisciplinary curriculum in AAAS offers a major, minor, and an honors program for outstanding students.

The following courses are recommended for first-year students (AAAS):

09. Introduction to AAAS Diaspora Studies
10. Introduction to African American Studies
11. Introduction to African Studies
12. Race and Slavery in US History
14. Pre-Colonial African History
15. History of Africa since 1800
19. Africa and the World
22. Religion and the Civil Rights Movement
22.10 African American Religion and Culture in Jim Crow America
27. Transformative Spiritual Journeys
63. Race Matters: "Race" Made to Matter
66. Black Migration – Black Immigration

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

09. Introduction to AAAS Diaspora Studies

A comparative and historical team-taught course composed of three units: Africa, the Caribbean, and the United States. In addition to literary and social sciences texts, the course will consider music, the visual arts, science, diaspora theory, and research strategies. Topics include the coloniality of modernity; religio-racial self-fashioning; Diaspora identity and identification; African diaspora gender and sexuality; cuisine; pathogenicity, disease and chemical catastrophes.

10. Introduction to African American Studies

A multidisciplinary investigation into the lives and cultures of people of African descent in the Americas. Topics include: the African background, religion and the black church, popular culture, slavery and resistance, morality and literacy, the civil rights movement, black nationalism, theories of race and race relations.

12. Race and Slavery in US History

This course deals with the African heritage, origins of white racial attitudes toward blacks, the slave system in colonial and antebellum America, and free Black society in North America. Specific emphasis on the Afro-American experience and the relationship between blacks and whites in early American society.

CREDIT ON ENTRANCE AND PLACEMENT EXAM INFORMATION

Credit on Entrance Website

Make sure you view all the tabs at this website for definitions, types of credit, and departmental guidelines: http://www.dartmouth.edu/reg/enrollment/prematriculation_credit.html. [When you see an asterisk (*) in the Recommended Courses Section, go to the website above to find answers to your credit on entrance, placement, and exemption questions.]

Dartmouth-Generated Placement Exams

The primary purpose of Dartmouth-generated placement exams is to ensure that you are taking courses appropriate to your level of preparation. It is strongly recommended that you take them when there is a question of placement or if we lack sufficient information in the form of standardized test scores to evaluate advanced preparation during high school. Refer to https://www.dartmouth.edu/orientation/ later this summer for information about Dartmouth-generated placement exams.

[When you see an asterisk (*) in the course listings and have questions about Dartmouth-generated placement exams, visit the New Student Orientation website above for dates, forms of administration, and other information.]

Students who may need disability-related accommodations for placement examinations should contact Student Accessibility Services as soon as possible at Student.Accessibility.Services@Dartmouth.edu.

You will have the opportunity to check the accuracy of the credit on entrance and placement information on your official record during your first term.

19. Africa and the World
Focus on links between Africa and other parts of the world, in particular Europe and Asia. Readings, lectures, and discussions will address travel and migration, economics and trade, identity formation, empire, and cultural production. Rather than viewing Africa as separate from global processes, the course will address historical phenomena across oceans, cultures, and languages to demonstrate both the diversity of experiences and long-term global connections among disparate parts of the world.

22.10. African American Religion and Culture in Jim Crow America
Jim Crow segregation in the US compelled many African American men and women to use their bodies—their hands, feet, and voices—to create sacred scenes, sounds, and spaces to articulate their existence in America. This seminar focuses on religious production to explore African American culture in the post-Civil War era. Students will analyze a variety of sources, including music, visual art, film, religious architecture, sermons, food, theater, photography, and news media.

27. Transformative Spiritual Journeys
Presents African Americans who have created religious and spiritual lives amid the variety of possibilities for religious belonging in the second half of the twentieth century and the early twenty-first century. We will study the writings of theologians, religious laity, spiritual gurus, hip hop philosophers, LGBT clergy, religious minorities, and scholars of religion as foundational for considering contemporary religious authority through popular and/or institutional forms of religious leadership. Themes of spiritual formation and religious belonging as a process—healing, self-making, writing, growing up, renouncing, dreaming, and liberating—characterize the religious journeys of African American writers, thinkers, and leaders whose works we will examine. We will incorporate relevant audiovisual religious media, online exhibits, documentary films, recorded sermons, tv series, performance art, and music.

Anthropology (ANTH)

Anthropology seeks to understand what makes human beings a single species and why that unity finds expression in such culturally diverse ways. Anthropology ranges from scientific inquiry into human biological and cultural evolution to humanistic concerns with people's day to day experiences across time and space. The discipline's four subfields of archaeology, biological anthropology, linguistic anthropology, and sociocultural anthropology bring together the sciences and humanities to ask holistically what it means to be human.

The following courses are recommended for first-year students (ANTH):
01. Introduction to Anthropology
06. Foundations in Biological Anthropology
09. Language and Culture
36. Contemporary Africa: Exploring Myths, Engaging Realities
49. Environment, Culture, and Sustainability

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

01. Introduction to Anthropology
This course explores the unity and diversity of humankind by examining our evolution as a single biological species that nonetheless depends for its survival on learned-and therefore varied as well as variable-patterns of cultural adaptation. Lectures and readings address the relationship between the material conditions of our existence, our unique human capacity for creative thought and action, and changes in the size and scale of human societies. Dist: INT or SOC; WCult: CI.

06. Foundations in Biological Anthropology
The major themes of biological anthropology will be introduced; these include the evolution of the primates, the evolution of the human species, and the diversification and adaptation of modern human populations. Emphasis will be given to (1) the underlying evolutionary framework, and (2) the complex interaction between human biological and cultural existences and the environment. Dist: SCI

09. Language and Culture
This course will introduce students to the study of human language as a species-specific endowment of humankind. In this investigation we will examine such issues as: 1) the relationship between language use (e.g. metaphoric creativity) and cultural values, 2) the relationships between language diversity and ethnic, political, economic stratification, 3) language use and the communicating of individual identity, thoughts, and intentions in face-to-face interaction, 4) the cultural patterning of speech behavior, and 5) whether or not the structure of specific languages affects the characteristics of culture, cognition, and thought in specific ways. Dist: SOC.

36. Contemporary Africa: Exploring Myths, Engaging Realities
This course focuses on processes, relationships, and experiences that have shaped, and continue to shape, the lives of Africans in many different contexts. These include issues of ecology and food production, age, gender, ethnicity, exchange, colonialism, apartheid, and development. We will then embark on in depth readings of ethnographies that engage these issues and themes. In the processes we will move beyond prevailing stereotypes about Africa, to engage the full complexity of its contemporary realities. Dist: INT or SOC; WCult: CI.

49. Environment, Culture, and Sustainability
Environmental problems cannot be understood without reference to cultural values that shape the way people perceive and interact with their environment. In this course we will engage with cultural difference with special attention to how the American experience has shaped the ways in which Americans imagine and interact with the environment. We will pay close attention to issues of consumption and conservation and how they have impacted ecologies and human livelihoods around the world. Dist: INT or SOC; WCult: CI.

Arabic

(See program description under Middle Eastern Studies.)

Art History (ARTH)

The areas of interest represented among the art

Recommended Courses for First-Year Students

history faculty are broad, spanning many centuries of European, American, and Asian art. On-site study is available to students who enroll in the Foreign Study Program in Rome, Italy, offered annually in the spring term. The mission of the Department of Art History includes providing courses and training to majors and pre-professionals in the discipline, offering general courses to develop visual literacy and art-historical awareness in the college at large, and promoting overall understanding of the visual arts in the contemporary world. Students majoring in art history are well-prepared for graduate study, and an advanced degree in art history can lead to careers in scholarship and teaching, museum work, commercial art galleries, auction houses, arts administration, and public and private art foundations. In addition, many art history students have followed their undergraduate studies with professional training in law, business, and medicine. Most art history courses carry no prerequisite and are open to first-year students. Questions about specific courses should be directed to the appropriate faculty member.

ADVANCED PLACEMENT

No pre-matriculation credit or exemption is given for courses in art history.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Bodies and Buildings: Introduction to the History of Art in the Ancient World and the Middle Ages
This course studies basic problems and new directions in the understanding of architecture, sculpture, and painting in Europe and the Near East from the earliest times to the end of the Middle Ages. It introduces students to the language of art criticism and method, as well as the relationships of the arts to each other and to their historical contexts. Special attention is given to the human body and visual narrative. Dist: ART; WCult: W.

Asian Societies, Cultures, and Languages (ASCL)
Asian cultures have long and productive traditions in science and technology, arts and literature, political philosophy, business and economics, religious beliefs and practices—traditions that have become dominant forces in the contemporary world. A basic knowledge of Asia is vital to Dartmouth students because Asia figures prominently in issues related to international law and human rights, the environment and climate change, economic development and migration, media and the arts, and technological innovation. ASCL provides courses that present students with a range of methodologies used by Asia specialists from various disciplines. ASCL offers a flexible major that allows students to focus their study on a specific country or region of Asia. Students can also adopt a discipline specific approach to Asia and focus on Asian literatures, languages, religions, histories, or visual cultures.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

CHIN 1. First Year Courses in Chinese
JAPN 1. First Year Courses in Japanese
ASCL 1.01 Urban Asia
ASCL 10.02 Introduction to Korean Culture
ASCL 10.03 Introduction to Japanese Culture
ASCL 11.01 Introduction to Chinese Culture
ASCL 11.04 Introduction to South Asia

Astronomy
(See program description under Physics and Astronomy.)

Biological Sciences (BIOL)
The Department of Biological Sciences offers a highly flexible major and a wide variety of courses, research opportunities, and experiences for Dartmouth undergraduates. The research interests of the faculty include molecular and cellular biology, ecology and evolutionary biology, developmental biology, neurobiology, and computational biology. Biology majors can focus their studies on a wide range of different areas within biology, and the major can include selected courses from other departments. The Department of Biological Sciences offers a Foreign Study Program (FSP) in tropical ecology that includes an introduction to studies of rain forests, coral reefs, and other tropical environments. For more information, please visit: https://biology.dartmouth.edu/

For many students, BIOL 11 (The Science of Life) is the entrance course to the major and the minor. This topics-based course with no laboratory is offered in the fall, winter and spring of the 2020-2021 academic year. BIOL 11 may be counted toward the Biology major or minor if it is taken during the first year or as the first Biology major course. The Biology department has established an online self-assessment exam for students to use as a guide to determine if they should start their study of Biology with BIOL 11 or if they should enroll directly in a more advanced Foundation course (BIOL 12-16 or 19).

Topics for the three offerings of BIOL 11 during the 2020-2021 academic year are:

Fall: Major Events in the History of Life and the Human Genome
Winter: Cooperation and Conflict
Spring: Animal Minds

Foundation courses include BIOL 12 (Cell Structure and Function, fall and spring); BIOL 13 (Gene Expression and Inheritance, winter and summer); BIOL 14 (Physiology, fall and winter); BIOL 15 (Genetic Variation and Evolution, winter), BIOL 16 (Ecology, fall and spring) and Biology 19 (Honors Cell Structure and Function, fall, open only to first year students). Students must successfully complete three of the five Foundation courses for the major. A Biology minor must successfully complete two Foundation courses. Students interested in Biology FSP are encouraged to take BIOL 16 in fall or spring of their first year and BIOL 15 in their first or second year.

To complete the major, students, in consultation with their faculty advisor, focus in an Area of Concentration by taking seven additional courses including two advanced courses numbered 50 and above. A student minoring in Biology must complete four additional courses. Additional prerequisites for the major and minor include CHEM 5 and CHEM 6, and one quantitative course from among COSC 1 or 5, ENGS 20, EARS 17, BIOL 29, MATH 4, MATH/BIOL 5, and MATH 8 or above. MATH 10 (or equivalent) also satisfies the quantitative requirement. In addition, many graduate and professional

As you explore this guide, circle seven to ten courses that interest or intrigue you. Keep your mind open and curious!

schools require CHEM 51-52 for admission, so we highly recommend that students consider taking these courses while at Dartmouth.

Although non-majors can (and are encouraged to) enroll in BIOL 11 and Foundation courses, the department also offers a course intended primarily for non-majors: BIOL 2 (Human Biology, fall).

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

2. Human Biology (does not count for major/minor credit)
A course designed to help students (biologists and non-biologists) understand the biological basis of human health and disease. The course will emphasize the fundamental aspects of biochemistry, genetics, cell and molecular biology, physiology, anatomy, reproductive biology, and structure/function of various organs as they relate to humans. Particular emphasis will be placed on specific topics in human health and disease and how these issues affect us all individually in our own health and collectively in our international society. Dist: SCI.

11. The Science of Life
Biology, like all of science, is a problem-solving endeavor. This course introduces students to a major problem in biology, and considers it from many different perspectives, viewpoints and biological levels of organization. Along the way, students are exposed to many of the major concepts in biology, from molecules to ecosystems. Each offering will address a different major problem. Dist: SCI.

Fall Topic for BIOL 11: Major Events in the History of Life and the Human Genome
Over the course of the last 4.5 billion years, life has faced a number of challenges, and in response has evolved a number of remarkable innovations. These innovations are written in DNA, and thus molecular fossils for many of the major events in the history of life can be found within our very own genomes. This course will survey the human nuclear and mitochondrial genomes, using a gene or region from a chromosome as a "ticket" to a particularly important event or process in the history of life. Dist: SCI.

12. Cell Structure and Function
BIOL 12 will provide a foundation in the fundamental mechanisms that govern the structure and function of eukaryotic cells. Topics include membrane transport, energy conversion, signal transduction, protein targeting, cell motility and the cytoskeleton, and the cell cycle. Emphasis will be placed on discussion of the experimental basis for understanding cell function. The laboratory section will provide students with hands-on experience in modern laboratory techniques including microscopy, cell fractionation, and protein purification. Dist: SLA.

14. Physiology
BIOL 14 introduces students to the complexity of organisms by studying how their different organ systems strive to maintain internal homeostasis in the face of different environmental demands. The adaptive responses of selected organisms (humans, different animals and plants) to a variety of environmental factors will be studied from the molecular, cell, tissue, organ, and systems level of organization. Some of the topics to be covered include biological control systems (hormones, neurons) and coordinated body functions (circulation, respiration, osmoregulation, digestion). All systems studied will be integrated by analyzing how different organisms adapt to living in extreme environments (deserts, high altitude) or facing environmental demands (navigation, exercise). Dist: SLA.

16. Ecology
This course examines fundamental concepts in the rapidly developing areas of ecology. These topics include the factors that limit the distributions and abundances of organisms, the effects that organisms have on ecosystems, the integration of ecosystems around the globe, and the conservation of species diversity. The class will also explore how the behavior and physiology of individual organisms shape both local and global patterns of distribution and abundance. Laboratories focus on experimental and quantitative analyses of local ecosystems, with an emphasis on field studies. Dist: SLA.

19. Honors Cell Structure and Function
This honors introduction to cell biology is for students with a strong background in biology and chemistry. This course will discuss fundamental topics, including protein targeting, the cytoskeleton, membrane transport, cellular energetics, the cell cycle, and signal transduction. The course will emphasize experimental strategies to understand eukaryotic cell function, and the laboratory will provide hands-on experience in modern cell biological techniques, including microscopy, cell fractionation, and protein purification. Biology 19 is open only to first-year students and enrollment is limited. Invitation to enroll will be based in part on performance on the Biology Placement Exam (online). Biology 19 is a foundation course equivalent of Biology 12. Dist: SLA.

Chemistry (CHEM)

Dartmouth students who are interested in chemistry or a background in chemistry for study in other fields have outstanding opportunities at Dartmouth. The Department is known for excellent teaching and close student-faculty relations in nationally competitive research projects. A Ph.D. program and the presence of post-doctoral research associates help to ensure a stimulating scientific atmosphere supported by modern research instruments that are accessible to undergraduates. Research in the general fields of inorganic, organic, physical, theoretical, computational, materials and biological chemistry, and in structural biology, is supported by modern instrumentation, computers, and a first-rate library including computer-assisted literature searches.

All chemistry majors are welcome to attend the weekly departmental colloquium, which features speakers from other universities and from industry. Undergraduate research students attend the research seminars of their faculty mentor's research group. Graduate courses allow undergraduates to pursue specific interests in advanced topics as these develop. Chemistry faculty members are dedicated educators and the department ranks at or near the top in undergraduate ratings of teaching quality at Dartmouth. The Department believes it has one of the best undergraduate programs in chemistry available at any college or university.

The Department of Chemistry offers two parallel introductory sequences, which are prerequisite to more advanced courses in chemistry. The normal sequence consists of Chemistry 5 and 6 (General Chemistry). Chemistry 10 is a limited enrollment honors course for those first-year students with a strong background and interest in chemistry and adequate mathematics preparation (credit-on-entrance for, or exemption from, Mathematics 3). Chemistry 10 is offered during the fall term, is only open to first-year students, and is the prerequisite equivalent to Chemistry 5 and 6. Eligibility for Chemistry 10 is discussed below. Students who plan to take general chemistry in their first year at Dartmouth and have credit-on-entrance for, or exemption from, Mathematics 3 are encouraged to take Chemistry 5 in the fall term. Students without Mathematics 3 credit-on-entrance or exemption

Recommended Courses for First-Year Students

must take this prerequisite mathematics course in the fall prior to taking Chemistry 5 in the winter.

5-6. General Chemistry

10. Honors First-Year General Chemistry
For students who wish to major in Chemistry or Biological Chemistry, it is important to begin taking chemistry courses early, and they are strongly encouraged to take Chemistry 5-6 or Chemistry 10 in their first year. None of the major programs precludes off-campus activities, such as Language Study Abroad. Students who are interested in combining chemistry and engineering should plan their program in consultation with both the undergraduate advisor at Thayer and one of the members of the Undergraduate Advising Committee of the Chemistry Department at the start of the first year. Students contemplating a major in the physical sciences, but undecided between physics and chemistry, should note that Mathematics 3 and 8, Chemistry 5-6 (or Chemistry 10), and Physics 13-14 will serve as good preparation for further study in either field.

CREDIT ON ENTRANCE AND ADVANCED PLACEMENT

Students with a score of 5 on the CEEB Advanced Placement Examination will receive credit-on-entrance for Chemistry 5. These students will be invited to take the Chemistry 6 credit test during the fall term. Students who have been given credit-on-entrance for Chemistry 5 may not enroll in Chemistry 5 without permission of the Chemistry Department. The training described in the CEEB Advanced Placement Program Syllabus is a satisfactory guide to the type of work that may be expected to lead to Advanced Placement at Dartmouth. Students who have credit-on-entrance for Chemistry 5 and either credit-on-entrance for, or an exemption from, Mathematics 3 are eligible to enroll in either Chemistry 6 or Chemistry 10 (subject to enrollment limits) in the fall term.

CREDIT ON ENTRANCE BY SPECIAL EXAMINATION

Students with a good background in chemistry, but who were unable to take the CEEB Advanced Placement Examination (for example, students who took the International Baccalaureate or British A-Level examinations) or achieved a score lower than 5 on the CEEB Advanced Placement Examination, are strongly encouraged to take the Chemistry 5 credit exam during the fall term. Please contact the Chemistry Department to schedule this exam. Those students who pass this test will receive credit-on-entrance for Chemistry 5 and be invited to take the Chemistry 6 credit test later in the fall term. Students who pass the Chemistry 6 credit test will receive credit-on-entrance for Chemistry 6. Students are strongly encouraged to prepare for these tests by reviewing their high school chemistry material and consulting material available on the Chemistry Department website https://chemistry.dartmouth.edu

ELIGIBILITY FOR ENROLLMENT IN CHEMISTRY 10

First-year students who are interested in taking Chemistry 10 must have credit-on-entrance for Chemistry 5, either by scoring a 5 on the CEEB Advanced Placement Examination or by passing the Chemistry 5 credit test, and must also have credit-on-entrance for, or exemption from, Mathematics 3. Please note that enrollment in Chemistry 10 is limited and requires the permission of the instructor, Professor Robustelli.

TRANSFER CREDIT

Students who have taken college chemistry courses prior to matriculation at Dartmouth and wish to receive transfer credit-on-entrance for Dartmouth chemistry courses should contact the Chair of the Chemistry Department early in the fall term.

Chinese
(See program description under Asian Societies, Cultures, and Languages.)

Classics (CLST, LAT, GRK)
The study of Classics takes in every aspect of Greek and Roman antiquity, with direct connections to many contemporary concerns. Multiple disciplinary perspectives within the department empower students to explore ancient texts, artefacts, and archaeological sites in complex ways. Courses in Latin and Ancient Greek are available from beginning through advanced levels, offering swift access to major works of the Western tradition in their original languages. Every Classics course aims explicitly to develop analytical thinking, speaking, and writing skills. The legacies of the ancient Mediterranean world are scrutinized as well as appreciated.

The Classics Department offers courses under three different rubrics. Classical Studies courses, labeled CLST, do not require any knowledge of Latin or Greek. This area of the curriculum includes courses on Greek and Roman archaeology, history, literature, philosophy, and religion. Courses labeled LAT or GRK are language courses at various levels. The department also sponsors two Foreign Study Programs, one in Greece and one in Italy.

Major programs within the department include not only the broad-based major in Classical Studies but also more specific majors in Ancient History, Classical Archaeology, and Classical Languages and Literatures. Students who choose these majors often go on to medical school, law school, or directly into a wide range of professions. Employers and professional programs welcome Classics majors because of their rigorous training and proven ability in the areas of independent research, logical thinking, and communication skills.

PLACEMENT IN LATIN COURSES

Students who are just beginning their study of Latin should take LAT 1 in either Fall or Winter, followed by LAT 2 and LAT 3. Successful completion of Latin 3 satisfies the college language requirement and prepares the student for LAT 10. Those who enter Dartmouth with some prior study of Latin will be automatically placed into Latin 2, 3, 10, or 15, according to their scores on the Advanced Placement Test or SAT II Subject Test. Placement is also available through the department's online test, which can be accessed during August and the first week of September at https://canvas.dartmouth.edu. If you do not see the link, you may request access through Professor Lynn (jenny.lynn@dartmouth.edu). Those who do especially well on the online test will be given an initial placement into Latin 3 and invited to take an on-campus written test, which will determine placements into Latin 10 or 15.

PLACEMENT IN GREEK COURSES

Students who are just beginning the study of Ancient Greek may take GRK 1 in Winter Term, followed immediately by GRK 3 in Spring; or, they have the option of a double-credit intensive course, GRK 1-3 in the Spring term. Successful completion of GRK 3 satisfies the college language requirement and prepares the student for GRK 10. Students who have studied Greek in high school should consult with Professor Graver (margaret.graver@dartmouth.edu) to determine their placement.

The following courses are recommended for first-year students in 2020-21:
CLST 4. Classical Mythology
CLST 6. Introduction to Classical Archaeology
CLST 18. History of the Roman Empire
CLST 24. Etruscan and Early Roman Archaeology
CLST 1.02 Introduction to Classical Studies: Foodstuffs and Culinary Culture
CLST 7. First-Year Seminar in Classics
CLST 2. The Tragedy and Comedy of Greece and Rome
CLST 10.13 New Testament
CLST 10.14 Heart, Mind, Brain
CLST 11. Topics in Ancient History
CLST 15. Alexander the Great and the Macedonian Kings
CLST 22. Greek Archaeology: City-States and Panhellenic Sanctuaries
CLST 26. Later Roman Imperial Archaeology
GRK 1. Introductory Ancient Greek
GRK 1-3. Intensive Ancient Greek
GRK 3. Intermediate Greek
GRK 10. Readings in Greek Prose and Poetry
GRK 20. Homer
GRK 29. New Testament
LAT 1. Introductory Latin
LAT 2. Introductory Latin II
LAT 3. Intermediate Latin
LAT 10. Reading Latin Texts
LAT 15. Literature and the Romans
LAT 28. Medieval Latin
LAT 29. Courtroom Speech
LAT 33. The Italian Countryside

We encourage you to explore additional curricular opportunities by attending academic open houses during Orientation.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

CLST 4. Classical Mythology
An introduction to Greek and Roman myths through their representation in literary and visual art. Readings from Homer, Hesiod, Ovid, Virgil and other authors are accompanied by artistic objects that represent or are influenced by Greco-Roman myths.

CLST 6. Introduction to Classical Archaeology
Introduces basic methods and principles of Classical archaeology through a survey of characteristic sites and artefacts. Students will gain a good overview of the approaches useful in the interpretation of a wide variety of material evidence as well as problems inherent in such evidence. Also provides an introduction to Greek and Roman civilization from prehistory to the collapse of the Roman Empire.

CLST 18. History of the Roman Empire
Surveys the major events in the history of Rome from accession of Augustus through Septimius Severus. Considers the mechanisms promoting the political identity of diverse peoples as Roman, the endurance of local traditions, the evolving relationship between the princeps and the Roman senatorial aristocracy, the definition of the Roman frontiers, and the role of the army in the assimilation of non-Roman peoples.

CLST 24. Etruscan and Early Roman Archaeology: The Rise of Rome
In addition to the chronological development of the material culture of Italy, the course will explore 1) Etruscan religion and its influence on the Roman sacro-political system; and 2) the machinery of Roman government as expressed in the spaces that played host to political ritual: the Arx, the Forum, the Comitium, the Curia, the Tribunal and the Basilica.

GRK 10. Readings in Greek Prose and Poetry
For students who have some prior knowledge of Ancient Greek.

LAT 1. Introductory Latin
A rapid introduction to the Latin language through reading passages of gradually increasing difficulty, with supporting materials on Pompeii and Roman Egypt.

LAT 10. Reading Latin Texts
An introduction to continuous readings of Latin prose and poetry in combination with a review of Latin grammar. Students develop the necessary lan-guage and study skills to allow them to take more advanced Latin courses.

LAT 15. Literature and the Romans
For those who have already begun studying Latin literature. Covers essential elements of Roman literary culture and its academic study today: literacy, book production, textual transmission, and the nature of literature. Also introduces library resources, including materials for reading Latin inscriptions and illuminated manuscripts in Dartmouth's collection.

Cognitive Science (COGS)

Cognitive science is the study of cognition from an interdisciplinary perspective. The core component disciplines of cognitive science are philosophy, psychology, neuroscience, linguistics, and computer science. Cognitive scientists may focus on particular cognitive faculties, such as language or memory, on specific cognitive phenomena, such as empathy, or on understanding the fundamentals of cognition quite broadly, for example in information-theoretic terms. What sets cognitive science apart from its core areas is its commitment to cross-disciplinary methodology. Students wishing to pursue work in cognitive science take a defined group of core courses and then a series of electives selected from courses taught in a variety of departments.

The following courses are recommended for first-year students (COGS):
COGS 1. Introduction to Cognitive Science
COGS 02/PSYC 28. Cognition
COGS 25/PHIL 25. Philosophy and Cognitive Science
COSC 01. Introduction to Programming and Computation
LING 01. Introductory Linguistics
PSYC 01. Introductory Psychology
PSYC 40. Introduction to Computational Neuroscience

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

COSC 01. Introduction to Programming and Computation
CS 1 will teach you to design, write, and analyze code to solve computational problems from a range of disciplines. You'll also learn to think about problems the way a computer scientist thinks—a skill that is valuable in any field. The course is suitable for students with no previous background in Computer Science, and no knowledge of mathematics beyond high-school algebra. DIST: TLA.

PSYC 01. Introductory Psychology
A course designed to serve as a general introduction to the science of human behavior. Emphasis will be placed upon the basic psychological processes of perception, learning, and motivation as they relate to personality, individual differences, social behavior and the behavior disorders. DIST: SOC.

PSYC 40. Introduction to Computational Neuroscience
The mind is what the brain does, and the brain is becoming understood computationally. Computational neuroscience has as its twin goals the scientific and engineering tasks of understanding of how brain computes mind and using that understanding to characterize and reconstruct these computations. Scientific understanding of the brain will confer the ability not only to describe and characterize the mind, but to modify it, enhance it, diagnose and treat its illnesses, and, eventually, to imitate its operation. Note prerequisite: PSYC 1, PSYC 6, COSC 1, or ENGS 20. DIST: SCI.

Comparative Literature (COLT)

Comparative Literature is a exciting interdisciplinary program that promotes the study of literatures in different languages as well as the relationship between literature and other spheres of cultural production. It also embraces broader inquiry into the relationship between literature and other disciplines and practices, such as the visual and performing arts, philosophy, history, politics, religion, and the sciences. Some critical perspectives are rhetoric and poetics, translation and reception, film theory and media studies, colonial and postcolonial studies, theories of ethnic and national identities, gender and queer theory, and psychoanalysis.

Comparative Literature majors are expected to develop competence in at least one language other than their native language, and to work with original texts in more than one language.

*In Comparative Literature higher course numbers don't mean they are advanced courses; first year students are welcome to take the higher number courses.

The following courses are recommended for first-year students (COLT):
COLT 01. Read the World

Recommended Courses for First-Year Students

COLT 10.12 Race in the Middle Ages
COLT 10.16 Flashes of Recognition in Modernist Literature
COLT 18.03. From the Typewriter to Virtual Reality: Modern Media Theory
COLT 19.01. Translation: Theory and Practice
COLT 34.01. Theatre of Ideas in France, England, and the US
COLT 40.01. History of the Book
COLT 51.01. Masterpieces of African Literature
COLT 52.02. New Latin America Cinema
COLT 53.04. Rogues, Riddlers, Lovers, Liars: Love and Death in the Mediterranean
COLT 57.05. Migration Stories
COLT 60.01. Literature and Music
COLT 61.01. Art Writing and Writers on Art
COLT 63.02. The Conspiratorial Imagination
COLT 64.01. Nazis, Neonazis Antifa and the Others
COLT 66.02. Literature and Psychoanalysis: the Culture Legacy of Sigmund Freud
COLT 72.01. Global literary Theory

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

01. Read the World
Do you know how to read? Faces. Words. Pictures. Bodies. Games. Books. People. What are you really doing when you read the world? This course teaches comparative methods designed to confront the (mis) understandings and (mis) translations that constitute reading across the world's languages, locations, cultures, historical periods, and expressive forms. Classwork consists of hands-on exercises that engage ancient and modern myths and materials drawn from various media: text, movies, video games, anime, and digital arts.

10.16. Flashes of Recognition in Modernist Literature
Modernist literature is full of sudden moments of insight that transform the way the world is perceived. Such literary epiphanies allow writers to explore the subjective dimensions of consciousness and experiment with new modes of storytelling. The course will explore the question of how to interpret flashes of recognition and consider whether language can adequately represent them. Readings of works by Chekhov, Joyce, Proust, Woolf, Musil, Rilke, Kafka, and Beckett.

34.01. Theatre of Ideas in France, England, and the US
An exploration of the main intellectual movements, dramatic forms, and playwrights that shaped the evolution of British and French theatre in the post war period. Particular attention given to modern drama history, theory, and performance and how they relate to the wider social and political context. Writers drawn from some of the following: Osborne, Pinter, Stoppard, Churchill, Hare, Bennett, Ravenhill, Sartre, Beckett, Genet, Cixous and Mnouchkine, Koltes, Reza, and Ndiaye.

40.01. History of the Book
This course examines the book as a material and cultural object. We'll consider various practical and theoretical models for understanding the book form and investigating the materials, technologies, institutions, and practices of its production, dissemination, and reception. We'll focus primarily on the printed book in Western Europe and North America, but we'll also discuss the emergence of the codex (book), medieval manuscript books, twentieth and twenty-first century artist's books and the challenges posed by digitality to the book form. The readings for the course will be balanced by frequent use of exemplars drawn from Rauner Library and practical experience setting type in the Book Arts workshop.

64.01. Nazis, Neonazis Antifa and the Others
Why do the Nazis remain the world's epitome of evil? What did they actually do? And how specifically are they remembered, depicted, emulated, despised or ignored since the catastrophes of the mid-twentieth Century? In this course we will examine the main events connected with the Second World War, the genocide of European Jewry and Roma-Sinti, forced resettlements of various populations, and the Allied attacks on the German civilian population. We will analyze the different stages of coming to grips with that past on the part of German and some other postwar societies, by examining together a number of controversies like those surrounding the Nuremberg, Frankfurt, Eichmann and Barbie trials, the campaign to build a Holocaust memorial in Berlin, Neonazism, the Wehrmacht photo exhibition, and the current campaign to remember German civilian casualties and losses. Approaching our topic with an interdisciplinary and comparative methodology, that is, by utilizing history, journalism, video testimony, music, literature, and art, including film, photography and architecture, students will develop their own perspectives on the formation of postwar German identity and why Nazis remain the epitome of evil. An individual midterm project will allow students to practice the skill of summarizing different sides of a debate, and a final group project will invite students to solidify what they have learned in the course about the formation of national identity by creatively staging a contemporary debate about the Nazi past.

72.01. Global literary Theory
Comparative Literature entails conscious engagements with theories of literature, language, and culture from throughout the world. This course ranges across some of the ideas that have been influential in shaping scholarly questions in a variety of languages. It also addresses the global dimensions of theory: rhetorics and ethics of comparison, world literature, and indigenous knowledges.

Computer Science (COSC)

Students interested in taking more than one course in computer science usually start with COSC 1 (Introduction to Programming and Computation) in the fall, winter, or spring, followed by COSC 10 (Problem Solving Via Object-Oriented Programming) in the fall, winter, or spring. COSC 1 is an introductory course, which does not assume any computer science experience or background, and it can be taken as early as first-year fall. COSC 10 develops skills in solving problems computationally. It assumes previous programming experience (COSC 1 prerequisite) and uses Java.

The following courses are recommended for first-year students (COSC):
1. Introduction to Programming and Computation
10. Problem Solving via Object-Oriented Programming
22. 3D Digital Modeling
24. Computer Animation: The State of the Art
30. Discrete Mathematics in Computer Science
50. Software Design and Implementation
70. Foundations of Applied Computer Science

ADVANCED PLACEMENT

A student who receives a 4 or 5 on the Computer Science Advanced Placement examination receives placement into COSC 10 and COSC 30. A student may instead take a departmental computer science exam (*) to determine if he or she will receive placement into COSC 10 and COSC 30; this placement exam is administered only during Orientation.

TRANSFER CREDIT

The Department of Computer Science does not give transfer credit for courses taken at other institutions before matriculation at Dartmouth. Students who feel that they know the material in COSC 1 can be placed out of COSC 1 by taking the local placement exam as described above. Students who feel that they know the material in a higher-level computer science course should see the computer science undergraduate program director during Orientation to arrange to take an examination on the material.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introduction to Programming and Computation
This course introduces computational concepts that are fundamental to computer science and are useful for the sciences, social sciences, engineering, and digital arts. Students will write their own interactive programs to analyze data, process text, draw graphics, manipulate images, and simulate physical systems. Problem decomposition, program efficiency, and good programming style are emphasized throughout the course. No prior programming experience is assumed. Dist: TLA.

10. Problem Solving via Object-Oriented Programming
Motivated by problems that arise in a variety of disciplines, this course examines concepts and develops skills in solving computational problems. Topics covered include abstraction (how to hide details), modularity (how to decompose problems), data structures (how to efficiently organize data), and algorithms (procedures for solving problems). Laboratory assignments are implemented using object-oriented programming techniques. Prerequisite: Computer Science 1, Engineering Sciences 20, or placement through the Advanced Placement exam or the local placement exam. Dist: TLA.

22. 3D Digital Modeling
This projects-based lab course teaches the principles and practices of 3D modeling. Lectures focus on principles of modeling, materials, shading, and lighting. Students create a fully rigged character model while learning their way around a state-of-the-art 3D animation program. Assignments are given weekly. Students are graded on the successful completion of the projects, along with a midterm examination. Work will be evaluated on a set of technical and aesthetic criteria. Dist: TLA.

Earth Sciences (EARS)

Earth Science is a field-based, interdisciplinary science that uses the principles of chemistry, physics, biology and mathematics to 1) understand the origins and evolution of natural features such as mountains, rocks, lakes, air, oceans, weather, flora, and fauna; 2) understand the scientific basis of important environmental issues such as surface and groundwater contamination, global climate change, and the interactions of life, including its origins, with earth processes; and 3) assess, find, and extract natural resources such as groundwater, petroleum, and ores.

The core of the Earth Sciences degree is our off-campus field program, the Stretch, usually taken during the fall term of the junior year. The Stretch is made up of a series of segments, each taught by a different professor in a different location. Topics covered include geologic structures and landforms, river and lake processes, volcanism, geochemistry of environmentally fragile ecosystems, glacial processes, and the geological origins of western North America. These segments currently take place in the Canadian Rockies, Wyoming, Montana, Utah, Nevada, California, and Arizona.

There are two majors in earth sciences: one in environmental earth sciences and one in earth sciences. The prerequisites for the two majors are the same, but the courses recommended for the majors differ slightly. Students interested in modified majors, minors, or in interdisciplinary studies such as geophysics, geochemistry, oceanography, or environmental sciences, can shape their course of study according to their interests, and are encouraged to consult the Earth Sciences chair or undergraduate advisor.

Prerequisites for the earth sciences or environmental earth sciences major include one of the introductory courses (Earth Sciences 1-9 exclusive of 7), Chemistry 5 (or 10), and any one of the fol-lowing taken at Dartmouth: Math 3, 8, 9, 11, 12, 13, 14, 23, or 46. Earth Sciences 40, offered during the summer term, is a prerequisite for the off-campus field program in earth sciences, which is required for the major.

The following courses are recommended for first-year students (EARS):

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. How the Earth Works
This course explores the making of our planet — from the big bang to the subsequent formation and evolution of the Earth. We investigate how earthquakes, volcanic eruptions, and global climate change are byproducts of our planet's ceaseless activity and see that these natural forces are essential for creating the conditions necessary for life in all its diversity. We will learn how to decode Earth's dynamic history by reading the record preserved in rocks, oceans, and glaciers. We will also see that life is not only at the mercy of our planet's natural forces, but since its inception has been an agent of environmental change as well, altering the Earth's land, water, and air faster than many geologic processes. Dist: SLA.

6. Environmental Change
This course investigates the science of natural and human induced environmental change on a global scale. The Earth has never existed in a pristine balanced state, and an understanding of pre-industrial changes in the Earth's environment provides important information that we can use to interpret current environmental change. Topics that will be discussed include: the evolution of the atmosphere, global temperature variation, sea level change, atmospheric trace gases and global warming, stratospheric ozone, acid rain and tropospheric ozone, human migration and landscape development, and global catastrophes. Dist: SCI.

18. Environmental Geology
This course takes an interdisciplinary approach toward understanding the Earth's present and past environments as systems controlled by natural processes and impacted by human actions. Environmental issues, such as global climate change, acid rain, ozone depletion, and water resources and pollution, are discussed in this context. In the process of developing this understanding, students will gain skills in collecting, interpreting, and reporting scientific data. This course does not emphasize environmental policies, but instead the scientific knowledge and arguments behind them. However, case studies will allow students to gain appreciation of the complexity of scientific, social, cultural, and political interactions surrounding local and global environmental issues and sustainability. Dist: TLA.

Economics (ECON)

Economics is the study of how societies organize themselves to produce and distribute goods and services—from bread to iPads, from housing to health care. The world is constantly confronted with important public policy issues that are essentially economic in character. Economic analysis provides a coherent and principled framework for examining and understanding the tradeoffs involved in attempting to solve important social problems. Individuals who are not familiar with economics are at a serious

Recommended Courses for First-Year Students

disadvantage in the public debate over questions concerning government spending and social insurance, international trade policy, corporate governance and the stock market, and a host of other issues.

PREREQUISITES

The starting point for the Economics major is Economics 1. It is a prerequisite for every other class in the major. The other prerequisites for the major are Economics 10, Introduction to Statistical Methods and Math 3, Introduction to Calculus. Students who have not satisfied the Math 3 requirement through their high school coursework should enroll in Math 3 in the fall or winter of their first year.

ADVANCED PLACEMENT

Students will receive placement out of Economics 1 (Microeconomics) if they score 5 on the Microeconomics Advanced Placement Exam, 6 or higher on the Higher Level International Baccalaureate exam, or an A in British A-Level Economics. Students who receive placement out of Math 10 via the AP Statistics exam are also exempt from taking Economics 10.

MAJOR COURSES

Below is a list of courses that are often taken by first year students. The required prerequisites are listed in parentheses.
All major courses require Econ 1 and many require Math 3, so it is important to complete these courses as soon as possible. Many students also take Econ 10 early to complete the economics prerequisites. Economics 21 and 22 are logical next choices for potential majors, but students are welcome to take any course for which they have the prerequisites.

The following courses are recommended for first year students (ECON):

1. The Price System
10. Introduction to Statistical Methods (Econ 1, Math 3)
15. Political Economy of China (Econ 1)
16. Political Economy of Regulation (Econ 1)
20. Econometrics (Econ 10, Math 3)
21. Microeconomics (Econ 1, Math 3)
22. Macroeconomics (Econ 1, Math 3)
24. Development Economics (Econ 1, 10)
26. Financial Intermediaries and Markets (Econ 1)
27. Labor Economics (Econ 1)
38. Urban and Land Use Economics (Econ 1)
39. International Trade (Econ 1)
77. Social Entrepreneurship (Econ 1, 10)

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

01. The Price System: Analysis, Problems and Policies
Emphasis will be placed on problems and policies of current interest as they relate to resource use and the distribution of income and output. Students will receive an introduction to the theory of supply and demand in both product and factor markets in order to examine selected topics drawn from such areas as industrial organization and antitrust policy, labor economics, international trade, economic development, agriculture, urban problems, poverty and discrimination, public sector economics, and environmental problems. Dist: SOC.

10. Introduction to Statistical Methods
This course introduces the student to the basic concepts and methods of statistics. It covers descriptive statistics and inference (estimation and hypothesis testing) for a single variable and for two variables. The probability theory required for these topics will be developed. Dist: QDS.

15. Political Economy of China
This course examines how politics, economics, and culture have shaped the modern Chinese economic policy. Course topics include the Mao era, the pathologies of socialism and central planning, and the post-Mao transition to the market. Special emphasis will be placed on how "capitalism with Chinese characteristics" affects innovation, entrepreneurship, and law. Dist: INT or SOC.

16. Political Economy of Regulation
This course examines the history, politics and economics of market regulation in the United States. Class discussions will focus on the arguments for and against state intervention in the market. We will also explore the meaning of "market failure" and "government failure" in the context of financial markets, transportation, the environment, health care, and public utilities. Dist: SOC

20. Econometrics
Econometrics is the statistical analysis of economic data. This course focuses on regression analysis (specification, estimation, and hypothesis testing) and problems and pitfalls in its application in economics. Dist: QDS.

21. Microeconomics
This course is a study of the pricing and allocation process in the private economy. Topics include the theories of demand and production, and the determination of prices and quantities for commodities and factors of production in competitive and noncompetitive markets. Applications of the theory and its implications for empirical analysis are also considered. Dist: SOC.

22. Macroeconomics
This course is concerned with the behavior of the economy as a whole, particularly fluctuations in economic activity. General equilibrium models are developed to analyze the determinants of GNP, unemployment, the rate of inflation, and the growth of output. The micro foundations of macro aggregates are developed, with special emphasis on the role of expectations. The analytic tools are used to evaluate monetary and fiscal policies and to understand current macroeconomic controversies. Prerequisites: Mathematics 3 and Economics 1. Dist: SOC.

26. The Economics of Financial Intermediaries and Markets
This course examines the nature and function of financial intermediaries (e.g., banks, mutual funds, and insurance companies) and of securities markets (e.g., the money and capital markets and the market for derivatives). It analyzes liquidity and risk management and studies the efficiency, stability, and regulation of the financial system. Dist: SOC.

27. Labor Economics
This course studies the economic behavior of employers and employees as they interact in the labor market. The class will move beyond the basics of labor supply and demand to cover such topics as human capital investment, the structure and determinants of financial compensation and benefits packages, contract negotiations and arbitration. Additionally, since many of the pressing problems facing the United States are labor market issues, this course will provide a basis for better understanding of nationally-debated issues such as reforms of the welfare system, the income tax system, immigration policy, and affirmative action programs. Dist: SOC.

38. The Economics of Governments and Public Policy
This course considers governments as economic actors. We will investigate how social decisions are made; why governments fail; why different levels of government (federal, state, local) fund different public goods and services; and how governments at different levels interact. Topics to be covered include externalities and public goods, political economy, and fiscal federalism. Dist: SOC.

39. International Trade
This course deals with the causes and consequences of international trade and factor movements. Topics covered include theories of why nations trade, the consequences of trade for economic welfare and the distribution of income, the determinants of trade patterns, the tariff and other forms of commercial policy, trade policies of selected countries, and the formation of the multinational corporation. Dist: SOC. or INT.

77. Social Entrepreneurship
This course provides an introduction to the theory and practice of social entrepreneurship, defined as the process of finding innovative, sustainable solu-tions to social problems, particularly those related to poverty. Students will learn about the nature and causes of poverty, both domestically and interna-tionally, and about the role that social entrepreneurs play in addressing poverty. The course culminates with teams of students developing business models for their own social entrepreneurship ventures. Dist: SOC.

Have you registered for on-line advising with the Undergraduate Deans?

Education (EDUC)
For over one hundred years, the Department of Education has been an integral part of Dartmouth's liberal arts tradition. In both courses and research, students investigate the complex world of education through a research-based, interdisciplinary lens. Our courses are open to all students and have no prerequisites, although we suggest taking EDUC 01 to start (see http://educ.dartmouth.edu/). We offer a minor in Education. The minor is composed of six courses: EDUC 01, along with any five other Education courses.

The following courses are recommended for first-year students (EDUC):
01. Introduction to Education: Learning, Development, and Teaching
17. What Works in Education
19. Educational Testing
20. Educational Issues in Contemporary Society
27. The Impact of Poverty on Education
30. Educational Psychology
46. STEM and Education
47. Social and Emotional Development
50. The Reading Brain: Education and Development
64. Development in the Exceptional Child

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introduction to Education: Learning, Development, and Teaching
Education, development, and learning are inextricably intertwined. In this course, we will explore how pre-Kindergarten through high school education is informed by scientific evidence across multiple domains. Topics to be explored may include the educational system in America; the research-to-practice gap and educational misconceptions; social, emotional, and motivational development in school context; memory, strategies, metacognition, and assessment as related to learning; and learning and teaching in early math, science, and reading. Dist: SOC.

30. Educational Psychology
In this course we will explore the multitude of ways that people learn, the effects of different types of teaching strategies on learning, and the impact of individual differences on learning. We will also explore assessment, creativity and problem solving, as well as cultural and motivational influences on learning across diverse educational situations. Underlying the course will be an account of the way the human mind works, changes, and adapts in different settings. This includes the home, the school, the university, and any context in which explicit or implicit education takes place. Dist: SOC.

Engineering Sciences (ENGS)
The engineering sciences department is dedicated to educating well-rounded engineers within the context of liberal arts. We regard the ability to think quantitatively as a valuable part of a liberal arts education and thus provide a variety of ways for all students to increase their understanding of the relationship between technology and society.

Your very first engineering course, Introduction to Engineering—ENGS 21—is usually taken at the end of your first year or beginning of sophomore year and will challenge you to develop a novel solution to a real-life problem. You'll team up with classmates to define a problem and solve it by designing a device or system. That's because we know the best way to learn engineering is to do engineering.

All engineering sciences majors earn a Bachelor of Arts (A.B.) and most also earn the ABET Accredited Bachelor of Engineering (B.E.) degree. The major is excellent preparation not only for the engineering profession but also for medicine, law, business or other careers that require ability in quantitative analysis, design and problem solving. The major may be modified with other sciences or with studio art, economics, or public policy.

In addition to the standard major and minor and the modifications, we offer:
- Engineering Physics major for students interested in applied physics or more fundamental aspects of engineering science;
- Biomedical Engineering Sciences major for students who wish to apply to medical school after Dartmouth;
- Human Centered Design minor focused on the process of innovation for addressing human needs;
- Materials Science minor offered by the departments of Chemistry, Physics, and Engineering which can be combined with majors in any of the three areas.

MAJOR COURSES

Most students who intend to study engineering begin by taking pre-requisite courses in mathematics and physics in the first year. One of the introductory courses ENGS 20 or 21 may be taken in the spring term (COSC 1 and 10 may be taken instead of ENGS 20). However, there are many routes into the major and paths through the major, and students should consult with an engineering professor to develop a course of study that fits their interests.

The following courses are recommended for first-year students (ENGS):

ENGS 20. Introduction to Scientific Computing
This course introduces concepts and techniques for creating computational solutions to problems in engineering and science. The essentials of computer programming are developed using the C and Matlab languages, with the goal of enabling the student to use the computer effectively in subsequent courses.

ENGS 21. Introduction to Engineering
The student is introduced to engineering through participation, as a member of a team, in a complete design project. The synthesis of many fields involving the laws of nature, mathematics, economics, management, and communication is required in the project. Engineering principles of analysis, experimentation, and design are applied to a real problem, from initial concept to final recommendations.

The BE degree, accredited by the Engineering Accreditation Commission of ABET requires a minimum of 9 courses beyond the AB. Most students will add a fifth year but students may also plan ahead to finish a combined AB/BE in four years. Need based financial aid for the additional terms is available.

NON MAJOR COURSES

Engineering isn't just for engineers. The engineering sciences department offers a number of courses that serve in satisfaction of the TAS distributive requirement and/or are complementary to studies in other disciplines. Even if you've never picked up a hammer or a drill, our faculty and staff are committed to helping all students get comfortable with the creation process, beginning to end. You'll discover engineering's power to improve the world. You'll gain problem-solving skills useful in all areas of education and life. You may even decide to become an engineer.

Ideal for non-majors and first-year students exploring engineering, these courses have few or no prerequisites.

ENGS 4. Technology of Cyberspace
This course will cover some basic concepts underlying the "information superhighway." The technologies of high-speed networking have stimulated much activity within the federal government, the telecommunications and

Recommended Courses for First-Year Students

computer industries, and even social science and popular fiction writing. The technical focus will be on communications technologies, information theory, and the communications requirements of video (standard and ATV), speech (and other audio), and text data.

ENGS 13. Virtual Medicine and Cybercare
This course will cover topics related to the virtual human, created from bits. This will include virtual reality, augmented reality and datafusion, computer simulation, advanced 3D and 4D imaging techniques, the operating room of the future, minimally invasive surgery, space medicine, tele-operations, tele-medicine and tele-surgery, Internet 2 and cyberspace, artificial intelligence and intelligent agents applied to medicine, and the National Library of Medicine virtual human project.

FOREIGN STUDY

Engineering students may pursue study abroad through Dartmouth's Guarini Institute for International Education.

In addition, we offer four exchange programs designed especially for engineering majors: one with Thailand's Chulalongkorn University (or 'Chula'), located in the center of Bangkok, another with The Chinese University of Hong Kong (CUHK), a third with the Technical University of Denmark (DTU) in Copenhagen, and a fourth, most recently added, with New Zealand's largest university, the University of Auckland.

DARTMOUTH EMERGING ENGINEERS (DEE)

This purpose of the DEE program is to improve the first-year experience of students entering Dartmouth with an interest in engineering. As part of the program we provide support and mentoring to these students in order to ensure they gain a solid academic foundation prior to beginning engineering courses. Free group study sessions. Visit https://engineering.dartmouth.edu/dee/ for schedule.

FIRST YEAR RESEARCH IN ENGINEERING EXPERIENCE (FYREE)

The First-Year Research in Engineering program provides research opportunities for first year undergraduate students and provides prospective engineering majors with early hands-on experience and mentoring within engineering. Up to 12 two-term research projects will be available to first-year students who want to participate in engineering research projects. Applications are due in fall term.

English (ENGL) and Creative Writing (CRWT)

The Dartmouth College Department of English and Creative Writing offers courses ranging across a thousand years of cultural history, from Beowulf to The Wire. Students in English work with some of the leading scholars and creative writers in the country. They study canonical figures such as William Shakespeare, Jane Austen, and Ernest Hemingway and contemporary writers such as Zadie Smith, David Foster Wallace, and Alison Bechdel. They engage with graphic novels, video games, and television drama, and they sometimes even make their own books in Dartmouth's unique Book Arts Workshop.

The Department is also home to Dartmouth's Creative Writing Program. Students can practice the crafts of fiction, poetry, creative nonfiction, and more with our faculty of renowned writers. The Writing Workshops are small, intimate, and intense—ideal both for aspiring writers and for those who want to complement their critical studies with creative investigation. All department courses pay close attention to the language and structure of texts, the production of original creative and/or scholarly work, the development of critical vocabularies and theoretical models, and the cultural circumstances of textual production.

The following English courses are recommended for first-year students:
ENGL 1. Literary History I: Literature Up to the Mid-17th Century
ENGL 2. Literary History II: Mid 17th to the 19th Century
ENGL 3. Literary History III: Literature in the 20th and 21st Centuries

Consider the different ways to complete the language requirement: continue a language started in high school, start something new, or study abroad.

ENGL 11. Chaucer: The Canterbury Tales
ENGL 15. Shakespeare
ENGL 22. The Rise of the Novel
ENGL 23. Romantic Literature
ENGL 26. Masterpieces of 19th Century British Fiction
ENGL 29. American Fiction to 1900
ENGL 45. Introduction to Literary Theory

The following Creative Writing courses are recommended for first-year students:
CRWT 10. Reading and Writing Fiction
CRWT 11. Reading and Writing Creative Nonfiction
CRWT 12. Reading and Writing Poetry

For a complete listing of English and creative writing course offerings in fall term, please consult the department website at https://english.dartmouth.edu/undergraduate/course-schedule.

The Department encourages first-year students to talk to individual professors about courses they would like to take.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

CRWT 10. Writing and Reading Fiction.
An introductory workshop and reading course in fiction, designed to allow students to work in all fictive modes.

CRWT 12. Writing and Reading Poetry.
An introductory workshop and reading course in poetry, designed to have students consider different aspects of writing and the various elements integral to the genre.

ENGL 1. Literary History I: Literature up to the mid-Seventeenth Century.
An overview of English literature from the Anglo-Saxon period through the Middle Ages and into the seventeenth century.

ENGL 15. Shakespeare: Poet and Playwright
A formal critical study of Shakespeare's verse in six generic modes: comedy, history, tragedy, romance, epyllion, and sonnet.

ENGL 26. Masterpieces of Nineteenth Century British Fiction
The British novel achieved great popularity during the nineteenth century as it became a realist form with increasing complexities of plot and character. During a period of imperial and economic expansion, too, great works of fiction participated in widespread debates about progress, empire, Englishness, and evolutionary thought. We will look at fiction's contributions to such cultural debates, considering the novel's powerful critique of empire and dreams of progress; the importance of formations of English identity to plot and character; reactions in fiction to evolutionary revisions of history; and how Victorian fiction

signals the importance of class, gender, and race to character development.

ENGL 29. American Fiction to 1900
A survey of the first century of U.S. fiction, this course focuses on historical contexts as well as social and material conditions of the production of narrative as cultural myth. The course is designed to provide an overview of the literary history of the United States novel from the National Period to the threshold of the Modern (1845-1900). To do justice to the range of works under discussion, the lectures will call attention to the heterogeneous cultural contexts out of which these works have emerged as well as the formal and structural components of the different works under discussion.

ENGL 31. Asian American Literature and Culture
This course examines narratives of migration to, from, and between the Americas by groups from East, South, and Southeast Asia. We will analyze novels, short fiction, poetry, and films by twentieth-century artists (Joy Kogawa, Theresa Cha, Shani Mootoo, Jhumpa Lahiri, Bienvenido Santos, Wayne Wang) against the historical backdrop of imperialism in Asia and the Americas; periods of exclusion and internment; and social movements that coalesce around intersections of race, class, gender, sexuality, and citizenship.

ENGL 33. Modern Black American Literature
A study of African American literature from the Harlem Renaissance to the present, this course will focus on emerging and diverging traditions of writing by African Americans. We shall also investigate the changing forms and contexts of 'racial representation' in the United States. Works may include those by Hurston, Hughes, Wright, Ellison, Morrison, Schuyler, West, Murray, Gates, Parks.

ENGL 37. Contemporary American Poetry
This course explores the most exciting developments in American poetry from 1960 until the present. We will consider a wide array of poetic movements—the Beats, the New York School, the Confessionals, the Black Mountain group, the Black Arts Movement, Language poets, performance and conceptual poetry, rap and spoken word—in order to understand the aesthetic tendencies that inform American poetries being written today. In particular, we will examine key individual poets through close readings of their most exemplary work.

ENGL 45. Introduction to Literary Theory
The course will introduce students to some of the leading texts, concepts, and practices of what has come to be known as theoretical criticism. Topics to be considered may include some of the following: structuralism, deconstruction, psychoanalysis, feminism, new historicism, post-colonialism, post-modernism, queer theory, and cultural studies. Attention will also be given to historical and institutional contexts of this criticism. Intended to provide a basic, historically informed, knowledge of theoretical terms and practices, this course should enable students to read contemporary criticism with understanding and attempt theoretically informed criticism themselves.

Environmental Studies (ENVS)

Environmental Studies offers interdisciplinary courses that are of interest to students regardless of their major field of study. Our classes examine the biophysical and social issues behind important environmental problems such as global change, air pollution, loss of biodiversity, international environmental policy, and energy resources. Learning about the complexity of these problems is complemented by exploring possible solutions to these problems. Classes are offered on a diversity of topics such as ecological economics, environmental writing, environmental health, biogeochemistry of natural and human-disturbed ecosystems, and ecological agriculture. Students may major in environmental studies or may use environmental studies to modify other majors or complete a minor in either environmental studies, sustainability, or environmental science. A foreign study program is offered in Southern Africa. The program has prerequisites and interested students should inquire by the beginning of the sophomore year, or earlier.

CREDIT ON ENTRANCE AND ADVANCED PLACEMENT

Students who have scored a 4 or 5 on the Environmental Science CEEB Advanced Placement Examination will receive credit on entrance for Environmental Studies 2. Credit on entrance appears on the Dartmouth transcript and does not count towards the 35 credits required to graduate.

The following courses are recommended for first-year students (ENVS):
2. Introduction to Environmental Science
3. Environment and Society: Towards Sustainability?
11. Humans and Nature in America
14. Sustainable Food Systems
15. Environmental Issues of the Earth's Cold Regions
17. Marine Policy
18. Indigenous Environmental Studies

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

3. Environment and Society: Towards Sustainability?
The relationship between humans and the environment is mediated by the consumption of natural resources, the discharge of pollution and waste, and the transformation of landscapes and ecosystems. Unsustainable outcomes arise because individuals and organizations have incentives to undertake actions that degrade environmental quality, often in the context of markets. As a result, achieving sustainability requires laws, public policies, social norms, and shared understandings that align individual action with collective well-being. This course analyzes the causes and solutions of environmental problems through the integration of concepts from a variety of social science disciplines. In addition, it explores the central role that ecology and ecosystem science play in understanding and responding to sustainability challenges. Dist: SOC.

17. Marine Policy
People use the oceans for transportation, recreation, food, mineral wealth, waste disposal, military defense, and many other important things. This course explores the most significant human-ocean interactions known today from two perspectives: science and policy. From the scientific literature, students will learn about issues ranging from the physical effects of sea level rise to the biological impacts of pollution to the bioeconomic repercussions of overfishing. For each of the problems that are revealed by science, we will also critically evaluate relevant policy solutions to understand how institutional design can (or can't) enhance human interactions with the oceans. This includes insights into the politics surrounding oceans issues in the US and around the world. Dist: SOC

18. Indigenous Environmental Studies
In this course, we examine Indigenous worldviews, environmental values and everyday life through the lens of environmental issues facing Indigenous nations and communities. Our geographic focus is on North America and the Pacific, with limited examples from other places and peoples globally. Through course materials, discussions, and assignments, students gain exposure to varied Indigenous perspectives and Indigenous knowledges expressed and enacted by scholars, Elders, community people, political leaders, and activists. Key concepts in Indigenous environmental studies will be discussed including Indigenous rights and responsibilities, Indigenous environmental stewardship, energy and development, land-language linkages, tribal sovereignty and self-determination, empowerment and resurgence. Dist: TMV; World Cult: NW.

Film and Media Studies (FS)

The Department of Film and Media Studies has established a notable reputation for scholarship and production across various moving picture media. We offer a range of courses in the history and criticism of film, television and digital media as well as in screenwriting, filmmaking, videomaking, new media production (including computer games), and animation.

The following 2020-2021 courses are open to first-year students: All of the courses we teach except FS 32, 34, 38, 39 40 and 50. Prerequisite courses especially recommended for first-year students interested in majoring in Film and Media Studies include:

Recommended Courses for First-Year Students

1.Introduction to Film
3. Introduction to Digital Arts and Culture
20. Film History I (Silent to Sound)

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introduction to Film
Examines all the processes which go into the creation of a film from its inception to distribution, focusing on in-depth analysis of different kinds of films and the key technical and critical concepts used in understanding them. Experts (writers, directors, cinematographers, distributors) may talk on areas of expertise. Prerequisite to the major in Film and Media Studies. Dist: ART; WCult: W.

3. Introduction to Digital Arts and Culture
Digital technology is a key component of culture. Looking at popular media, science fiction, computer games, and artists' projects, students will learn important approaches to digital culture including: the history of the computer as a medium; the conceptual history of interactivity; the development of film, design, animation, and hypermedia; the history of artificial reality; and how visions of the future may change our sense of identity and what constitutes our physical bodies. This course serves as an alternate for FS 1 as a prerequisite to the major in Film and Media Studies. Dist: ART; WCult: W.

20. Film History I (Silent to Sound)
Detailed history of film from its origins to early sound films. Among the major topics will be: the rise of the feature film; the rise of the studio and star system; the tradition of silent comedy; European movements and their influence (German Expressionism, Russian Constructivism, and French Impressionism); the coming of sound. Prerequisite to the major in Film and Media Studies. Dist: ART; WCult: W.

French and Italian (FREN) (ITAL)
Renowned for its innovative, successful teaching of French and Italian language, literature and culture, the Department of French and Italian is a strong presence in the Humanities that is committed to engaging students throughout their careers. Some of the department's students choose to major in language and literature; many others connect their study of Italian or French with courses in government, economics, history or the arts. Each student shares the excitement that comes from being part of a program that is designed to meet individual needs, talents, and aspirations.

PROGRAMS IN FRANCE

The Department runs term-long programs in France every year in Lyon (LSA/LSA+) in the winter, Toulouse (LSA/LSA+) in the spring, and Paris (FSP) in Fall, Winter and Spring. The prerequisite for the Language Study Abroad (LSA) is French 2 or French 11, with a grade of B or better; the pre-requisite for the Advanced Language Study Abroad (LSA+) is French 3, with a grade of B or better; the prerequisites for the Paris Foreign Study Program (FSP) are French 8 and French 10 or satisfactory completion of the LSA+ program in the term immediately preceding the Foreign Study term.

PROGRAMS IN ITALY

The Department runs term-long programs in Rome every year: the Full Immersion Rome Experience (F.I.R.E.) in the summer, the LSA/LSA+ in Fall and the LSA+ in Winter. There are no prerequisites for F.I.R.E. The prerequisite for the LSA is Italian 2 or Italian 11 with a grade of B or better, and the prerequisite for the LSA+ is Italian 3 with a grade of B or better.

FRENCH (FREN)

Either a series of three, one-term elementary courses (French 1, 2, and 3) or two, one-term courses (French 11, an accelerated course combining French 1 and 2, followed by French 3), gives students the foundation they need in the language and allows them to satisfy Dartmouth's language requirement. They are then able to move on to the intermediate courses, French 8 (Exploring French Culture and Language), followed by French 10 (Introduction to French Literature).

COURSE PLACEMENT AND EXEMPTION

The scores of the SAT II Subject Test and the CEEB Advanced Placement Examination will be used as follows:

Course placement:
1. A student who receives a score of 0-530 on the SAT II Subject Test will be placed in French 1.
2. A student who receives a score of 540-600 on the SAT II Subject Test will be placed in French 2.
3. A student who receives a score of 610-710 on the SAT II Subject Test or a score of 4 on the AP will be placed in French 3.

Exemption from the Language Requirement (French 1, 2, 3):

The following scores/grades will exempt students from the Language Requirement:
1. A score of 5 on the CEEB Advanced Placement Examination.
2. A score of 720 or higher on the SAT II Subject Test.
3. A grade of 6 or 7 on the Higher-level International Baccalaureate (IB)
4. A grade of "A" on the British A-Level

EXEMPTION FROM FRENCH 8: DARTMOUTH'S ADVANCED PROFICIENCY EXAM

An entering student who has been exempted from French 1, 2, and 3 is eligible to take the Advanced Proficiency Exam (APE) during New Student Orientation in September. A score of 90 percent or more earns exemption from French 8.
Note: French 8 (or exemption) and French 10 (see below) are prerequisites for participation in our Paris program; they are also required courses for all students who major or minor in French.

TRANSFER CREDIT

Transfer credit is not granted for French courses taken at other colleges and universities before matriculation at Dartmouth. The Department Chair may authorize exceptions for upper-level French courses for students transferring from another school after their first year. Transfer credit is never granted for French 1, 2 or 3.

RECOMMENDED FRENCH LANGUAGE SEQUENCE

1. French 1 followed by French 2
Introductory French I
The French language in all skill areas: classwork emphasizes listening, speaking, reading and writing. Students learn the basics of French grammar and acquire a broader understanding of French and Francophone culture through materials that enable them to use the language in context.

Introductory French II
Builds on skills acquired in French I. Students deepen their understanding and further their practice of French grammar. A broad variety of assignments improve proficiency in listening, speaking, reading and writing and enhance understanding of French and Francophone culture. OR

2. French 11 Intensive French (an accelerated course that combines French 1 and 2 in one term)
This 1-credit course, which combines French 1 and 2 in one term, is designed for students with little or no knowledge of the French language, but who have a strong background in another Romance language (i.e. Spanish, Italian, Romanian, Portuguese, Catalan, and also Latin). French 11 is an accelerated course that combines French 1 and 2 in one term offering an exciting and fast-paced atmosphere to learn French.

3. Introductory French III
Given on campus as the final course in the required sequence, or in France as part of the LSA (Language Study Abroad) curriculum in Lyon and Toulouse, this course refines spoken and written language skills by reinforcing grammatical structures and expanding vocabulary. Exposure to a broad spectrum of language styles ranging from colloquial to formal and use of multiple French language sources such as literature, advertising, comics and television. Frequent oral and written assignments with a focus on culture.

8. Exploring French Culture and Language
Practice in the active use of the language combined with analysis of key aspects of French society. Students write papers and participate in discussions based on books, articles, and films emphasizing social and historical concepts. Prerequisite: French 3 or equivalent preparation. Dist: SOC; WCult: W.

As you explore possible majors, consider the many minors available. Look at department websites for details.

10. Introduction to French Literature
Different variations of the course are offered in each term, but all deal in major figures, themes, or issues of French and Francophone writing. Students learn techniques of critical reading and interpretation. Prerequisite: French 8 (or exemption). Dist: LIT; WCult: W.

ITALIAN (ITAL)

Either a series of three, one-term elementary courses (Italian 1, 2, and 3) or two, one-term courses (Italian 11, an accelerated course combining Italian 1 and 2, followed by Italian 3), gives students the foundations they need in the language and allows them to satisfy Dartmouth's language requirement. They are then able to move on to the intermediate courses, Italian 9 (Italian Culture) and Italian 10 (Introduction to Italian Literature).

Students interested in seeking Advanced Placement in Italian should inquire at the Department of French and Italian, 315 Dartmouth Hall, during New Student Orientation in September, or email frandit@dartmouth.edu.

COURSE PLACEMENT AND EXEMPTION

The scores of the SAT II Subject Test and the CEEB Advanced Placement Examination will be used as follows:

Course placement:
1. A student who receives a score of 0-530 on the SAT II subject test will be placed in Italian 1.
2. A student who receives a score of 540-600 on the SAT II subject test will be placed in Italian 2.
3. A student who receives a score of 610-710 on the SAT II subject test or a score of 4 on the AP will be placed in Italian 3.

Exemption from the Language Requirement (Italian 1, 2, 3):

The following scores/grades will exempt students from the Language Requirement:
1. A score of 5 on the CEEB Advanced Placement Examination.
2. A score of 720 or higher on the SAT II Subject Test.

TRANSFER CREDIT

Transfer credit is not granted for Italian courses taken at other colleges and universities before matriculation at Dartmouth. The Department Chair may authorize exceptions for upper-level Italian courses for students transferring from another school after their first year. Transfer credit is never granted for Italian 1, 2, or 3.

RECOMMENDED ITALIAN LANGUAGE SEQUENCE (ITAL)

Based on your incoming placement and prior language study background, one or more of our courses in the following sequence (Italian 1 or Italian 5 followed by Italian 2 and 3 OR Italian 11 and Italian 3)

Introductory Italian 1 or Italian 5
The Italian language in all skill areas: classwork emphasizes listening, speaking, reading and writing. Students learn the basics of Italian grammar and acquire a broader understanding of Italian culture through materials that enable them to use the language in context. Italian 5. Italian Express: Replaces Italian 1 in the Spring with a stronger emphasis on travel vocabulary and communication.

Introductory Italian 2
Builds on skills acquired in Italian I. Students deepen their understanding and further their practice of Italian grammar. A broad variety of assignments improve proficiency in listening, speaking, reading and writing and enhance understanding of Italian culture.

Italian 11. Intensive Italian for speakers of other Romance Languages (an accelerated course that combines Italian 1 and 2)
This 1-credit course, which combines Italian 1 and 2 in one term, is designed for students with little or no knowledge of the Italian language, but who have a strong background in another Romance language (i.e. Spanish, French, Romanian, Portuguese, Catalan, and also Latin). Italian 11 is an accelerated course that combines Italian 1 and 2 in one term offering an exciting and fast-paced atmosphere to learn Italian.

Introductory Italian 3
Refines spoken and written language skills by reinforcing grammatical structures and expanding vocabulary. Exposure to a broad spectrum of language styles ranging from colloquial to formal and use of multiple Italian language sources such as literature, advertising, comics and television. Frequent oral and written assignments with a focus on culture.

Italian 9. Italian Culture
In this culturally contextualized advanced grammar course students solidify their active command of Italian, and gain greater understanding of Italy, her people and culture. The course prepares students for future study of Italian language, literature, film, and culture at more advanced levels (Dist: LIT; WCult: W).

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

The following courses are recommended for first-year students:

Italian 14. Introduction to Italian Culture
Have you ever wondered what makes people fall in love with Italy? From history, the arts, religion, and gastronomy to science, technology, and "Made in Italy," Italian culture will come alive in this course as you learn how to critically read and discuss cultural texts and artifacts while also gaining an understanding of the global impact of Italian cultural production across time and space. Expect to be highly engaged through lectures, discussions, and hands-on projects. No prerequisites. Taught in English. (Dist: SOC; WCult: CI)

French 11: Intensive French
French 11 combines French 1 and 2 in one term, offering an exciting and fast-paced atmosphere in which to learn French. This course is designed for students who have studied French for one to three years in high school, or who have been exposed to French in a Francophone environment. It is also suitable for students with little or no knowledge of the French language, but who have a strong background in another Romance language.

Geography (GEOG)

Geographers study the material and symbolic transformation of the earth in relation to both human and natural processes. In keeping with contemporary global cultural, political, economic and environmental shifts in culture, the boundaries of the geographic discipline are dynamic. Central topics of study include, for example, international development, globalization, climate

change, immigration and new spatial technologies. Theories of space, scale, location, place, region, mobility and displacement allow geographers to critically analyze change in both human and physical environments.

Geography is both a natural science and a social science as it examines people and their environment and serves as a bridge between the physical and cultural worlds. Human geography (a social science) is concerned especially with the political, economic, social, and cultural processes and resource practices that shape particular places and are shaped by them. Physical geography (a natural science) focuses on the earth systems that create the natural environment, such as weather, soils, biogeography, and earth sculpting processes.

CREDIT ON ENTRANCE AND EXEMPTIONS

Students who have scored a 5 on the Human Geography CEEB Advanced Placement Examination, a 7 on the Higher-Level International Baccalaureate in Geography, or an A on the Higher Level Geography A-Level Exam will receive credit on entrance for Geography 1. Students with an AP exam score of 4 will receive an exemption from Geography 1 as a prerequisite to the major.

The following courses are recommended for first-year students (GEOG):

1. Introduction to Human Geography
2. Global Health and Society
3. The Natural Environment
4.02 Introduction to Geospatial Thinking
5. Global Climate Change
6. Introduction to International Development
9. Climate Change and the Future of Agriculture
12. Wilderness, Culture and Environmental Conservation
15. Food and Power
22. Urban Geography
33. Earth Surface Processes and Landforms
35. River Processes and Watershed Science
36. Climate Extremes
44. Environment and Politics in S.E. Asia
50. Geographical Information Systems

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introduction to Human Geography
The purpose of this course is to provide an understanding of how human societies organize their geographic space and why certain patterns emerge in the resulting human landscape. Principles of location, place, territoriality and geopolitics, migration, gender, economic change, and power are used to examine the geographic distribution of human activity. Geographic comparisons are drawn between North and South, and on global, regional, and local issues. Dist: SOC or INT; WCult: CI.

2. Global Health and Society
Only a few decades ago, we were ready to declare a victory over infectious diseases. Today, infectious diseases are responsible for the majority of morbidity and mortality experienced throughout the world. Even developed countries are plagued by resistant "super-bugs" and antibiotic misuse. This course will examine the epidemiology and social impact of past and present infectious disease epidemics in the developing and developed world. The introduction of drugs to treat HIV/AIDS in sub-Saharan Africa will be considered from political, ethical, medical, legal and economic perspectives. Lessons from past and current efforts to control global infectious diseases will guide our examination of the high-profile infectious disease pathogens poised to threaten our health in the future. Dist: INT or SOC.

3. The Natural Environment
Our natural environment results from an array of climatic, biogeographic, and other physical processes that have changed dramatically over time in re-sponse to natural and human-induced disturbance. This course begins by presenting the fundamentals of atmospheric processes; then examines the physical controls on the resulting global pattern of landforms, soils, and vegetation biomes across spatial and temporal scales; and ultimately explains the form and pattern of the earth's physical geography. Emphasis is also placed on demonstrating the role of human disturbance on these natural processes through shifts in global climate, land use, deforestation and other anthropogenic mechanisms. The media of presentation will be lecture and both field and laboratory exercises. Dist: SLA.

4.02 Introduction to Geospatial Thinking
This course is an introductory survey into key concepts of geographical thought (e.g., place, space, and territory) and their interconnection with a range of geospatial tools and techniques (from paper maps to global positioning systems). By developing geospatial thinking, students will enrich their understanding of spatial data and technologies through concepts and debates in the field of geography. Conversely, command of geospatial tools and techniques will help integrate their use with other types of knowledge. Dist: SOC.

6. Introduction to International Development (Identical to International Studies 16)
Why are some countries rich and others so persistently poor? What can and should be done about this global inequity and by whom? We address these development questions from the perspective of critical human geography. Focusing on the regions of Latin America, Africa and Asia, we examine how development meanings and practices have varied over time and place, and how they have been influenced by the colonial history, contemporary globalization, and international aid organizations. Dist: SOC or INT; WCult: NW.

22. Urban Geography
This course examines the historical, cultural, and socio-economic geographies of cities. We begin by tracing the process of urban development from its inception over 5,000 years ago, to industrial modern cities, to postmodern urban forms, using case studies to illuminate certain key features and processes. We then focus on understanding the particular dynamics that shape cities today. Examples are widely drawn but particular attention will be given to American urban patterns and processes. Dist: SOC.

50. Geographical Information Systems
Geographical information systems (GIS) are computer-based systems that process and answer questions about spatial data relative to concerns of a geographic nature. This course focuses on the basic principles of GIS, including data capture and manipulation, methods of spatial interpolation, and GIS trends and applications. The course is not intended to train students to be GIS operators; rather, to explain the fundamentals of this rapidly growing technology. Dist: TLA.

German (GERM)

The Department of German Studies introduces students to the language, literature, cinema, art, music, culture, and philosophy of Germany, Austria, and Switzerland. Its off-campus programs take place in the endlessly fascinating city of Berlin, and its students frequently win internships and prestigious fellowships that enable them to pursue individual interests there and elsewhere in the German-speaking world. Its students also often go on to highly successful careers in professional fields such as business, law, medicine, education, engineering, and diplomacy.

The Department welcomes students of all levels of proficiency, including those who have never learned German. Its elementary courses (German 1, 2, and 3) offer intensive training in hearing, speaking, reading, and writing the language. Intermediate courses (German 10.00, 10.01, 10.02, etc.) explore German culture while reinforcing grammar and expanding vocabulary. Courses taught in English (German 13-15 and 42-47) and advanced seminars (German 61-84) address a variety of specific literary and other topics. Completing German 3 satisfies Dartmouth's foreign language requirement and signifies a level of fluency adequate for an intermediate course.

CREDIT ON ENTRANCE AND ADVANCED PLACEMENT

Students who score 720 or higher on the SAT II German test or who score 5 on the CEEB Advanced Placement Examination in German are exempted from Dartmouth's foreign language requirement and place into any of the Department's intermediate courses (10.00, 10.01, 10.02, etc.). Students who score 4 on the AP exam are placed into German 3. Students who have studied German but not taken the SAT II test or the AP Exam in German or who score less than 4 on the latter should take the departmental placement exam online (https://german.dartmouth.edu/undergraduate/placement-test).

Have you noticed all the different courses that can fulfill the INT, SOC, or TMV distributive requirements?

TRANSFER CREDIT

Transfer credit is not granted for German courses taken at other colleges and/or universities before matriculation at Dartmouth. The departmental chair may authorize exceptions.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introductory German

2. Introductory German
Introduce German as an infinitely rich and rewarding written and spoken language and raise salient issues that figure in everyday as well as cultural life of German-speaking countries.

3. Intermediate German
Completes study of fundamental grammar, with emphasis on the expansion of vocabulary and development of conversational skills, as well as on the reading and discussion of texts, films, and other primary sources of historical, literary, and general cultural interest.

10.01. Intermediate German Language and Culture: To Be Young and German
Investigates youth cultures in the German-speaking world, analyzing different ideas of youth and their political and cultural impact in four distinct units: fairy tales and nation building in the early nineteenth century; sexual awakening in the early twentieth century; authoritarian regimes of the mid- and late twentieth century; and youth rebellion in post-war and post-unification Germany. Dist: SOC; WCult: CI.

Government (GOVT)

Political science is a highly diverse field united around a core interest. Political scientists study power, especially power used for public purposes: how it is created, organized, distributed, justified, used, resisted, and sometimes destroyed. American political science is traditionally divided into four subfields: American politics, comparative politics, international relations, and political theory and public law. Students may choose to focus on one of these subfields or may select courses according to some other intellectual plan.

The prerequisite to the major is one course in statistics and the methods of social science—either Government 10, Economics 10 or Math 10. A standard government major comprises at least 10 courses (beyond the prerequisite) chosen to constitute an intellectually coherent program. These courses should include two introductory courses, six additional courses at any level, an advanced seminar or the honors program as the senior culminating experience, and an additional advanced seminar. The minor in government consists of two introductory courses, four upper-level courses (Government 10 may count as one of the upper-level courses), and one advanced seminar, chosen to constitute an intellectually coherent program.

The following courses are recommended for first-year students (GOVT):
3. The American Political System
4. Politics of the World
5. International Politics
6. Political Ideas
10. Quantitative Political Analysis. Recommended after students have completed at least 1 introductory course

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

3. The American Political System
An examination of the American political process as manifested in voting behavior, parties and their nominating conventions, interest groups, the Presidency, Congress, and the Judiciary. Special emphasis is placed on providing the student with a theoretical framework for evaluating the system including discussions of decision-making, bargaining, and democratic control. Dist: SOC; WCult: W.

4. Politics of the World
This course examines democracy and dictatorship, revolutions and social movements, political development, and the nature of political regimes and institutions around the world. Students learn how political decisions are reached, how actors are mobilized, and whether and how authority can be exercised without being abused in a wide variety of political settings. Dist: SOC or INT.

5. International Politics
This course introduces the systematic analysis of international society, the factors that motivate foreign policies, and instruments used in the conduct of international relations. Particular attention is given to power and economic relations; to cultural differences that may inhibit mutual understanding or lead to conflict; to nationalism and other ideologies; to the requisites and limits of cooperation; and to the historical structuring and functioning of international institutions. Dist: SOC or INT.

6. Political Ideas
The course is designed to introduce students to political philosophy. It opens with the classic contrast between Plato and Machiavelli concerning the problems of justice and power. The course then examines several basic positions in the development of modern political philosophy—liberalism, socialism, and conservatism. Among the individual thinkers considered as representative of these positions are Locke, J. S. Mill, Rousseau, Marx, and Burke. Dist: TMV.

10. Quantitative Political Analysis (recommended after students have completed at least 1 introductory course)
This course will provide students with useful tools for undertaking empirical research in political science and will help them to become informed con-sumers of quantitative political analysis. The course will first consider the general theoretical concepts underlying empirical research, including the nature of causality, the structure and content of theories, and the formulation and testing of competing hypotheses. The course will then employ these concepts to develop several quantitative approaches to political analysis. Students will be introduced to two statistical methods frequently used by political scientists: contingency tables and linear regression. By learning to systematically analyze political data, students will gain the ability to better conduct and evaluate empirical research in both its quantitative and qualitative forms. Dist: QDS.

Greek

(See program description under Classics.)

Hebrew

(See program description under Middle Eastern Studies.)

History (HIST)

The Department of History offers a major, a minor, a modified major, and, for outstanding students, a senior-year honors program. A common aim informs all work in the department: to implement historical approaches in considering human experience throughout the world and across time.

With its inherently strong sense of chronology, change, variety, conflict, and complexity, the discipline of history offers a constant antidote to cultural myopia and parochialisms of nation, class, and epoch. In a rapidly changing world, a historical awareness is more valuable than ever. Disciplined historical inquiry is a unique means of freeing ourselves to be vigorously and genuinely contemporary.

A student is advised to begin studying in History with a course he or she finds interesting. The introductory level classes (History 1-9) are encouraged as good entry points. Topics courses may

Recommended Courses for First-Year Students

demand greater amounts of reading and research, as well as more advanced writing proficiency and intellectual sophistication.

The history department sponsors a Foreign Study Program to London in the fall. Prerequisites include completion of two history courses. Students are also required to submit a proposal for an independent field project on a topic of British, European, American, or world history that makes use of London's research opportunities. Participants are usually juniors.

ADVANCED CREDIT

Only transfer students may receive credit for courses taken at other colleges or universities prior to matriculation at Dartmouth.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

While we have listed below the introductory courses in history, there are also many upper-level history courses that are open to all students with few or no prerequisites. Consult the ORC or visit the department's website for a complete list of departmental offerings.

2. #EverythingHasAHistory#: Understanding History Today
This introductory course will explore the historical roots of current events in the United States. This course demonstrates how history is woven into the fabric of our everyday lives and why understanding history is important for understanding the present and navigating the future. We will focus on case studies—such as immigration and borders, computers and society, and race and whiteness—and expect the syllabus to evolve in real time depending on what is in the news during the quarter. This class serves as an introductory course for History majors but is open to all students.

3.01. Europe in the Age of Wonder
This course examines Europe from the fall of the Roman Empire in the 5th century through religious warfare in the 17th century, when society, economics, politics, and culture were guided by a sense of wonder, which held people in awe of their rulers and the divine. Wonder did not imply passivity: from the disintegration of the Roman Empire to the emergence of early nation states, through crusades, the expansion of trade, religious reformation, and advances in scientific thinking. Europeans drew on their experiences to develop new concepts of representative government, individual liberty, and religious meaning.

4.03. Introduction to the Modern Middle East and North Africa
The diverse nations and peoples that make up the Middle East and North Africa are of major significance in our contemporary world, at the same time that they are often misunderstood or given only superficial (albeit spectacular) popular attention. This lecture course is designed to give students a nuanced introductory overview of the modern histories of this region. Students will read a variety of primary and secondary materials designed to familiarize them with the historical, cultural, and social processes that have affected and transformed the region in question and will learn to put these regional histories in a global framework.

5.05. The Emergence of Modern Japan
A survey of Japanese history from the mid-nineteenth century to the present. Topics to be covered include the building of a modern state and the growth of political opposition, industrialization and its social consequences, the rise and fall of the Japanese colonial empire, and the postwar economic 'miracle.'

5.08. Africa and the World
This course focuses on links between Africa and other parts of the world, in particular Europe and Asia. Readings, lectures, and discussions will address travel and migration, economics and trade, identity formation, empire, and cultural production. Rather than viewing Africa as separate from global processes, the course will address historical phenomena across oceans, deserts, cultures, and languages to demonstrate both the diversity of experiences and the long-term global connections among disparate parts of the world.

5.13. Introduction to Modern Latin America
This course presents the histories of Latin American and Caribbean societies, peoples, and nations from the onset of the Haitian Revolution in 1791 to the present. By placing Haiti at the center of the Age of Revolutions, this course also locates the Caribbean region within the Latin American context. We will study the region's nation-building processes using an intersectional lens to explore how different people interpreted them through their own gendered, classed, and racialized identities.

Humanities 1 and 2 (HUM)

Humanities 1 (Fall term, Dialogues with the Classics) and Humanities 2 (Winter term, The Modern Labyrinth) form a two-term sequence designed to introduce first-year students to the subject matter and intellectual perspectives of the humanities. Students engage with professors and each other in small and intense discussion sections and meet with professors for individual writing conferences. Faculty from a range of humanities departments (e.g., English, Film and Media Studies, Philosophy, Religion, Music, German) also lecture from week to week on texts from many historical periods, national traditions, and literary genres.

Humanities 1 and 2 draw students who love reading, who enjoy immersing themselves in works of art that have profoundly influenced human culture from the ancient world onwards, and who are not daunted by intellectual challenge. The Humanities sequence lays an excellent foundation for further study in departments across the humanities and social sciences, from Anthropology to Classical Studies and from Art History to Government.

Completing Humanities 1 satisfies the Writing 5 requirement; completing Humanities 2 fulfills the First-Year Seminar requirement.

Students interested in taking Humanities 1 and 2 should have applied by the deadline of July 24, 2020. For further information please see www.dartmouth.edu/~hums1-2/.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Dialogues with the Classics
Through a selection of compelling books and artworks from antiquity to the present, the course introduces students to key moments and ideas in global, especially Western, culture. The interpretative approaches taken to these works, and the connections drawn between them, will prepare students for further study in Dartmouth courses rooted in the humanities and social sciences. Readings have recently included texts by Kafka, Mengiste, Homer, Dante, Lope de Vega, Plato, Stoker, Salih and Morrison, as well as units on Enlightenment-era painting, Baroque sculpture, and contemporary film.

International Studies (INTS)

The Dickey Center offers an interdisciplinary minor in international studies that allows Dartmouth students, regardless of major, to become educated in the cross-cutting global forces that shape the vital issues of our day. These issues—environmental change, global health, global inequality, terrorism and violence—transcend boundaries by their very nature, and as such cannot be understood from a single disciplinary perspective. At the same time, a strong disciplinary grounding is essential for providing a rigorous training and relevant bodies of knowledge to ascertain facts and understand values. The international studies minor aims to make students cognizant of the interplay between local and global processes, human and environmental interactions, and places, identities and culture, and to prepare them to live productive, responsible lives in an interconnected and rapidly changing world.

Please visit the Dickey Center's website for more information about the minor and a complete listing of courses: http://dickey.dartmouth.edu/teaching-learning/international-studies-minor.

The six-course sequence for the minor includes four multidisciplinary courses, one advanced language course, and one elective course of international scope. None of the international studies courses have prerequisite requirements and all are open to first-year students for enrollment.

The following courses are recommended for first-year students (INTS):
15. Violence & Security

16. Introduction to International Development
17. Cultures, Places, & Identities
18. Global Health & Society

Italian
(See program description under French and Italian.)

Japanese
(See program description under Asian Societies, Cultures, and Languages.)

Jewish Studies (JWST)
The Jewish Studies Program serves to provide a focal point for the various courses in Jewish religion, literature, history, society and culture that are given at Dartmouth as well as to sponsor special course offerings and a variety of academic activities related to the discipline. The Jewish Studies Pro-gram is interdisciplinary, and all of our courses are cross listed with other departments and programs. We currently offer a minor in JWST and a major is possible by special request.

*In the Jewish Studies Program higher course numbers don't indicate advanced courses; first year students are welcome to take the higher number courses.

The following courses are recommended for first-year students:
06. Introduction to Judaism
10. History and Culture of the Jews I: The Classical Period
11. History and Culture of the Jews II: The Modern Period
21. Jewish American Literature
36.02. Jewish Views of Christianity
37.02. Nazis, Neonazis, Antifa and the Others: Exploring Responses to the Nazi Past
40.01. Politics in Israel/Palestine
58. Jewish Views of Islam
61. Modern Judaism

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

JWST 11. History and Culture of the Jews II: The Modern Period
A continuation of JWST 10, but may be taken independently. This course provides a survey of Jewish history and culture from the European enlightenment to the establishment of the State of Israel.

JWST 21. Jewish American Literature
The content of Jewish American Literature reflects that of many literatures including the broad variety of historical, political, social, and cultural experiences that Jews from very different places and backgrounds have brought to the United States. The course introduces students to the central topics, motives, and literary strategies from the beginnings of a tangible Jewish American literature in the late nineteenth century to the present.

JWST 37.02. Nazis, Neonazis, Antifa and the Others: Exploring Responses to the Nazi Past
Why do the Nazis remain the world's epitome of evil? What did they actually do? And how specifically are they remembered, depicted, emulated, despised or ignored since the catastrophes of the mid-twentieth Century? In this course we will examine the main events connected with the Second World War, the genocide of European Jewry and Roma-Sinti, forced resettlements of various populations, and the Allied attacks on the German civilian population. We will analyze the different stages of coming to grips with that past on the part of German and some other postwar societies, by examining together a number of controversies like those surrounding the Nuremberg, Frankfurt, Eichmann and Barbie trials, the campaign to build a Holocaust memorial in Berlin, Neonazism, the Wehrmacht photo exhibition, and the current campaign to remember German civilian casualties and losses. Approaching our topic with interdisciplinary and comparative methodology, that is, by utilizing history, journalism, video testimony, music, literature, and art, including film, photography and architecture, students will develop their own perspectives on the formation of postwar German identity and why Nazis remain the epitome of evil.

An individual midterm project will allow students to practice the skill of summarizing different sides of a debate, and a final group project will invite students to solidify what they have learned in the course about the formation of national identity by creatively staging a contemporary debate about the Nazi past.

JWST 40.01 Politics of Israel/Palestine
This course explores the century-old conflict as seen from the political structures and changing narratives of Israelis and Palestinians, including the Zionist movement and the responses of the Palestinian Arab community to it; the formation of the Arab national movement as a whole—and within this, the claims of Palestinians before and after the British Mandate; the founding of the state of Israel and the formation of the post-1948 Palestinian national movement; the aftermath of the 1967 war; the start of the Israeli occupation and the latter's impact on Israeli institutions, economy, and political parties; and the Palestine Liberation Organization and the founding of Hamas. We will explore contemporary political and economic developments in light of the global forces operating on the region, and consider the plausibility of a two-state solution.

JWST 58: Jewish Views of Islam
This course will examine Jewish views of Islam by reviewing the history of medieval and modern Jewish experience under Muslim rule, Jewish theological understandings of Islam, and modern Jewish historiographical interpretations of Islamic origins within Judaism. We will study Jewish understandings of Islam: the articulated differences between Jewish and Muslim beliefs, particularly in relation to prophecy, revelation, scripture, and messianism; the ways that Islam served as a template for presenting Judaism to modern Christian Europe; the alliance forged between Jewish scholars and their imagined Islam as a polemical tool against Christianity; the rise of Oriental Studies and Religious Studies in Europe and the role played within that field by Jewish scholars; Jewish-authored travelogues to Muslim countries; and individual cases of conversions from Judaism to Islam. We will examine Arab-Jewish intellectual and literary creativity and how Orientalism has shaped other cultural phenomena, specifically early psychoanalytic writings.

Latin American, Latino and Caribbean Studies (LALACS)
LALACS is an interdisciplinary program that offers courses in the social sciences and humanities

Recommended Courses for First-Year Students

on Latin America, Latinos in the United States, and the Caribbean. This region includes among the world's most dynamic economies, rich and complex cultures, and complicated and vital transnational re-lationships. LALACS teaches students how to think critically about the relationship between the US and its Latin American and Caribbean neighbors. Courses in Latino Studies are well suited to help Dartmouth students understand the United States where Latinos comprise among the largest ethnic groups. All courses are taught in English.

The following courses are recommended for first-year students:
LACS 1. Introduction to Latin America and the Caribbean
LACS 24.5. Latsploitation
LATS 3. Latinx Lives in the US
LATS 44. Crossing Over

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

LACS 1. Introduction to Latin America and the Caribbean
This interdisciplinary course introduces students to the geographical conditions, historical roots, and enduring cultural diversity of Latin America and the Caribbean. The course draws on these historical and anthropological understandings to assess recent economic, social, and political developments in Latin America.

LACS 24.5. Latsploitation
Latinx audiences have long been an interest and target of the Hollywood studios. Applying theories of racialized spectatorship and performance and film genre and authorship, we will interrogate this historically troubled relationship and grapple with its consequences for Latinx representation and inclusion in American cinema.

LATS 3. Latinx Lives in the US
The course will address the history of ethnic communities, the formation of transnational communities and identities; race, class, and ethnicity; gender and sexuality; political and social movements; geographic space and localities; and media and popular culture. Course materials will draw from the social sciences and the humanities, as well as from U.S. and Latin American scholarship and cultural traditions.

LATS 44. Crossing Over
This course focuses on the histories and experiences of Latinx transnational migrants—from Mexico, Central America, Puerto Rico, the Dominican Republic, and Cuba—living in the United States.

Latin
(See program description under Classics.)

Linguistics (LING)
Linguistics is the scientific study of human language. Linguists investigate essential aspects of languages' sounds and sound systems, their word and sentence structures, meaning, sociocultural contexts for language use, and language change. Students majoring in linguistics take most of their courses within the program, though there are relevant courses in other departments and programs. Linguistics 1, taught each fall, winter, and spring, offers an introductory description of human language and its use; this course serves as a prerequisite for subsequent study in linguistics.

The following courses are recommended for first-year students (LING):
1. Introductory Linguistics
11.16. Language and Ethnicity
11.13. The Language-Music Connection
11.17. Language Acquisition
11.06. Language Revitalization
17. Sociolinguistics

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introductory Linguistics
An introduction to the scientific description of human language. The course teaches methods of analyzing languages' sound systems (phonology), word structure (morphology), sentence patterns (syntax), and systems of meaning (semantics and pragmatics). Some important implications of linguistics for the study of human cognition and cultural behavior will be discussed. Coto-Solano. Dist: QDS.

11.16. Language and Ethnicity
What is the role of language in helping to construct and reveal a speaker's ethnic identity? Why do people sometimes borrow features of another ethnic group's language? Drawing on language observations from a range of ethnic groups around the world, we explore how language contributes to the social and psychological processes involved in the formation of ethnic identity. The final class project will focus on African American Language. Nesbitt. Dist: SOC.

11.13. The Language-Music Connection
Language and music are universal components of human experience. While we treat them as distinct phenomena, the overlap between the two is immense. Recent research from diverse fields continues to reveal just how intertwined the two faculties are. We explore the language-music connection from the basic ingredients (pitch, timbre, rhythm, syntax), to cultural expression, to evolution and origins. McPherson and Levin. Dist: INT or ART; WCult: NW.

Mathematics (MATH)
The Department of Mathematics offers a wide variety of courses for interested students. Many (but not all) students begin their study of mathematics at Dartmouth by taking a Calculus course appropriate to their preparation. Students who have not had the opportunity to take Calculus before coming to Dartmouth should take Mathematics 1, which is an introduction to Calculus that reviews appropriate pre-calculus material. Students whose SAT II Math Subject Test scores suggest that this sequence may be appropriate for them will be placed by the department in Mathematics 1, but students who have not had Calculus before may self-place into Mathematics 1 as well. Students completing Mathematics 1 who wish to continue the Calculus sequence continue in Mathematics 3, where they revisit some of the core topics in Mathematics 1 in more depth while applying them in new ways.

Students who have seen some aspects of Calculus before should assess their placement through our Math Placement System on Canvas (see below). Those who do not place into Mathematics 8 or 11 should take Mathematics 3. Normally, no student who has completed any portion of a Calculus course before matriculation will take Mathematics 1. Students with concerns or confusion about their placement should consult the Math Placement System and/or the First-Year Advisor for Mathematics.

The following courses are recommended for first-year students (MATH):
1. Introduction to Calculus
3. Calculus
4. Applications of Calculus to Medicine and Biology
5. Exploring Mathematics
7. First-Year Seminar
8. Calculus of Functions of One and Several Variables
9. Multivariable Calculus with Linear Algebra
10. Introduction to Statistics
11. Accelerated Multivariable Calculus
13. Multivariable Calculus
17. An Introduction to Mathematics Beyond Calculus
20. Discrete Probability
22. Linear Algebra
23. Differential Equations
24. Linear Algebra (Honors Section of Mathematics 22)
28. Introduction to Combinatorics

Are there academic departments that are not represented in your course choices? Why do you think that is the case?

CREDIT AND ADVANCED PLACEMENT

Qualified students may receive credit on entrance for one or two terms of calculus (Mathematics 3 and 8) with advanced placement into a higher course. In awarding credit on entrance and advanced placement, the Department of Mathematics bases its decisions on results of the CEEB Advanced Placement examinations and/or a departmental test given at Dartmouth (see our Math Placement System on Canvas). Students with exceptional preparation should contact the mathematics department prior to or during New Student Orientation.

The Mathematics 3 syllabus is similar to that of high school AB calculus. However, the sequel, Mathematics 8, is quite different from the BC calculus course: the first half corresponds to BC topics but the second half covers multivariable calculus. To better place students with BC experience, we offer Mathematics 11, which covers all of multivariable calculus. A student who receives a score of 4 or 5 on the CEEB Advanced Placement Examination for Calculus BC receives credit for Mathematics 3 and 8 and is placed into Mathematics 11. In this case, completing Mathematics 11 finishes the calculus sequence. A student who receives a score of 4 or 5 on the CEEB Advanced Placement Examination for Calculus AB or for the AB subscore of a BC exam, receives credit for Mathematics 3 and is placed into Mathematics 8. For students who think they may be qualified for Advanced Placement in mathematics, but who did not take either CEEB Advanced Placement Examination, or who feel their CEEB scores do not reflect their current qualifications, we offer local placement and credit exams. Students who scored a 3 on the AB exam or the AB Subscore are particularly encouraged to take the local department exam for credit in Mathematics 3. Students who scored a 3 on the BC exam may wish to take the local department exam for credit in Mathematics 8. All students are encouraged to review their calculus before the examination. Students who have advanced credit for Mathematics 3 but do not have additional credit and wish to continue the calculus sequence, typically begin with Mathematics 8.

At the end of Mathematics 8, the student may elect to take Mathematics 13 (Calculus of Vector Valued Functions) or any other course (e.g., 20, 22) for which Mathematics 8 is the sole prerequisite. Students with advanced credit for Mathematics 3 and who receive credit for Mathematics 8 based on the local placement exam, and wishing to continue with the calculus sequence are placed in Mathematics 11 in the fall. The most commonly chosen subsequent courses are Mathematics 24 (Honors Linear Algebra) in the winter, Mathematics 22 (Linear Algebra) in the spring, and/or Mathematics 23 (Differential Equations) in the winter or spring.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introduction to Calculus
This course is an introduction to single variable calculus for students who have not taken calculus before. Students who have seen some calculus, but not enough to place out of MATH 3, should take MATH 3. MATH 1 reviews relevant techniques from algebra and pre-calculus, covers the manipulation and analysis of functions, including polynomial, trigonometric, logarithmic, and exponential functions, an introduction to convergence and limits, continuity, rates of change and derivatives, differentiation rules, and applications to approximation. Students wishing to continue their study of calculus after MATH 1 take MATH 3. Dist: QDS.

3. Calculus
This course is an introduction to single variable calculus aimed at students who have seen some calculus before, either before matriculation or in MATH 1. MATH 3 begins by revisiting the core topics in MATH 1—convergence, limits, and derivatives—in greater depth before moving to applications of differentiation such as related rates, finding extreme values, and optimization. The course then turns to integration theory, introducing the integral via Riemann sums, the fundamental theorem of calculus, and basic techniques of integration. Dist: QDS.

8. Calculus of Functions of One and Several Variables
This course is a sequel to MATH 3 and is also appropriate for students who have successfully completed an AB calculus curriculum (or the equivalent) in secondary school. Roughly half of the course is devoted to topics in one-variable calculus, selected from techniques of integrations, areas, volumes, numerical integration, sequences and series including Taylor series, ordinary differential equations and techniques of their solution. The second half of the course studies scalar valued functions of several variables. It begins with the study of vector geometry, equations of lines and planes, and space curves (velocity, acceleration, arclength). The balance of the course is devoted to studying differential calculus of functions of several variables. Topics include limits and continuity, partial derivatives, tangent planes and differentials, the Chain Rule, directional derivatives and applications, and optimization problems including the use of Lagrange multipliers. Prerequisite: Mathematics 3 or equivalent. Dist: QDS.

9. Multivariable Calculus with Linear Algebra
This course includes the multivariable calculus material present in MATH 8 along with a brief introduction to concepts from linear algebra. First-year students who have successfully completed a BC calculus curriculum in secondary school may complete multivariable calculus either by taking the two-term sequence MATH 9, 13 or by taking the single course MATH 11. Topics include vector geometry, equations of lines and planes, matrices and linear transformations, space curves (velocity, acceleration, arclength), functions of several variables (limits and continuity, partial derivatives, the derivative as a linear transformation, tangent planes and linear approximation, the Chain Rule, directional derivatives and applications, and optimization problems including the use of Lagrange multipliers).

11. Accelerated Multivariable Calculus
This course is a course in multivariable calculus aimed at students who have successfully completed a BC calculus curriculum in secondary school and earned a 4 or 5 on the CEEB Advanced Placement Calculus BC Examination. This course covers all of the material in the second half of Mathematics 8 and that in Mathematics 13. Dist: QDS.

13. Multivariable Calculus
This course is a sequel to Mathematics 8 and pro-

vides an introduction to calculus of vector-valued functions. Topics include differentiation and integration of parametrically defined functions with interpretations of velocity, acceleration, arc length and curvature. Other topics include iterated, double, triple, and surface integrals including change of coordinates. The remainder of the course is devoted to vector fields, line integrals, Green's theorem, curl and divergence, and Stokes' theorem. Prerequisite: Mathematics 8 or equivalent. Dist: QDS.

Middle Eastern Studies (MES)

The Middle Eastern Studies (MES) Program brings together scholars from across a wide range of disciplines to teach and research the great civilizations, societies, and cultures of the Middle East and North Africa. MES offers a wide array of courses on history, politics, religion, literature, and culture of the region (taught in English) as well as state-of-the-art language training in Arabic and Hebrew. MES also offers advanced seminars using primary sources. In addition to our offerings on campus, there is a full array of study abroad opportunities. The friendly, personal relationships that develop between professors and students in MES often extend beyond the students' time on campus. Because of the pivotal role that the Middle East will play in the geo-politics, economics, and history of the twenty-first century, students with a strong background in the region are highly competitive for a wide array of professional opportunities, including consulting, NGOs, development, government, medicine, and law. We urge interested students to begin Arabic or Hebrew during their first term at Dartmouth.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

ARABIC (ARAB)

Spoken by almost 300 million people in the world today, Arabic is the dominant language in over twenty countries in the Middle East and North Africa as well as one of the six official languages of the United Nations. It is also the language of a rich cultural heritage spanning many centuries. In addition to broadening your intellectual horizons and understanding of the Middle East, studying Arabic opens up a surprising array of exciting professional opportunities.

Almost all students of Arabic at Dartmouth arrive on campus with no previous background in the language, and therefore enroll in Arabic 1 during the fall of their first year (followed by Arabic 2 and 3 in the winter and spring). Students with some background in Arabic should contact Professor Tarek El-Ariss for placement. Completion of Arabic 3 satisfies the Foreign Language Requirement at Dartmouth.

ARAB 1. First-Year Courses in Arabic (Arabic 1)
This is the introductory course for Arabic. Students first learn the sounds and letters of the Arabic alphabet and then study basic vocabulary and grammar. Students learn how to communicate about a variety of practical topics, from describing university life to talking about family members. Arabic 1 is the fundamental course for further study of the language. Prof. Chahboun, Prof. Ouajjani.

ARAB 22. Intermediate Arabic

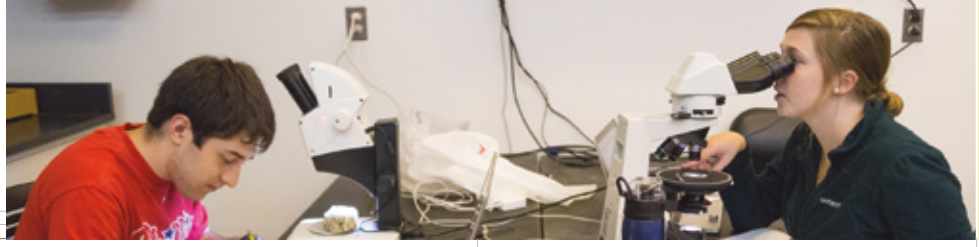
ARAB 31. Advanced Arabic

MES 8.01/GOVT 40.25.
Introduction to Middle Eastern Politics.
This counts as one of the MES "Core" courses. This is a gateway course to the political life of the Middle East. Topics include: Conflict and civil war; security arrangements; political economy; political ideologies; authoritarianism; terrorism; and regional rivalries. First-year students are encouraged to take this course. Prof. Fishere.

MES 12.06/GOVT 40.24: Dictatorship and Dissent: the Middle East in a Global Context.
Dictatorship is the defining characteristic of some governments, especially in the Arab world. Dictatorship is usually described as a strongman imposing his will on the nation through sheer force. French political philosopher Étienne de La Boétie (1530–1563) in his seminal essay Discours de la servitude volontaire (Discourse on Voluntary Servitude)presented the existence of a dictatorship as a relationship between two parties. Before every dictator is a population that is willing to accept rule by the dictator. The dictator cannot impose his will on a people that shun a dictatorship. Extrapolating from this concept, we can consider dictatorship to be a syndrome. The dictionary defines a syndrome as "a group of signs and symptoms that occur together and characterize a particular abnormality or condition." In this course, students will examine the condition, signs, symptoms, and cures for the malady of dictatorship. Prof. Al-Aswany.

MES 15.01/CRWT 40.07: The Craft of Fiction:
A Masterclass with Alaa Al Aswany Fiction presents an abundance of rich and creative possibilities. Through the magic of imagination, fiction takes us deep inside worlds and into the lives of characters. This course trains students to recognize the qualities that make for spellbinding fiction, including the natural rhythm and tone, mapping the structure, and shaping the content. The Craft of Fiction course teaches the essential elements of sketching a story, creating a great opening, devising structure and plot twists, incorporating tension, implementing flashback and viewpoint, and mastering the art of dialogue. Students learn techniques of crafting a story, originating colorful characters, and developing ways of bringing imagination and intrigue into a literary work. They will learn how their stories can be woven into unforgettable narratives by mastering rhythm, tempo, tone, and brevity. Students will explore the process of developing lively characters, mapping out a plot, describing realistic settings, adding subtext and layers of meaning, and penning captivating fiction. Prof. Al-Aswany.

MES 16.07. Arabian Nights East and West.
An introduction to Arabo-Islamic culture through its most accessible and popular exponent, One Thousand and One Nights. The course will take this masterpiece of world literature as the focal



How do the courses you have circled connect to your interests, talents, and dreams?

point for a multidisciplinary literary study. It will cover the genesis of the text from Indian and Mediterranean antecedents, its Arabic recensions, its reception in the West, and its influence on European literature. The course will be taught in English in its entirety. Prof. Kadhim.

HEBREW (HEBR)

Hebrew has been one of the world's most influential languages, through the Bible and other great writings. Miraculously revived, Hebrew is the main language of six million Israelis, with world-renowned literature and cinema. Students new to Hebrew can begin with Hebrew 1 (Modern Hebrew) in the fall term and complete the language requirement with Hebrew 2 in winter and Hebrew 3 in spring. Students with previous experience should take the local language placement test during New Student Orientation. Students interested in participating on our exchange program with the Hebrew University of Jerusalem should contact Prof. Glinert.

1. First-Year Course in Modern Hebrew (Hebrew 1)
Offered only in the fall term, this course introduces written and spoken modern Hebrew to students without any background. In addition to the basics of grammar, emphasis is placed on communication and Israeli culture. Conversational drills and comprehensive exercises provide practice in pronunciation and the use of the basic patterns of speech. Prof. Ben Yehuda.

Music (MUS)

The thirty-five full and part-time faculty in the Department of Music offer a diverse and comprehensive curriculum. Introductory music courses intended for the general student body cover topics from beginning music theory to opera. In addition, specialized courses in the history of Western art music, jazz, American music, world music, and sonic arts are offered frequently. Students may also receive private instruction for credit in string, brass, woodwind, and percussion instruments; classical or jazz piano, organ; or in voice. Students may also receive credit for our chamber music, jazz, opera and contemporary performance laboratories (MUS 50) and for performance in a Hop ensemble (MUS 59). Introductory music courses are: Music 1-16. Music 20 and 25 are introductory courses that are prerequisites for the major.

The following courses are recommended for first-year students (MUS):
1. Beginning Music Theory
2. The Music of Today
3.03 American Music: Roots and Revolutionaries
4. Global Sounds
6. Masterpieces of Western Art Music
8. Programming for Interactive Audio-Visual Art
14.01 Music, Mind, Invention
20. Introduction to Music Theory
21. Melody and Rhythm (prerequisite: Music 20)
25. Introduction to Sonic Arts
30. Film Scoring
34. Sound Art Practice
42. From Plato to Mozart (Early Classical Music)
43. From Beethoven to Now (Modern Classical Music)
46. Video Games and the Meaning of Life
50. Performance Laboratories, Sections 1, 2, 3
53–58. Studies in Musical Performance (Individual Instruction Program)
59. Ensemble Performance and Leadership

ADVANCED PLACEMENT

Students may be exempted from Music 20 for the music major or minor by passing a local placement exam administered by the Department of Music just before the start of classes in the fall term.

TRANSFER CREDIT

Students who wish to receive transfer credit for college music courses taken prior to matriculation at Dartmouth should see the chair of the Department of Music early in the fall term.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Beginning Music Theory
A course intended for students with little or no knowledge of music theory. Among topics covered are musical notation, intervals, scales, rhythm and meter, and general musical terminology. Concepts will be directly related to music literature in class and through assignments. Students will have the opportunity to compose simple pieces and work on ear training. No prerequisite. Dist: ART.

4. Global Sounds
A survey of music and music-making whose origins are at least partially in the non-European world. This class will address ways that particular kinds of music are culturally and socially contextualized, comodified, and transformed as they circulate globally. Examples include Indian raga, Javanese gamelan, and Gnawa trance music. Course work will include listening, reading, and critical writing assignments. Where possible, visiting musicians will be invited to demonstrate and discuss the music under consideration. No prerequisite. Dist: ART; WCult: NW.

21. Melody and Rhythm
Through a focus on the relation of melody and rhythm, this course aims to develop students' understanding of how composers organize pitch and time and bring the linear and temporal elements of music into play with one another. Examples are drawn from a variety of musical sources ranging from popular songs and jazz compositions to symphonies and chamber works. Course work includes analysis, reflection, and directed composition.Prerequisite: MUS 20, or Music Department-approved exemption from MUS 20. Dist: ART; WCult: W.

42. From Plato to Mozart (Early Classical Music)
This course introduces students to the composers, repertoires, and cultures of early Western music from ancient civilizations to ca. 1800. By examining a wide selection of instrumental and vocal genres, we will reflect on critical issues of history, repertoire, virtuosity, class, religion, nationalism, exoticism, censorship, and humor. Among the composers we will study are Comtessa de Dia, Hildegard de Bingen, Dufay, Josquin, Palestrina, Monteverdi, Pachelbel, Corelli, Purcell, Strozzi, J.S. Bach, Handel, Haydn, and Mozart. No prerequisite. Dist: ART; WCult: W.

46. Video Games and the Meaning of Life
Video Games and the Meaning of Life is an interdisciplinary course that explores the philosophies, epistemologies, and praxis of the human condition via the music, narrative, and design of U.S. and Japanese digital games—from the marvels of mundanity (Nietzsche and Harvest Moon) to the perils of obedience (Arendt and The Stanley Parable), from metaphors of illness (Susan Sontag and That Dragon, Cancer) to the transnational rise of today's billion-dollar e-Sports industry. Dist: TMV; WCult: CI.

50. Performance Laboratories
Performance Laboratories provide weekly coaching and instruction in diverse forms of music making and are open by audition to all Dartmouth students. Course work centers on musical readings, discussion, and informal performance of selected repertory chosen both for its intrinsic interest and for its relevance to the contents of course syllabi within the music department. Performance laboratories may be taken for credit (three terms equal one credit) or on a not-for-credit basis. Subject to space availability, students may enroll in different laboratories during different terms. Terms of enrollment need not be consecutive. Dist: ART.

Native American Studies (NAS)

Through the study of culture, literature, history, law, and contemporary issues, Native American Studies courses seek to enrich our understanding of Native Americans. Dartmouth's Native American Studies Program is one of the oldest, and is known as one of the best, in the country. Most courses in the program are open to all students. Courses may be used as a major or minor in Native American Studies.

The following courses are recommended for first-year students (NAS):
8. Perspectives in Native American Studies
15. (HIST 15) American Indians and American Expansion: 1800 - 1924
16. (HIST 39) 20th Century Native American History
18. (ENVS 18) Native Peoples in a Changing Global Environment
25. Indian Country Today
35. (ENGL 32) Native American Literature

Recommended Courses for First-Year Students

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

8. Perspectives in Native American Studies
The growing field of Native American Studies is inherently interdisciplinary. This course gives an overview of the relevant intellectual and cultural questions of tribal expression, identity, traditional thought, continuity, and sovereignty. Using readings from the areas of literature, philosophy, visual arts, anthropology, philosophy of history, and cultural and political discourse, we will examine how their discourses are used to promote or inhibit the ongoing project of colonialism in indigenous communities and lives. Dist: SOC; WCult: NW.

18. Native Peoples in a Changing Global Environment
This course is about indigenous peoples' relationships to land and natural resources and the threats that rapid environmental changes, such as climate change and invasive species, pose to indigenous societies. What is at stake when significant changes, like the loss of a cultural keystone species, occur on indigenous homelands? In NAS 18 (ENVS 18), we attempt to understand the societal impacts of rapid environmental change from multiple perspectives including those of indigenous and non-indigenous actors. Dist: TMV; World Cult: NW.

Philosophy (PHIL)

Students who major or minor in philosophy learn to follow complex lines of reasoning, expose presuppositions, weigh evidence, craft arguments, make objections and replies, offer creative answers to philosophical questions, and construct independent solutions to philosophical problems. Majors in philosophy are knowledgeable about the main contemporary and historical areas, authors, concepts, methodologies, techniques and problems of philosophy. The benefits of a philosophy major extend well beyond philosophy, and our students go on to pursue careers in many areas, including law, film and media, medicine, finance, the arts, and academia. Please visit the department website for a complete listing of courses: https://philosophy.dartmouth.edu/.

The following courses are recommended for first-year students (PHIL):
1.04. God, Darwin, and the Cosmos
1.05. Reasons, Values, Persons
1.08. Philosophy of Time & Time Travel
1.09. Science, Superstition, and Skepticism
1.16. Morality, Freedom, and the Mind
1.11. True, Beautiful, Nasty: Philosophy and The Arts
3. Reason and Argument
5. Philosophy and Medicine
6. Logic and Language
7. First-Year Seminars in Philosophy
8. Introduction to Moral Philosophy

TRANSFER CREDIT

At most two transfer credits may be counted toward the major, but transfer credit cannot be used to satisfy the advanced seminar requirement.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

PHIL 1.16 Morality, Freedom, and the Mind
In this course, we will focus on classic philosophical questions about morality, freedom, and the mind. We all have to address moral questions in our everyday lives, but how should we go about answering them? What makes actions right and wrong—is it the consequences of the action, or the principle followed, or something else? We all feel like we are free when we make important decisions. But does it make sense to think we might have free will, given that we are natural creatures, in a world governed by deterministic physical and biological laws? If we don't have free will, can we be held morally responsible for our actions? Finally, we all think of ourselves not just as physical beings, but as thinking things—as beings who are aware of our world, who have beliefs, thoughts, and hopes. But what is the mind—and what are beliefs, thoughts, hopes? Can the mind be understood as identical with the brain, or mental events as events in the brain? If not, how can talk about the mental be understood? We will examine a variety of approaches to these three central topics through both historical and contemporary philosophical texts.

3. Reason and Argument
An introduction to informal logic with special attention to the analysis of actual arguments as they arise in daily life as well as in legal, scientific, and moral reasoning. Along with the analysis and criticism of arguments, the course will also consider the methods for constructing arguments that are both logically correct and persuasive.

8. Introduction to Moral Philosophy
An introduction to the foundations and nature of ethics. Questions may include: What is the good life? What is it for something to have value? Are there acts that ought never to be done, no matter the consequences? Is ethics objective or relative to different perspectives? We inevitably make assumptions whenever we offer ethical verdicts about particular cases. This course aims to think systematically about those assumptions.

Physics and Astronomy (PHYS) (ASTR)

The Department of Physics and Astronomy offers a variety of introductory courses for students of different interests.

ASTRONOMY (ASTR)

Astronomy 1, 2, 3, and 4 are intended primarily for students who do not plan to major in a physical science. These courses have no prerequisites and any of the courses ASTR 1, 2/3, and 4 may be taken independently of the others (ASTR 2 and ASTR 3 are the same course with and without lab so both may not be taken for credit). Students who wish a more technical introduction to astronomy and astrophysics are encouraged to take Astronomy 15 and/or 25. Math 3 and an introductory physics course (or permission of the professor if such a course was taken in high school) is required for enrollment in Astronomy 15.

Students interested in majoring in astronomy should consult Professor John Thorstensen. A brochure describing the major, including research

Which courses in this guide excite you?
Which courses pique your intellectual curiosity?

opportunities for undergraduates, is available from the department office in 105 Wilder.

The following are recommended first-year courses (ASTR):
1. Exploration of the Solar System
2. Exploring the Universe
3. Exploring the Universe with Laboratory
15. Stars and the Milky Way

PHYSICS (PHYS)
Physics 1, 2, and 5 are intended primarily for students who do not plan to major in a physical science. These courses have no prerequisites and any one of them may be taken independently of the others.

There are three sequences of physics courses open to first-year students. Physics 13 and 14 are intended for students oriented toward the physical sciences or engineering. The two courses constitute the regular introduction to the fundamentals of mechanics, electricity and magnetism, and freely use calculus. These courses are offered in the fall (13), winter (13, 14), and spring (14). First-year students who take Physics 13/14 fall-winter may take Physics 19 in the spring term and can then start intermediate physics (40's level) in their second year. Alternatively, students who complete Physics 13/14 in the spring term can take Physics 19 in the fall or spring terms of their second year, and then move on to intermediate physics. Math 3 is a prerequisite for Physics 13. Math 8 can be taken concurrently with Physics 13 and is a prerequisite for Physics 14.

Physics 15 and 16 are the accelerated track into the physics major. These courses are intended for students who have an extremely strong background in both calculus and classical mechanics from high school. Students must qualify for Physics 15 by taking an online placement exam available starting in early August . These two courses together cover the material of Physics 13, Physics 14, and Physics 19. Physics 14 may be substituted for Physics 16. Students who complete Physics 15/16 or Physics 15/14 and have sufficient math may move into intermediate physics (40's level).

Physics 3 and Physics 4 are somewhat less in-depth treatments of the topics covered in Physics 13/14 and 15/16, with the addition of some modern physics. These courses are aimed at students interested in the life sciences or medical school. They do not serve as engineering prerequisites. Relatively few first-year students take these courses.

Students interested in majoring in physics or engineering physics should consult the departmental undergraduate advisor, Professor Jim LaBelle. A brochure describing the major, including research opportunities for undergraduates, is available from the department office in 105 Wilder.

Here is an example of an introductory sequence for a student entering with no math or physics exemptions:
F - Math 3
W - Physics 13, Math 8
S - Physics 14, Math 13
F - Physics 19

Students entering with exemption from Math 3 or 8 may opt to take:
F - Physics 13, Math 8
W - Physics 14, Math 13
S - Physics 19

Students with exemption from Math 3 or 8 and placement into Physics 15 via the departmental online placement exam may opt to take:
F - Physics 15, Math 8 or 13 (or Math 9 or Math 11)
W - Physics 16, Math 13, 22 or 23
S - Physics 40

Students placed into Physics 15 may opt to take it in the Winter
F - Math 8 or 13
W - Physics 15, Math 22 or 23
S - Physics 16

CREDIT ON ENTRANCE AND ADVANCED PLACEMENT
A score of 4 or 5 on CEEB Advanced Placement Examinations in Physics results in Physics 3 exemption for the C-Mechanics exam, and Physics 4 exemption for the C-Electricity exam.

Exemption from Physics 3, 4, 13, or 14 can also be earned by passing a local placement exam given by the department. The exam may be taken by those who have had a substantial physics background in high school.

Students who have a grade of A in A-Level Physics are eligible for exemption from Physics 3 and 4 without taking the local placement exam.

Students are admitted to the accelerated sequence (Physics 15/16) based on (a) having placement into Math 8 or 9 or higher, and (b) satisfactory perfor-mance on an on-line placement exam administered prior to matriculation.

Students receiving pre-matriculation exemption from Physics 13 and Physics 14 based on the local placement exam may take Physics 19 in the fall or spring of their first year, provided they have the Math prerequisite (Math 13).

TRANSFER CREDIT
Students who wish to receive transfer credit for college physics courses taken prior to matriculation at Dartmouth should see the undergraduate advisor (Prof. Jim LaBelle) of the Department of Physics and Astronomy during Orientation. Such students may be required to pass a proficiency examination in order to obtain credit.

ASTRONOMY (ASTR)
2. Exploring the Universe
A survey of contemporary knowledge of the nature and the evolution of stars, our Galaxy, other galaxies, dark matter, the expanding universe, and the big bang. Physical processes underlying these phenomena are discussed. Identical to Astronomy 3, but without the observing laboratory. Dist: SCI.

3. Exploring the Universe, with Laboratory
See description above. Students will make observations with radio and optical telescopes. Supplemental course fee required. Dist: SLA.

PHYSICS (PHYS)
3. General Physics I
The fundamental laws and phenomena of mechanics, heat, wave motion, and sound, including relativistic concepts. The Physics 3-4 sequence is elected primarily by 2nd and 3rd year pre-health students and is not accepted as a prerequisite to the engineering sciences major. Prerequisite: Mathematics 3. Dist: SLA.

13. Introductory Physics I
The fundamental laws of mechanics. Reference frames. Harmonic and gravitational motion. Ther-modynamics and kinetic theory. Physics 13, 14, and 19 are designed as a three-term sequence for students majoring in a physical science. Supplemental course fee may be required. Prereq-uisite: Mathematics 3 and 8 (at least concurrently). Dist: SLA.

15. Introductory Physics I, Accelerated Section
Physics 15 and 16 are an alternative sequence to Physics 13, 14, and 19 for students whose substantial background in physics and mathemat-ics enables them to study the material at a greater speed than is possible in regular sections. Classical dynamics. Differential Equations. Special Relativ-ity. Introduction to Quantum Mechanics including wave-particle duality of radiation and matter. The Uncertainty Principle and the Schroedinger equa-tion. One laboratory period per week. Supple-mental course fee may be required. Prerequisite: Mathematics 8 or 9 concurrently and achieving a threshold score on the physics departmental placement exam. Dist: SLA.

Portuguese (PORT)
(See program description under Spanish and Portuguese.)

Psychological and Brain Sciences (PSYC)
Psychologists are interested in understanding observable behavior and in developing models of the underlying cognitive and physiological processes. Neuroscientists are interested in under-standing how the brain functions, drawing from psychology, biology, chemistry, engineering, medi-cine, and computer science. The Department of Psychological and Brain Sciences offers courses in social interaction, sensation and perception, the

Recommended Courses for First-Year Students

physiological basis of behavior, cognitive neuroscience, human and animal learning, cognitive and language processes, social and cognitive development, personality, and the behavior disorders. The Department offers a major and minor in Psychology and a major and minor in Neuroscience.

Psychology 1 (Introductory Psychology) serves as a broad-based introduction to psychology as the sci-ence of behavior. This course is prerequisite for the Psychology major. Psychology 6 (Introduction to Neuroscience) is the prerequisite for the Neuroscience major.

The following courses are recommended for first-year students (PSYC):
1. Introductory Psychology
6. Introduction to Neuroscience

ADVANCED PLACEMENT

The department does not offer credit for Advanced Placement. Students who believe their preparation in Psychology is particularly strong may take a local placement exam during Orientation to determine if they should be exempted from Psychology 1.

Students who have received Advanced Placement credit for Statistics and who are considering becoming Psychology majors should take the Methods in Psychological Science local placement exam during Orientation, which will be used to determine whether or not the student is exempted from Psychology 10 (Statistical Methods) and placed into Psychology 11 (Laboratory in Psychological Science).

TRANSFER CREDIT

It is possible for entering students to obtain transfer credit for Psychology 1 if they have taken an introductory psychology course at a four-year college or university. In order to qualify for such recognition, a grade of C or better is required. Students who wish to apply for such recognition should follow the process outlined on the Registrar's Office website for prematriculation credit and submit the Prematriculation Transfer Credit Approval Form along with a syllabus, the title, author, and edition of the text used, and a transcript to the department. Courses taken in secondary schools or two-year colleges will not be considered for credit. The decision to award credit will be based on the materials submitted.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introductory Psychology
This course provides an introduction to the scientific study of the mind, brain, and behavior. Emphasis is placed upon the basic psychological processes of perception, consciousness, cognition, memory, and motivation as well as development, personality, individual differences, social behavior, and psychological disorders. Dist: SOC.

6. Introduction to Neuroscience
This course provides students with an introduction to the fundamental principles of neuroscience. The course will include sections on cellular and molecular neuroscience, neurophysiology, neuroanatomy, and cognitive neuroscience. Neuroscience is a broad field that is intrinsically interdisciplinary. As a consequence, the course draws on a variety of disciplines, including biochemistry, biology, physiology, pharmacology, (neuro) anatomy, and psychology. The course will begin with in-depth analysis of basic functions of single nerve cells. We will then consider increasingly more complex neural circuits, which by the end of the course will lead to an analysis of the brain mechanisms that underlie complex goal-oriented behavior. Dist: SCI.

Public Policy (PBPL)
The Nelson A. Rockefeller Center sponsors an interdisciplinary minor in Public Policy for students of all majors who seek a coherent program of study organized around public policy challenges, such as health, education, the environment, leadership, and law. The minor in Public Policy allows students to build on their coursework taken in departments across campus by exploring various theoretical concepts of governance and socio-economic interaction and applying them to the real world of public policymaking. The Public Policy minor complements any major offered at Dartmouth, whether in the sciences, social sciences, or arts and humanities. Many students build an international dimension into their minor.

The six-course sequence for the minor includes a gateway public policy process course, Public Policy 5: Introduction to Public Policy; a choice of two 40-level public policy tools and methods courses from among twelve courses offered on a regular basis during the four academic terms; and three courses in a particular public policy domain, including a capstone public policy seminar. Incoming students are strongly encouraged to enroll in Public Policy 5 during the Winter Term and to complete the social science statistical analysis prerequisite (in most cases, Government 10 or an equivalent course) during their first year on campus.

What sets the Public Policy minor coursework apart from the more traditional courses at Dartmouth is the direct connection to the public policy process at the international, federal, state, and local levels pursued in the Public Policy courses. First-year students who complete both Public Policy 5 and the social science statistical analysis prerequisite are eligible to apply for the Rockefeller Center First-Year Fellowship Program. This Program, conducted each summer in Washington, DC, pairs 20 first-year students to serve as interns with Dartmouth Alumni Mentors who work in the public policy realm in Washington, DC. For more information about the Public Policy minor and the First-Year Fellows Program please contact Professor Shaiko, the Rockefeller Center's Associate Director for Curricular and Research Programs, or Laura M. Mitchell, Public Policy Program Officer, via e-mail or at (603) 646-2229.

The following courses are recommended for first-year students (PBPL):
5. Introduction to Public Policy
21. Crisis and Strategy in American Foreign Policy
41. Writing and Speaking Public Policy
42. Ethics and Public Policy
43. Social Entrepreneurship
45. Introduction to Public Policy Research
46. Policy Implementation

Quantitative Social Science (QSS)
The Program in Quantitative Social Science (QSS) offers a structured undergraduate curriculum that combines strong methodological and technical training with a concentration in a traditional social science field. The QSS curriculum is grounded in computing and quantitative analytical techniques, and students who study in the program leverage these techniques in the pursuit of data analysis in the social sciences.

QSS offers both a minor and a major. Students pursuing either of these programs combine a specialization in one of the social sciences with foundational coursework in mathematics, computer science, data analysis, and modeling. Both the QSS minor and major have research components that students complete in their last years on campus. If a Dartmouth student is interested in anthropology, economics, education, geography, environmental studies, history, political science, psychology, or sociology as a quantitative social science, QSS is ready-made for the challenge. The strong training of Dartmouth QSS majors has led alumni to a variety of careers and advanced degrees, including university teaching and research, law, business, medicine, and public policy. Interested first-year students are advised to begin a curriculum in data analysis and mathematics and to consult with faculty affiliated with QSS.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

15. Introduction to Data Analysis
Methods for transforming raw facts into useful information. The course includes basic techniques for detecting interrelations among events and for assessing trends. Topics include exploratory data analysis, and QSS 15 may be used in some departments in place of an introductory methodology requirement. Prerequisite: Mathematics 3 or its equivalent or permission. Directed toward students with an aptitude for mathematics and statistical reasoning. Recommended for first-year and second-year students wishing to pursuing coursework in QSS or continue in the social, biological, or physical sciences. Dist: QDS.

Pay attention to the breadth of the liberal arts curriculum as well as the potential depth of an area of study.

17. Data Visualization
Big data are everywhere – in government, academic research, media, business, and everyday life. To tell the stories hidden behind blizzards of data, effective visualization is critical. This course primarily teaches R, a free software environment for statistical computing and graphics, which is widely regarded as one of the most versatile and flexible tools for data visualization and, more broadly, data science. Students completing the course will know how to "wrangle" and visualize data critical to their scientific endeavors. Dist:TLA

Religion (REL)
Religion lies at the core of all cultures and societies. An objective understanding of religion is thus a crucial component of a liberal-arts education. The Department of Religion offers a rich list of courses on the major religions of the ancient and modern world, as well as courses on religion and ethics, the nature of religious belief, myth and ritual, religion and gender, and many other topics. The Department also offers a foreign study program at the University of Edinburgh in Scotland. Many students find that a major, modified major, or minor in Religion is an excellent choice of concentration in the liberal arts. Please visit the Department website for a complete listing of courses: https://religion.dartmouth.edu/.

The following courses are recommended for first-year students (REL):
1.01. What Matters
1.06. Getting Religion
1.09. Religion and Drugs
3.01. Indigenous Religions in the Colonial Americas
5. Early Christianity: The New Testament
6. Introduction to Judaism
7. First-Year Seminar in Religion
11. Religion and Morality
13. Sports, Ethics & Religion
19.27. Female Saints and "Feminine" Spirituality

TRANSFER CREDIT

Since the quality of instruction in religion at colleges and universities varies widely, the Religion Department is hesitant to approve courses for pre-matriculation and/or transfer credit and does so only in rare cases. The Department requires a full syllabus noting required readings and the name of the instructor for any course in religion presented for pre-matriculation credit. Application for credit should be made through the chair of the Department as soon as possible in the fall of the first year. The Religion Department does not normally approve more than one course per student for transfer or pre-matriculation credit.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1.01 What Matters
What does it mean to say that something matters and how can we know that it does? This is an introductory course to modern religious thought, examining the quest for meaning, value, and significance as captured in religious, ethical, and philosophical language in Western tradition. The intent is to provide students with a broad exposure to the various ways humans in modernity have attempted to make sense of their condition. What are some of the changes brought about by life in the modern world that prompt new questions about human life and purpose? What new answers have been provided to explain our place in the cosmos and reason for being? We explore questions of belief, value, significance, meaning, suffering, love, and justice.

1.06. Getting Religion
This introductory course invites students to "get religion" as a historical and lived reality in the modern world by engaging religious belief, belonging, and behavior in the unfolding spiritual landscape of the Atlantic world, from the beginning of colonial encounters to the present era. Exploring how individuals, families, and groups of people "get religion" under free, un-free, and secretive conditions, students will examine key historical episodes of modern religious encounter, embrace, and exchange.

Russian (RUSS)
The Russian Department offers the opportunity for comprehensive study of Russian language, literature, culture, and history. Our faculty have a wide variety of interests and areas of expertise – from folklore to poetry and translation studies to the history of human rights in Russia – that they bring to the classroom in small, intensive seminars and large introductory courses for non-majors. Our summer study abroad program is based in Moscow and St. Petersburg but also includes travel to Russia's medieval cities and, on the Trans-Siberian railroad, to thriving cities and places of natural beauty in Siberia. After graduation, our students successfully pursue careers in government, international business, journalism, teaching, and medicine.

Since Russian 1 is offered only in the fall term, interested students should start taking the language in the fall of their first year. Three one-term courses (Russian 1, 2, 3) give students basic fluency in the elements of the Russian language. Completing Russian 1-3 satisfies the College language requirement and gives the student access to the FSP summer program in Russia. It also qualifies students for Russian 27, which serves as a gateway course for many of the department's more advanced language courses.

Three years of the language are offered, as are many courses in literature, culture, and history. Those students who wish to major have two options: a major in language and literature, with an emphasis on one or the other; or a major in area studies, with courses about Russia taken in both the Russian Department and other Dartmouth departments, such as History, Government, Music, Geography, and Economics. Most of the literature courses are taught in English, with some offering Russian majors extra work that draws upon their knowledge of the language. Most majors participate in the department's summer FSP at the Higher School of Economics (Moscow / St. Petersburg) but the program is open to all Dartmouth students with one year of Russian.

The following courses are recommended for first-year students (RUSS):
1, 2, 3. Introductory Russian
7. First Year Seminar
10. Russian Civilization
15. Russia and the West
31. The World as Word: 19th Century Russian Fiction
32. Twentieth-Century Russian and Soviet Literature
50.02. Twentieth-Century Russian History

Recommended Courses for First-Year Students

ADVANCED PLACEMENT

Graduation credit is not granted for secondary school courses in Russian, but students with secondary school Russian should take the Russian Department's local placement exam (*). Students who demonstrate sufficient knowledge will thereby satisfy the Dartmouth College language requirement and be eligible for Russian 27; students whose knowledge is substantially greater will receive credit on entrance for Russian 27 and be eligible for Russian 28 or higher-level courses.

TRANSFER CREDIT

Students who wish to receive credit for college Russian courses taken prior to matriculation at Dartmouth should see the Chair of the Department of Russian early in the fall term.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. First-Year Course in Russian
An introduction to Russian as a spoken and written language.

10. Russian Civilization
An examination of Russia as a cultural, national, and historical entity that is distinct from both Europe and Asia. Russia is a continental power of vast proportions whose traditions, character, national myths, and forms of political organization often seem a mirror-image to those of the United States. After a brief survey of Russian history, the course will examine certain determinants of Russian culture, including Christianity, multinationalism, and the status of Russian civilization on the periphery of Europe. The course will then deal with the art, music, and popular literature of Russia, the complex coexistence of Russian and Soviet culture, and the challenges of post-Soviet Russia. TMV, WCULT, CI STAFF

31. The World as Word:
19th Century Russian Fiction
In his Philosophical Letters, Pyotr Chaadaev, a Russian intellectual of the 19th century, compared Russian history to the history of Western civilization. Chaadaev claimed that Russia had been cut off from global unity, belonged to no cultural system, and contributed nothing to the progress of human spirit. Since the publication of Chaadaev's "First Philosophical Letter" in 1836, writers and thinkers both inside and outside of Russia have wrestled with Chaadaev's categorical verdict. One response was from the 20th century poet Osip Mandelstam who pointed out that Chaadaev, in his evaluation of Russia, did not consider one singular contribution: the Russian language. Taking Mandelstam's point to its logical conclusion, it is Russia's literature rather than its economic, social, and political history that becomes the Rosetta stone to the exceptional nature of the Russian experience. In this course, we will explore some of the texts that make up this Rosetta stone. As we read some of the most celebrated works from the Golden Age of Russian literature – by Pushkin, Lermontov, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov – we will attempt to account for the distinct character of Russian literature and its unique role in Russian history and culture. W, LIT.

Sociology (SOCY)

Sociology enables us to understand how the dynamics of society affect and are shaped by individuals. It seeks first to describe the various forms of social structure which we all inhabit—groups, organizations, communities, social categories of class, sex, age, or race, and social institutions such as the economy, family, politics, and religion. Next, sociology seeks to explain how those structures affect patterns of human attitudes, behaviors, and opportunities, and simultaneously how individuals through collectivities construct, maintain, and alter social structure.

The curriculum of the Department of Sociology includes courses on social psychology and social change; organizations, and institutions; social movements and political sociology; and class, gender and race inequalities. Sociology offers a standard or modified major, a standard minor, and two specialized minors: Markets, Management and the Economy; and Social Inequality. Requirements for majors and minors are explained in the ORC and on our website: http://sociology.dartmouth.edu.

The following courses are recommended for first-year students (SOCY):
1. Introductory Sociology
2. Social Problems
10. Quantitative Analysis of Social Data
11. Research Methods
15. Sociological Classics
16. Constructing Social Theory
26. Capitalism, Prosperity, and Crisis
34. Health Disparities
35. Sociology of Mental Health
38. Status and Power in Social Interaction
42. A Sociological Introduction to the Asian American Experience
47. Race and Ethnicity

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Introductory Sociology
What is Society? How have societies developed historically? How do they distribute wealth, income and other resources? How do they organize political authority and economic power? How do they coordinate work? How do they socialize people to "fit in" with those around them? How do they produce popular culture? This course provides answers to these questions in ways that provide an introduction to the field of sociology. It focuses on a broad range of theory and research showing how sociologists think about and study these questions. In many cases, the topics covered in the course reflect the research interests and course offerings of faculty in the sociology department at Dartmouth. As a result, the course also provides an introduction to some of the curriculum offered in the department. Open to all classes. Dist: SOC; WCult: W.

Spanish and Portuguese (SPAN) (PORT)

Spanish and Portuguese is a lively and bustling department located in Dartmouth Hall, the historic architectural center of the campus and the focal point for the study of foreign languages, literatures, and cultures. Students who take classes in our department not only acquire linguistic and cultural competence in Spanish and Portuguese but are also better equipped to face the new challenges posed to globalized citizens of the 21st century.

Spanish and Portuguese offers all levels of beginning language as well as advanced topics courses for intermediate and native speakers. These prepare students to understand important cultural, political and historical issues in the Spanish and Portuguese speaking worlds and enrich their critical thinking about national identities, gender, race, ethnicity, and migration in and outside the US.

We offer multiple off-campus programs in Buenos Aires, Cusco, Barcelona, Madrid, Santander, and São Paulo. We are also affiliated with the University of Havana. The majors offered are (a) Hispanic Studies, (b) Romance Studies, (c) Modified Major in Hispanic Studies, and (d) Modified Major in Lusophone Studies. The minors offered are in Hispanic Studies, Lusophone Studies (Literature and Culture of the Portuguese speaking world), and a combined minor in Hispanic and Lusophone Studies.

INTRODUCTORY LANGUAGE COURSES PORTUGUESE (PORT)

Portuguese 1 and 2 furnishes the basic training to prepare for intermediate courses (Portuguese 20 on campus) or to go on our LSA+/FSP to São Paulo in Winter.

SPANISH (SPAN)

Three one-term introductory courses (Spanish 1, 2, and 3) furnish the basic training in language to satisfy the language requirement and to prepare for the intermediate courses (Spanish 9 and 20).

COURSE PLACEMENT

Which class should I take if I wish to continue with my studies in Spanish at Dartmouth College?
If I have taken the SAT II test:
0 – 410: Spanish 1
420 – 590: Spanish 2
600 – 680: Spanish 3
690 or better: Spanish 9
If I have taken AP exams:
AP Language 4 or 5: Spanish 9
AP Literature 4: Spanish 9
AP Literature 5: Spanish 20

Students who scored 5 on the AP Literature exam receive one credit on entrance for Spanish 9.
If I have taken the British A Level exams:
"A" on the A level exam: Spanish 20. Students

Take time to read the course descriptions. Reflect, consider options and opportunities, and allow different facets of your experience and personality to impact your course choices.

receive one credit for Spanish 9.
"B" on the A level exam: Spanish 9.

If I have taken the IB exam: 6 or 7 on the higher-level IB exam: Spanish 20. Students receive one credit on entrance for Spanish 9.

Students who have not taken SAT II, AP, British A level, or IB exam scores must take the Department placement exam if they wish to continue with their Spanish studies at Dartmouth. The exam is offered online for incoming first-year students from August 1– August 25. Upon completing the exam, the course for which you should register will be indicated. All students who place out of Spanish 3 on the local placement exam will be required to take an oral exam on campus during Orientation. There will be a make-up exam on October 16 only for students who missed the August 1 – 25 online exam. For more general information about language classes and the online exam (including password) see the department website. Students who have lived or studied abroad for more than 6 months should contact the Language Program Director for further placement information.

If you have studied Portuguese before coming to Dartmouth or have other experience with the language, you must take the Portuguese Placement Test (PPT) to be placed in the appropriate level class. The PPT consists of two parts: one written and one oral. The written part tests knowledge of grammar, reading comprehension, and writing composition. The written exam is followed by an interview that tests oral comprehension. It is offered in the fall and winter during the first week of classes. Students interested in taking the PPT should contact Professor Rodolfo Franconi or Professor Carlos Minchillo in order to take the test.

TRANSFER CREDIT

Transfer credit is not granted to incoming first-year matriculating students for Spanish and Portuguese (language 1, 2, 3) courses taken at other colleges and universities before matriculation. For transfer credit for equivalent courses 9 and above email the Language Program Director (for Spanish) or Professor Rodolfo Franconi (for Portuguese).

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

1. Spanish I
Introduction to spoken and written Spanish. Intensive study of introductory grammar and vocabulary with a focus on culture and communication. Oral class activities, readings and compositions. Weekly practice in the virtual language lab includes media, full-feature films and weekly drill sessions. Never serves in partial satisfaction of the Distributive or World Culture Requirements.

2. Spanish II
Continuation of Spanish 1. Further intensive study of grammar and vocabulary with a focus on culture and communication. Oral class activities, readings and compositions and continued practice in the virtual language laboratory. Weekly drill sessions. Never serves in partial satisfaction of the Distributive or World Culture Requirements. Prerequisite: Spanish 1, or a Placement Test score over 350.

3. Spanish III
Continuation of Spanish 2. Spanish 3 provides additional, intensive study of grammar and vocabulary with a focus on literature and culture. Oral class activities, readings and compositions and continued practice in the virtual language laboratory. Weekly drill sessions. Completion of this course on campus or as part of the LSA constitutes fulfillment of the language requirement. Never serves in partial satisfaction of the Distributive or World Culture Requirements. Prerequisite: Spanish 2, or a Placement Test score over 475.

9. Culture and Conversation: Advanced Spanish Language
This course serves as a bridge between Spanish 3 and Spanish 20. Through the intensive study of a variety of media (e.g. documentaries, TV programs, podcasts, films), grammar, vocabulary, and speech acts as presented in the course packet, students will actively practice listening and speaking, and hone their writing skills with the goal of reaching an Intermediate High Level on the ACTFL scale. Topics and materials may vary each term. Prerequisite: Spanish 3; score of 690 or better on the SAT II test; AP Lang 4 or 5, or AP Lit 4; Placement Test score over 600; or permission of the instructor. It serves as a prerequisite for the LSA+ program or for Spanish 20.

20. Writing and Reading: A Critical and Cultural Approach
Spanish 20 is the first course of the Major/Minor and serves as transition between the skills acquired through the Spanish language courses (Spanish LSA or equivalent preparation) and those needed for all upper-division courses (30 and above). Through the study of critical and theoretical vocabulary, and the reading of short stories, poems, films, theatrical plays, and journalistic articles, students will acquire analytic tools to comprehend and analyze several types of texts. This course is also designed to familiarize students with different textual genres and a wide array of literary and interpretative key concepts. Prerequisite: Participation in one of the Spanish LSA programs; Spanish 9 or 15; exemption from Spanish 9 or 15 based on test scores (see Department website); or permission of instructor. Spanish 20 may be taken in conjunction with 30-level survey courses. It serves as a prerequisite for all Spanish courses 40 and higher. Dist: LIT.

Studio Art (SART)
The Department of Studio Art provides students the opportunity to participate in a strong studio program within the liberal arts context. Classes are taught by well-established artists, whose work is exhibited throughout the U.S. and abroad. Students have full use of large, well-equipped studio facilities.

Course offerings include all levels of: architecture, drawing, painting, photography, printmaking and sculpture. Classes are open to all Dartmouth undergraduates, but are limited in size to encourage individual expression and close personal interaction between faculty and students.

Senior majors are encouraged to focus in one or two areas of concentration for their culminating experience. Many establish themselves in art related careers after graduation. Sculpture I, Drawing I, Photo I, Printmaking I, Architecture I, Special Topics, Figure Drawing and Figure Sculpture DO NOT have a prerequisite, and no prior knowledge of any of these courses is required.

The following courses are recommended for first-year students (SART):
Drawing I
Sculpture I
Special Topics

Recommended Courses for First-Year Students

Architecture I
Photography I
Printmaking I
Figure Sculpture
Figure Drawing

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

15. Drawing I
In this introductory course, major and non-major students will explore the issues of mark, line, scale, space, light, and composition. Students will develop their own critical ability as well, enabling them to discuss the work presented in class. Although the majority of work will be from the observed form, such as still life and the human figure, non-observational drawing will also be emphasized. Various kinds of charcoal, ink, and pencil will be the primary media used. Supplemental course fee required. Dist: ART.

16. Sculpture I
The emphasis of this course is to make and critique sculpture. Three-dimensional design concepts and various elements of sculpture such as form, space, surface, and time, will be discussed. Students will develop an understanding of different materials and techniques in conjunction with the aesthetics of each medium. This course focuses on an individual approach to creative problem solving, with students developing skills and art terminology to critique their own sculpture and that of others. Supplemental course fee required. Dist: ART.

17.08 Special Topics: Digital Drawing
This class will explore the connection of hand drawing and digital drawing to create original images. Students will explore the implications, opportunities and technical issues of using the computer as a drawing tool and combine computer-generated drawings with those done by hand. Drawings may combine layering, collaging and converting 3D form to 2D hand drawings using PhotoShop, Illustrator and Rhino software, among others. Supplemental course fee required. Dist: ART

29. Photography I
An introductory course concentrating on the fundamentals of operating and understanding a camera: black and white film processing and printmaking techniques, and the use of the camera as a tool of creative expression. Assignments in landscape, portraiture, and still life will be used to introduce a broad range of photographic problems. Supplemental course fee required.
Dist: ART

27. Printmaking I
Basic techniques of printing images from metal plates, and often from cardboard and plastic plates as well. Once a plate is developed, it can be printed many times and in many different ways. Several plate-making and printing techniques will be taught, enabling students to achieve a wide range of imagery through line dynamics, tonal variety, and color interactions. Printmaking is a unique intersection of Painting, Drawing, Sculpture, and Photography. Students learn from exploring and refining their own ideas, through use of various techniques and materials. Examples will be shown in class, and students will also see original prints by master artists (from Rembrandt to the present) in the Hood Museum's outstanding collection. Supplemental course fee required. DIST: ART

Theater (THEA)

The Department of Theater welcomes all Dartmouth students to participate in the study and practice of theater. While the department does offer a theater major and a minor, students do not have to be majors or minors to participate. Students from all parts of campus are invited to enroll in theater courses and to participate in the department's busy production program as actors, directors, playwrights, designers, stage managers, dramaturgs, and technicians. Students interested in auditioning for our Main Stage or student-directed productions should visit our website for up-to-date information at theater.dartmouth.edu. We also encourage students to visit our exciting Open House during orientation.

To provide students with a solid foundation in all aspects of theater study, the department offers a wide range of both classroom and studio-oriented courses. Courses in dramatic literature, theater history, and criticism are balanced by offerings in practical aspects of theater production such as performance, directing, design, playwriting, stage management, and theater technology.

Students who wish to major or minor in theater are assisted in designing a program that covers both the scholarly and practical aspects of the theater. Non-majors are invited to enroll in theater classes and to participate in all aspects of the production program. Our Foreign Study Program (FSP) occurs in the summer and students may participate as early as the summer after their first year. Students spend ten weeks in London studying at the London Academy of Music and Dramatic Art and attending up to thirty performances at a variety of London theaters, all of which is paid for by the program. Students receive three Dartmouth credits for the FSP. Prerequisites for the FSP include either Theater 15, 16, or 17 and one course in theater practice: Theater 25, 26, 27, 29, 30, 35, 36, 40, 41, 42, 44, 45, 48, 50 or Theater 10 (upon approval from the Chair).

The following courses are recommended for first-year students (THEA):
10. Special Topics in Theater
15. Theater and Society I: Classical and Medieval Performance
16. Theater and Society II: Early Modern Performance
17. Theater and Society III: 19th and 20th Century Performance
19. Human Rights and Performance
22. Black Theater, USA
23. Postcolonial African Drama
24. Asian Performance Traditions
26. Movement Fundamentals I
28. Dance Composition
30. Acting I
36. The Speaking Voice for the Stage
40. Technical Production
41. Stage Management
42. Scene Design I
44. Lighting Design I
48. Costume Design
50. Playwriting I
54. Directing I

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

15. Theatre and Society I: Classical and Medieval Performance

This course explores selected examples of world performance during the classical and medieval periods in Western Europe and eastern Asia. Plays to be discussed might include those by Aeschylus, Sophocles, Euripides, Aristophanes, Seneca, Plautus, Terence, and Zeami. Through the reading and discussion of primary and secondary texts, we seek to situate selected performance texts within their sociopolitical and artistic contexts. Dist: ART or INT; WCult: W.

19. Human Rights and Performance
What can theatre do for human rights, and human rights for theatre? How do playwrights translate violations of human rights to the stage? Through class discussion and creative exercises, we will explore selected plays from around the world that address human rights through various genres and dramatic forms, including theatre of testimony, documentary theatre, realism, allegory, and surrealism. Open to all classes. Dist: INT or ART

26. Movement Fundamentals I
An introduction to movement for the stage, this course will animate the interplay between anatomy, movement theories, and performance. Through exploration of physical techniques, improvisation, and movement composition, students will experience a fundamental approach to using the body as a responsive and expressive instrument. Assignments will include readings, written work, class presentations, mid-term exam, and final paper. Dist: ART.

30. Acting I
This course is a basic introduction to acting technique for the stage. The course is designed to develop the ability to play dramatic action honestly and believably, using realistic/naturalistic material as well as self-scripted autobiographical writing. Course work includes exercises and improvisations, monologues and scene work. Out-of-class assignments include required readings from acting texts and plays, attendance at local stage productions, rehearsals, and journal writing. Admission to this course is by instructor permission; instructor interviews will take place to determine enrollment. Dist: ART.

40. Technical Production
This course is an introduction to the technical aspects of scenic and property production, exploring traditional and modern approaches. Topics include drafting, materials and construction, stage equipment, rigging, and health and safety. The course consists of lectures and production projects. Open to all students. Dist: ART.

42. Scene Design
An introduction to the basics of scenic design through weekly projects in scale models, drawings, research, lighting, and storyboards. Students will also study the collaborative process among scene designers, directors, costume, and lighting designers. Suitable for students interested in theater, visual and video art, installation, film, architecture, and sculpture. Students will have the opportunity to assist student and faculty scene designers on Department of Theater productions. Open to all classes. Dist: ART.

50. Playwriting I
The aim of this course is for each student to write the best one-act play she or he is capable of writing. This undertaking will involve a number of preliminary exercises, the preparation of a scenario, the development of the material through individual conferences, and finally the reading and discussion of the student's work in seminar sessions. The course is limited in size and requires the permission of the instructor. Preregistration is not permitted. Dist: ART.

Women's, Gender, and Sexuality Studies (WGSS)

The Women's, Gender, and Sexuality Studies Program at Dartmouth College, the first such program in any of the previously all-male Ivy League colleges, offers multidisciplinary and cross-cultural courses on gender and gender-related issues. Our program faculty includes over 70 faculty members drawn from the Arts and Humanities, Social Sciences, and Sciences. The Women's, Gender, and Sexuality Studies Program enriches the traditional liberal arts curriculum by celebrating the multiplicity of gender and sexual identity (male, female, gay, lesbian, transgender, etc.) and by helping students understand how gender and sexuality intersect with other social markers like those of class, race, and ethnicity. Courses in WGSS are rich and diverse, as faculty share their cutting-edge research on topics such as identity formation, power and politics, knowledge formation, gender and the visual arts, family and community, gender and economic development, gender and health, etc. In partnership with the Asian Societies, Cultures, and Languages Program, we offer an annual Foreign Study Program in Hyderabad, India. Most courses are open to all students and may be taken for elective credit, as part of the Women's, Gender, and Sexuality Studies Major, Minor, Modified Major or to satisfy distributive requirements.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

10. Sex, Gender, and Society
How has current thinking about sex, gender, and sexuality formed our experiences and understandings of ourselves, the world we inhabit, and the world we envision? This course investigates basic concepts about sex, gender, and sexuality and considers how these categories intersect with issues of race, class, ethnicity, family, religion, age, and/or national identity. The course also considers the effects of sex, gender, and sexuality on participation in the work force and politics, on language, and on artistic expression. In addition to reading a range of foundational feminist texts, materials for analysis may be drawn from novels, films, the news, popular culture, and archival resources. Open to all students. Dist: SOC; WCult: CI.

Writing and Rhetoric: The Institute for Writing and Rhetoric

The Institute for Writing and Rhetoric at Dartmouth College oversees first-year writing courses (Writing 2-3, Writing 5, and the First-year Seminars taught in departments and programs throughout the College); upper-level courses in Writing; courses in Speech; and free student support services through our writing tutoring center. Dartmouth's first-year writing courses prepare students to engage fully with their intellectual work in every discipline. In order to provide a solid foundation for that work, Dartmouth requires first-year students to take Writing 5 (or its approved equivalents) followed by a First-year Seminar (or Humanities 2). Approved equivalents to Writing 5 include Writing 2-3 with teaching assistant support and a new pilot version of Writing 2-3: Writing Across the Disciplines. This year we are also offering a special winter section of Writing 5 for prospective writing tutors. Humanities 1-2 may also be taken to fulfill the first-year writing and first-year seminar requirements, with Humanities 1 taking the place of Writing 5 and Humanities 2 taking the place of First-year Seminar.

DARTWRITE DIGITAL PORTFOLIO

Your DartWrite digital portfolio is a personal WordPress site where you can archive your best

Recommended Courses for First-Year Students

academic work and reflect on your experiences at Dartmouth. Research shows that students who curate their work and periodically reflect on it perform better than students who do not. For more information on this exciting opportunity, see https://writing-speech.dartmouth.edu/DartWrite.

PLACEMENT PROCESS FOR FIRST-YEAR WRITING COURSES

All incoming students should complete the online directed self-placement process for first-year writing. This process is designed to help you select among our various writing courses to fulfill the first-year writing requirement. It also provides an opportunity for students to indicate interest in approved equivalents to Writing 5.
Students who complete the online writing placement process and accept placement into a Writing 2-3 course will be preregistered for Writing 2 when they arrive on campus in the fall. Students who take a Writing 2-3 course sequence (including Writing 2-3: Writing Across the Disciplines) take their First-year Seminar in the spring term.

Students who complete the online writing placement process and accept placement into Writing 5 are assigned to take the course in either the fall or the winter; this term assignment cannot be changed. Writing 5 term assignment information appears in the online student placement record visible to students and their advisors just prior to fall course registration. Students taking Writing 5 in the fall will register for Writing 5 when they register for their other fall courses. See our website for further information about placement and registration: https://writing-speech.dartmouth.edu/curriculum/placement-and-enrollment-policies.

TRANSFER CREDIT

Transfer students may request approval of transfer credit for Writing 5, upper-level Writing courses, or Speech courses based on courses taken at other colleges or universities before matriculation at Dartmouth. The deadline for all requests for credit is the end of the first term of study.

SELECTED COURSES THAT EXPLORE THIS DEPARTMENT OR PROGRAM:

2-3. Composition and Research
(with Teaching Assistant Support)
2-term course in fall and winter terms
This two-term course in first-year composition proceeds on the assumption that excellence in writing arises from serious intellectual engagement. Students engage in intensive study of literary and other works (including their own and each other's writing), with attention to substance, structure, and style. The primary goal of Writing 2 is for students to learn to write clearly and with authority. By submitting themselves to the rigorous process of writing, discussing, and rewriting their papers, students come to identify and then to master the essential properties of the academic argument. In Writing 3 students engage in the more sustained discourse of the research paper. These papers are not restricted to literary criticism but might employ the research protocols of other academic disciplines. Throughout the reading, writing, and research processes, students meet regularly with their tutors and instructors, who provide them with individual assistance. The same instructor and group of students meet for two terms together in this course.

Writing 2-3 is taken in place of Writing 5. Students must successfully complete both terms of Writing 2-3 to fulfill the first-year writing requirement. Writing 2-3 does not serve in partial satisfaction of the Distributive Requirement.

2-3. Composition and Research
(Writing Across the Disciplines)
2-term course in fall and winter terms.
See course description above. This new pilot version of the course does not have teaching assistant support, and it differs from traditional Writing 2-3 in having a different instructor for the fall and winter term portions of the course. In addition, the fall term and winter term portions of the course will approach a shared theme with different disciplinary approaches.

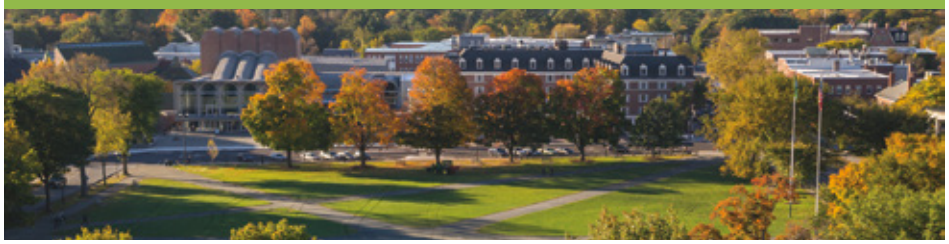
Writing 2-3 is taken in place of Writing 5. Students must successfully complete both terms of Writing 2-3 to fulfill the first-year writing requirement. This course does not serve in partial satisfaction of the Distributive Requirement.

5. Expository Writing
1 term course in fall or winter terms
Founded upon the principle that thinking, reading and writing are interdependent activities, Writing 5 is a writing-intensive course that uses texts from various disciplines to afford students the opportunity to develop and hone their abilities in expository argument. Instruction focuses on strategies for reading and analysis and on all stages of the writing process. Students actively participate in discussion of both the assigned readings and the writing produced in and by the class. This course does not serve in partial satisfaction of the Distributive Requirement.

SPEECH (SPEE)

20. Public Speaking
This course covers the theory and practice of public speaking. Building on ancient rhetorical canons while recognizing unique challenges of contemporary public speaking, the course guides students through topic selection, organization, language, and delivery. Working independently and with peer groups, students will be actively involved in every step of the process of public speaking preparation and execution. Assignments include formal speeches (to inform, to persuade, and to pay tribute), brief extemporaneous speeches, speech analyses, and evaluations. No prerequisites. Limited enrollment. Dist: ART.

Preparation for Health Professions



The Health Professions Program (HPP) is Dartmouth's four-year+ pre-health online advising program for students interested in health professions. We help you navigate the rigorous path of academic, experiential, and personal growth while you explore and prepare for a health profession (medical, veterinary, dental, nursing, etc.). We offer one-on-one advising, group workshops, a peer mentor program, a program for students from backgrounds underrepresented in medicine, and many other opportunities. www.dartmouth.edu/prehealth/.

Plan to attend the essential pre-health advising programs during New Student Orientation. Meet with your pre-health advisors as soon as possible after arriving, throughout your first year, and beyond. Use our weekly drop-in hours or make an appointment to meet with us. Your pre-health advisors will assist you with course selection, learning and study strategies, personalizing your D-Plan, determining your unique timing and choices, supporting self-assessment and self-reflection, experiences outside the classroom, and guiding you through the actual health profession school application. The pre-health journey is also experiential. Participate in Dartmouth's local shadowing program, receive guidance for finding undergraduate research and internship opportunities, service experience, and attend workshops that help you clarify your goals, meet your peer pre-health community, mentors, and learn about the pre-health process.

What is especially useful to know to get started?
There is not a "one size fits all" path. Students arrive with different math and science backgrounds and levels of clarity about their aspirations. Some take a term or two to adjust to the pace of college, review or learn essential foundations, or just explore other interests. Some are ready to dive into a science course in the first term.

A strong foundation in algebra and at least some knowledge of calculus upon matriculating is very useful for pre-health prerequisite classes. We advise students with a pre-health aspiration to begin learning or to review this material over the summer even if you have already taken calculus. Get acquainted with, or review, your chemistry and biology concepts. There is great free material online at www.khanacademy.org/ or https://thecrashcourse.com/search?query=chemistry. A summer community college class is another option, as are free online courses on Coursera.

Although there are different paths and timelines to consider, pre-health coursework takes planning, as you will see as you read through the requirements at the end of this section; speak with a pre-health advisor as early as possible.

Does my major matter?
No. There is no "pre-health" major at Dartmouth; you are a Dartmouth liberal arts student. Medical schools care that you develop a love of learning and depth of knowledge in your area of focus. Majors in the Humanities, Sciences, and Social Sciences are all just as likely to be strong candidates for a health profession if they are otherwise qualified and successful in the science prerequisites. With planning and assistance, your major courses and prerequisites can fit together. Your HPP advisors are here to support that journey.

When do people apply to a health professions school?
85 percent of students who apply to a medical, dental, or veterinary school from Dartmouth apply the summer after they graduate or in future years as alumni. This means one or more "gap" years are typical. This allows at least four years to take the prerequisite courses, develop personally, and prepare for the MCAT. The average age of a student entering medical school is currently 24 or older. Students find jobs or fellowships for a "gap year(s)" during their senior year. If you plan to attend medical school immediately after graduation, you would apply early summer at the end of junior year.

How do I gain new strategies for success in pre-health classes?
It is typical to need to develop new, more effective studying and learning strategies as a college student. Explore ways of studying differently: get great tips on learning strategies from HPP, the Academic Skills Center, Undergraduate Deans Office, your peers, your Teaching Science Fellows, and from faculty.

SEE THE FOLLOWING INFORMATION FOR CURRENT PRE-HEALTH REQUIREMENTS FOR MOST HEALTH PROFESSIONS SCHOOLS (INCLUDING MOST VETERINARY AND DENTAL).

PLEASE NOTE: We strongly discourage students from doubling up on lab classes in the first year; it is most typical to take one lab class at a time in general. We encourage students to adapt to science at Dartmouth and then decide what is right for them.

SUBJECT: English (ENGL) - 2 courses. **AT DARTMOUTH:** First-year Seminar and Writing 5 (or Writing 2&3) fulfills this requirement.

SUBJECT: Biology (BIOL) - 2 courses with lab. **AT DARTMOUTH:** Foundation courses include 12, 13, 14, 15, and 16. Most students choose Bio 12, 13, and 14 to be best prepared for the MCAT and med/dental/vet school, however, a student could choose from 15 and 16 as well. To help students determine if they are sufficiently prepared to enter a foundation course directly, the Biology department has established an online self-assessment exam for students. Either Bio 11 or Bio 2 are good entries into Biology at Dartmouth, depending on student's previous background. Speak with the pre-health advisors regarding your best path through Biology preparation.

SUBJECT: Chemistry (CHEM) - 2 courses Gen Chem with lab; and 2 terms Organic Chem with lab. **AT DARTMOUTH:** Calculus (Math 3) is a prerequisite for Gen Chem (Chem 5 and 6). With more advanced background (AP, IB) one might exempt out of one or both (Chem 5 or 6); however, one must still take a Gen Chem class at the college level. Chem 10 is an alternate course for students with advanced standing. Organic Chem: Chem 51 and 52. **For students with more advanced knowledge** or intend to major in chemistry, the Chem 57 and 58 sequence is typical. Students with little or no chemistry background should strongly consider doing chemistry prep the summer before arriving at Dartmouth or summer after their first year.

SUBJECT: Biochemistry - 1 course. **AT DARTMOUTH:** Bio 40 or Chemistry 41. These courses require Organic Chem as a prerequisite. Biology 40 also requires Biology 12 as a prerequisite.

SUBJECT: Physics (PHYS) - 2 courses of general Physics with lab. **AT DARTMOUTH**: Physics 3 and 4 (or Physics 13 and 14 for Chemistry, Engineering, or Physics majors). These courses have a Math 3 prerequisite. With a more advanced background (AP, IB) one might exempt out of one or both classes or be invited to Honors 15/16 (it's your choice to take or not if so). However, one should still take a general Physics class at the college level.

SUBJECT: Mathematics (MATH) - 1 term of Calculus and 1 term of Statistics. **AT DARTMOUTH**: Calculus: Math 3 or equivalent, Introduction to Calculus, is a prerequisite to several courses in Biology, Chemistry or Physics. For purposes of pre-health requirements at this time, the equivalent of Math 3 (via exemption, or Math 1 and 3) is sufficient as long as one Math class (which can be Statistics) is taken at the college level. Statistics: Any Statistics course numbered 10 in Psychology, Sociology, Economics, Government, or Mathematics; Biology 29 (Biostatistics); Math 10; and Social Sciences 15 (Intro to Data Analysis.)

OTHER COURSES FOR MCAT PREPARATION: Psychology and Sociology: While these are not yet prerequisites for most health professions schools, one or both is highly recommended; regardless, knowing the material will be necessary for the MCAT. If you choose to prepare at Dartmouth, Psych 1 gives you much of the Psychology material you need and Sociology 1 or a health-related Sociology course could give you the sociology material you need. Consult with your pre-health advisors; there may be other ways to learn this material at Dartmouth or on your own.