EXPLORE. ENGAGE. EXCEL.

AN INTRODUCTION TO ACADEMICS AT DARTMOUTH COLLEGE
Using This Guide

To fully experience the academic opportunities at Dartmouth, you need to know the academic benchmarks that are required of you and how to navigate the curriculum. Explore, Engage, Excel is a critical first step in your journey.

Exploration will be a recurrent theme throughout this guide and throughout your relationships with advisors and mentors. The Undergraduate Deans Office expects that you will use this guide for the entirety of your first year at Dartmouth; the advising it offers and the description of courses will remain invaluable.

You are expected to purposefully engage with your Advisors. They will keep asking you questions, such as:

- Why are you interested in that course?
- Why are you not interested in this other course?
- Where do you see opportunities to explore your creative side?
- What course would allow you to experience a previously unexplored academic discipline?

Don’t worry if you don’t know all the answers to these and other questions. There are tremendous resources at Dartmouth to support and encourage your exploration and discovery. The offices in Student Academic Support Services (SASS) (see column to the right), in conjunction with your faculty advisor, will offer assistance and guidance at every step along the way.

Watch for questions and prompts on many of the following pages, and then do what they instruct: ask yourself questions, push yourself to reflect, look at the course offerings with a thoughtful and inquisitive eye, and allow yourself to be energized with possibilities.

We know that many transitions bring uncertainty and transitioning from secondary school to college is no exception. Allow EXPLORE, ENGAGE, EXCEL to serve as your first resource, and know that there are many other resources available to you this summer and when you arrive at Dartmouth.

Let us now introduce you to YOUR ADVISING NETWORK. As you begin to work with your advising network, it is important that you understand what advising can offer, who will form your advising team, and how you can best utilize these important resources.

With a warm welcome,
The Undergraduate Deans Office

What exactly is advising?
At its best, advising is a process by which faculty, staff, and peers empower you to think and reflect deeply about what it is you want out of your Dartmouth experience. Your advisors will ask you to revisit and clarify your expectations, especially as you come to understand yourself—and Dartmouth—differently. Throughout the advising process, you will be encouraged to find balance within the choices that honor both your narrow academic interests and broader learning opportunities. We will challenge you to explore and expand your horizons at every stage of your undergraduate education. Additionally, you are expected to take increasing responsibility for your advising relationships.

First-year advising supports your transition from high school to college, encourages you to explore the opportunities and resources at Dartmouth, and assists you in making informed academic choices. As you read this guide and spend time with us during upcoming online advising chats or when reading our advising emails, you begin your own advising experience.

Who are the advisors?
Dartmouth faculty, administrators, and staff are all involved in advising students—in group settings, during programs and events, and, especially, through one-on-one appointments, open hours, and office hours. Advisors look forward to getting to know you and understanding your aspirations.

Undergraduate Deans
Undergraduate Deans Office
https://students.dartmouth.edu/undergraduate-deans/
- Offer advising and assistance on academic, personal, and social matters throughout your entire time at Dartmouth.
- Help students elect courses and explore the curriculum, academic requirements, educational goals, summer opportunities, career aspirations, and extra-curricular interests.
- Act as both a sounding board for students’ ideas and a link between students and resources.
- Strive to provide holistic advising through close collaboration with other offices in Student Academic Support Services (SASS). Together, our initiatives are directed toward anchoring students in the intellectual life of the College, supporting meaningful and inclusive interaction across difference, and facilitating engagement and personal development.

Additional Resources
- Student Accessibility Services (SAS) https://students.dartmouth.edu/student-accessibility/
- Academic Skills Center (ASC) https://students.dartmouth.edu/academic-skills/
- First Year Student Enrichment Program (FYSEP) https://students.dartmouth.edu/fysep/
- King Scholar Leadership Program https://students.dartmouth.edu/king-scholars/
Accessing Advising

Faculty
• Each first-year student is assigned a faculty academic advisor, as well as the House Professor and affiliated faculty within your House Community.
• You will meet with your faculty advisor to elect courses and discuss schedules and issues of an academic nature.
• When you declare a major, a major advisor from that academic department will help you shape your course of study within your chosen field.

Peer Advisors
Peer advisors include Undergraduate Advisors (UGAs), tutors, FYSEP Mentors, Pre-Health Peer Mentors, and others. As with other sources of advising, it will be important for you to evaluate your peer advisors’ advice alongside your goals, aspirations, and values, and in the context of the advising you receive from your faculty advisor, undergraduate dean, and pre-major advisor.

Other Faculty, Administrators, and Peers
• Students are encouraged to assume increasing responsibility for cultivating advising relationships during their time at Dartmouth.
• This includes expanding your network of advisors, proactively seeking desired resources, considering your own needs and goals, and balancing multiple sources of advising.

How do I take full advantage of advising?
You have a role to play in making your advising relationships successful. Academic advising works best when a student takes the initiative to seek guidance and maintains ongoing advising relationships. To make the best possible decisions for your academic career, you should be proactive, think critically about the information you receive, and invest time in meeting with your advisors regularly. Your advisors want to help you make sense of all that Dartmouth has to offer but need your full engagement in the process. This guide is designed to provide you with the information you need right now and throughout the summer. If you feel overwhelmed by the process or the choices ahead of you, come back to this guide and—in particular—the timeline to the right.

Remember: When you invest time and energy in developing meaningful advising relationships, you position yourself to make highly informed choices while at Dartmouth, and to develop valuable relationships with advisors that may enrich your life for years to come.

It’s time to begin! This guide is the first of several interactions we will have with you this summer. Watch for advising emails about exploring the curriculum, preparing for the meeting with your faculty advisor, and course election.

We can’t wait to meet you, support your exploration, and watch you grow and learn as a member of the Dartmouth community.

COURSE EXPLORATION AND TRANSITION TO COLLEGE TIMELINE

THIS PART OF YOUR JOURNEY IS ALL ABOUT EXPLORATION.

EARLY JULY
• Explore this guide from cover to cover immediately upon receipt.
• Begin the worksheet on page 38.

MID-SUMMER
• Read emails from New Student Orientation and the Undergraduate Deans Office.
• Deeply explore academic department and program websites – dig around!

LATE SUMMER
• Participate in online advising chats (registration links will arrive by email from the Undergraduate Deans Office).
• Complete the Advising Questionnaire in DartHub.
• You are not expected to arrive at Dartmouth with all your courses chosen. Don’t rush the decision-making process. Take your time!

NEW STUDENT ORIENTATION
• Attend academic and curricular programming which will inform course election.
• You will continue to explore the interests you’ve discovered in this guide by:
  - talking with your faculty advisor, undergraduate dean, and faculty;
  - participating in academic and curricular programming;
  - attending as many academic department and program Open Houses as possible.

CLASSES BEGIN
Monday, September 16
Remember: Part of your academic journey is leaving the path. You are not expected to have all the answers – engage with the QUESTIONS.

YOUR TO DO LIST:
1. Grab Post-its, highlighters, and a big pad of paper.
2. Find a comfortable place to sit, then take your time and really read this guide.
3. Imagine, be curious, don’t limit yourself, and EXPLORE.
4. Utilize the worksheet on pages 38-39 to organize your thoughts and discoveries.
Dartmouth College educates the most promising students and prepares them for a lifetime of learning and of responsible leadership, through a faculty dedicated to teaching and the creation of knowledge.

Dartmouth’s current curriculum was established by the faculty out of the desire to reflect contemporary changes in the many areas of human knowledge and to prepare students for citizenship in a complex world. In the Recommended Courses for First-Year Students section of this guide, we have included descriptions of those courses most frequently taken by first-year students in the fall term.

A complete inventory of course offerings and academic regulations may be found in the College bulletin entitled Organization, Regulations, and Courses (ORC). It is published each fall and is available online at https://dartmouth.smartcatalogiq.com/en/current/orc. First-year students elect fall term courses during New Student Orientation. To assist in electing courses, students meet with a faculty advisor; undergraduate deans, department and program chairs, and individual professors are also available for consultation. Important academic and curricular information in the following sections will guide you as you make your preliminary plans.

Academic Curriculum

THE IMPORTANCE OF ACADEMIC INTEGRITY

The integrity that you bring to your academic work contributes to your own learning, protects against one person taking unfair advantage over other students, promotes trust among students and with your faculty, and appropriately credits the work of scholars who have paved the way for you. In general, the Academic Honor Principle prohibits: plagiarism; giving or receiving assistance on examinations or quizzes; submitting the same work in more than one course; and unauthorized collaboration. A student who violates the Academic Honor Principle, regardless of their intent, should expect to be suspended from the College for a period of time.

You will be asked as part of the pre-arrival process to review a document titled Sources and Citations at Dartmouth College, which provides in-depth information about the Academic Honor Principle (http://writing-speech.dartmouth.edu/learning/materials/sources-and-citations-dartmouth). In each of your courses, we encourage you to ask about the Honor Principle if your professor has not already introduced the conversation.

REQUIREMENTS FOR THE BACHELOR’S DEGREE

Students should refer to Organization, Regulations and Courses catalog, known as the ORC/Catalog, for a full description of all the requirements for the degree. In general, enrolled students take three courses per term for twelve terms. To earn the bachelor’s degree, a student must complete a major, and receive credit for 35 courses, no more than eight of which may be passed with the grade of D. Students are also required to complete the first-year writing requirement, a first-year seminar, a foreign language requirement, distributive requirements that reflect the breadth of a liberal arts education, three world culture courses, three physical education credits, and a swim test.

It is the student’s responsibility to ensure that he or she has met all requirements (DartWorks, an individualized online degree audit tool available at all times, assists students in keeping track of progress towards a degree).

LIBERAL ARTS CURRICULUM

Dartmouth’s liberal arts curriculum lets you explore big ideas and pursue your particular passions. It is about BREADTH: a liberally educated person is one who has been exposed to a wide range of fields and insights. It also features DEPTH: students are required to complete some concentrated course of study in which they will display deep knowledge and mastery. At Dartmouth, you will engage with culture, creativity, compassion, and critical thinking as you explore the many courses available to you.

Through a liberal arts curriculum, we hope Dartmouth’s students begin a lifetime quest—an intellectual journey—that prepares them for the challenges and opportunities of the twenty-first century.

FIRST-YEAR WRITING REQUIREMENT

All first-year students are required to fulfill Dartmouth’s first-year writing requirement. Through the first-year writing courses, the college offers entering students a valuable opportunity to develop the thinking, research, writing, and presentation abilities that characterize intellectual work in the academy and in educated public discourse.

Most first-year students take Writing 5, or its two-term equivalent Writing 2-3, and a First-year Seminar to fulfill this writing requirement. Humanities 1-2 may be taken as another way of fulfilling the first-year writing requirement. For details, see https://www.dartmouth.edu/~hums1-2

Writing 5 focuses on the writing process, emphasizing careful analysis, thoughtful questions, and strategies for effective argument. Students taking Writing 5 are assigned to take the course either in the fall or winter; this assignment cannot be changed.

Writing 2-3 is a two-term course that provides more intensive guidance through the reading, writ-
ing, and research processes, including individual support from teaching assistants and a culminating research project. Writing 2-3 is taken in place of Writing 5. Writing 2-3 is offered in fall and winter terms only, and students must complete both terms and a First-year Seminar in order to satisfy the first-year writing requirement.

First-year Seminars offer every first-year student an opportunity to participate in a course structured around intensive writing, independent research, small group discussion, and reading across the disciplines.

You should keep in mind three scheduling guidelines:

1) Writing 5, Writing 2-3, or Humanities 1 is a prerequisite for enrollment in a First-year Seminar or Humanities 2.
2) The First-year Seminar or Humanities 2 must be taken during the first year, in the term immediately following completion of Writing 5 or its equivalent.
3) A student is not eligible to take part in an off-campus program until the First-year Seminar or Humanities 2 is completed.

For more information about the first-year writing requirement and placement and enrollment policies for Writing 2-3, Writing 5, and First-year Seminar, visit: http://writing-speech.dartmouth.edu/curriculum/placement-and-enrollment-policies.

LANGUAGE REQUIREMENT (COURSES NUMBERED 1, 2, AND 3)
The foreign language requirement follows from the conviction that mastery of another language unlocks a new world of people, cultures, and ideas. A student must complete this requirement before the end of the seventh term unless exempted on the basis of College Entrance Examination Board (CEEB) scores or by a Dartmouth placement exam. Where no department or program exists to determine a student’s fluency in a language, Associate Professor of Linguistics and Cognitive Sciences David Peterson will determine fluency. Introductory language courses do not fulfill Distributive or World Culture Requirements.

DISTRIBUTIVE REQUIREMENT (“DIST”)
Dartmouth’s requirement of Distributive courses allows you to explore broadly several fields and gain new perspectives. Both the Distributive Requirement and the World Culture Requirement allow for discovery and encourage exposure to new interests.

Each student must take courses in each of the following areas:
- one in Arts: creation, performance, history, or criticism (ART)
- one in Literature: the history, criticism, or theory of texts (LIT)
- one in Systems and Traditions of Thought, Meaning, and Value (TMV)
- one in International or Comparative Study (INT)
- two in Social Analysis (SOC)
- one in Quantitative and Deductive Sciences (QDS)
- two in the Natural Sciences; without/with laboratory (SCI/SLA)*
- one in Technology or Applied Science; without/with laboratory (TAS/TLA)*

* One of the courses taken in SCI/SLA and TAS/TLA must have a laboratory, experimental, or field component.

WORLD CULTURE REQUIREMENT (“WCULT”)
As with “Distributives,” the World Culture Requirement supports the belief that a liberally educated person is one who has been exposed to a wide range of fields and insights.

Each student must take at least one course in each of the following cultural areas:
1) Western Cultures (W)
2) Non-Western Cultures (NW)
3) Culture and Identity (CI)

All undergraduate courses other than Writing 2, 3, and 5 and language courses used to fulfill the foreign language requirement may potentially satisfy a Distributive Requirement. Such a course may also satisfy one of the World Culture Requirements. For example, a course in 19th-century British fiction might satisfy both the literature requirement under the Distributive category and the western cultures requirement under World Culture.

It is thus possible, by careful selection of courses which satisfy requirements in multiple categories, to complete both the Distributive and World Culture Requirements with ten courses. These may also overlap with major requirements. The online course catalog (ORC/Catalog) helps students to plan, and the termly Timetable of Class Meetings provides up-to-date information as to which courses are being offered and which satisfy Distributive and World Culture categories.

Distributive and World Culture Requirements cannot be fulfilled with pre-matriculation credit. Courses satisfying Distributive and World Culture Requirements must be passed with a regular letter grade.

MAJOR
A major assures that when you graduate from Dartmouth you will have gained mastery in the method and substance of a single area of academic inquiry. Ideally, the area of major study provides a path for intellectual exploration and the satisfaction of becoming proficient at a high level in your area of interest.

A student must successfully complete a major program, which usually consists of eight to ten courses in the major subject in addition to those courses prerequisite to the major, and other requirements specified by the department or program. Students may also declare modified or special majors that involve more than one academic department or program. Students must declare a major by the end of the student’s fifth term in residence, or immediately thereafter, depending upon a student’s enrollment pattern.

First-year students thinking of majoring in biology, chemistry, earth sciences, engineering sciences, mathematics, or physics are encouraged to elect Math 3 or the sequence of Math 1 and Math 2, starting in their first term.

PHYSICAL EDUCATION (PE)
The Physical Education requirement provides students with the opportunity to experience a variety of activity courses and, in turn, appreciate the importance of the balance of a healthy mind and body. All students are required to satisfactorily complete three credits of physical education by
graduation. To receive credit for these courses/activities, students must register in advance on DartHub. You can fulfill this requirement in many ways. PE courses include yoga, Zumba, DartFit, modern dance, ballroom dance, tennis, golf, racquetball, squash, swimming, kickbox aerobics, Pilates, barre fusion, spinning, fencing, table tennis, and strength training, as well as skiing and snowboarding in the winter and sailing in the summer. The three PE credits may be fulfilled by participation in varsity and club sports, some dance groups, and many Outdoor Programs Office/Dartmouth Outing Club activities. These courses are Pass/No Pass and are in addition to the 35 credits you need to graduate. Students must also complete an untimed 50-yard swim. www.dartmouthrecreation.com

FIRST-YEAR RESIDENCY REQUIREMENT
All first-year students are required to be in residence for all three terms of the first year, after which they may choose leave terms or apply for off-campus programs as part of their enrollment pattern (D-Plan).

ENROLLMENT PATTERN: THE "D-PLAN"
Dartmouth’s academic calendar consists of four terms that roughly correspond with the seasons. A year-round academic calendar challenges you to define personal educational goals and provides considerable opportunity to shape your educational program. Credit for 35 courses is a requirement for the Bachelor of Arts degree. Students normally take three courses each term, are enrolled for a total of 12 terms, and take three leave terms.

Students are required to be in residence in Hanover in the fall, winter, and spring of their first and senior years. In addition, members of the sophomore class are required to be in residence the summer term between their sophomore spring and junior fall. Other than these required residence terms, students will need to construct an enrollment pattern that takes into account intended major or minor subjects, off-campus study, exchange programs, internships, extracurricular activities, and preferred spacing of vacations. International students need to consider their particular visa status requirements when constructing their D-Plan and should consult with the Office of Visa and Immigration Services (OVIS) to ensure that their D-Plan conforms to immigration regulations. You can find more information about the D-Plan in the ORC Catalog at http:// dartmouth. smartcatalogiq. com/en/current/orc.

GRADE REPORTS
In most courses letter grades are assigned on a 4.0 scale, with an A equal to a 4.0, indicating excellence and E equal to 0 or failure (there is no grade of F at Dartmouth). Grades reported on the official transcript include the median grade given in the class as well as the class enrollment. Students who make particularly favorable impressions on faculty may receive a citation for meritorious performance.

Instructors can submit progress reports for students who are experiencing academic difficulty. Since not all instructors submit reports, students are always advised to consult with instructors if they have questions about their standing in their courses.

STUDENT RECORDS POLICY
The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. Please find more information in the FERPA section of the Student Handbook. https://www.dartmouth.edu/student-handbook/.

Dartmouth College values the privacy of its students and seeks to preserve the confidentiality of their education records. The college complies fully with the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA), as amended, a federal law that permits students to review their education records and creates certain obligations of the college with respect to protected education records. The only records the Undergraduate Deans Office keep on file pertain to a student's admissions materials at the time of application and a student's educational record. To review what materials we maintain, please schedule a time to meet with your undergraduate dean.

Academic Opportunities

OFF-CAMPUS PROGRAMS
The Frank J. Guarini Institute for International Education
(603) 646-1202
www.dartmouth.edu/~ocp

Off-campus programs are an important extension of the regular Dartmouth curriculum, offering undergraduate students safe, rigorous, learning experiences that promote disciplinary scholarship, foreign language acquisition, intercultural awareness and agility, and reflection in a global context. A distinguishing feature of Dartmouth's model is strong faculty involvement that leads to the development of meaningful relationships and mentoring between students and program directors. Consistently, over fifty percent of Dartmouth undergraduate students participate in one or more Language Study Abroad (LSA), Foreign Study Program (FSP), Domestic Study Program (DSP), or Exchange before they graduate. Students returning to campus after participating in a program often speak of experiences that were enriching, challenging, and transformative.

At present, the College offers more than forty different off-campus programs and thirty exchange program options. For more information on foreign and domestic study programs, please visit the Frank J. Guarini Institute for International Education website at www.dartmouth.edu/~ocp.

LANGUAGE STUDY ABROAD (LSA)
Dartmouth College requires proficiency in a foreign language and offers unique opportunities for language study (see Foreign Language Requirement on page five). Maintaining programs in multiple countries, Dartmouth’s LSAs are offered in support to the College’s commitment to understanding and communicating with people of other cultures. On most LSA programs, undergraduate students live with local families which gives students a personal context and access to the culture as a whole. Studying the language, literature, and civilization reveals historical and contemporary cultural patterns. As you begin to explore the curriculum and off-campus program opportunities, consider whether to continue studying a language you already know or beginning a new language. Dartmouth students can complete their foreign language requirement in a variety of ways:

1) Exemption on entrance: students whose achievement is sufficiently high are not obligated to study a foreign language.

2) Placement in foreign language courses numbered 1, 2, or 3, and completion of the language requirement on campus. This option is open in Arabic, Chinese, French, German, Italian, Japanese, Portuguese, Russian, and Spanish. Students normally complete this sequence in their first year.

3) Language Study Abroad (LSA) in French, German, Italian, and Spanish: A student may choose to satisfy the language requirement through a combination of preparatory courses at Dartmouth and one term of language study abroad in a program where the foreign language course numbered 3 is offered. A majority of students elect to take advantage of Dartmouth’s language programs in foreign countries where they study with Dartmouth faculty and local instructors while living with local families.

Students enroll in three courses while participating
in the program and study language and culture during the term. Since enrollments in most programs are limited, not everyone who applies will necessarily have the opportunity to participate in their first-choice term.

4) Students also have the opportunity to start their language learning by studying abroad. For Italian, the French and Italian Department offers F.I.R.E. (the Full Immersion Rome Experience). Upon returning to campus students take one more class to complete their language requirement.

In addition to the LSA programs, many departments also offer Advanced Language Study Abroad (LSA+) programs. The LSA+ is a program designed for students who satisfy the language requirement and are prepared for a more advanced language study abroad experience. Dartmouth’s LSA+ programs are offered in Brazil (Portuguese), China, France, Morocco (Arabic), Italy, Japan, Russia, Peru (Spanish), and Spain.

FOREIGN AND DOMESTIC STUDY

Dartmouth’s foreign and domestic study programs are designed to expand the curriculum into new areas of significant intellectual discovery and cultural understanding through supervised study and residence in localities beyond Hanover.

In addition to LSA and LSA+ offerings, most foreign language departments have Foreign Study Programs (FSP). FSPs in a language department offer advanced study of a country’s language, literature, and culture. The principle objective is an in-depth experience of the life and culture of the country through substantive courses as well as social interactions with the local people.

The College also offers a wide array of foreign and domestic study programs conducted primarily in the English language. These programs are designed to take advantage of resources unique to the host country or off-campus location in the United States. Like their language-based counterparts, these programs offer students opportunities to study other cultures and disciplines in depth as well as gain new perspectives on the United States.

Various departments maintain Foreign Study Programs in Argentina, Austria, Brazil, China, Costa Rica, Czech Republic, France, Germany, Ghana, Greece, India, Ireland, Italy, Morocco, New Zealand, Southern Africa, Spain, and the United Kingdom. While most of these programs are affiliated with a foreign university, some, such as the Biological Sciences program, involve travel and extensive fieldwork. The College offers Domestic Study Programs in Los Angeles CA, Tampa FL, Santa Fe NM, the Western US, and Washington DC.

EXCHANGE PROGRAMS

Dartmouth has several formal exchange programs inviting students to attend another institution and receive course credit (see Transfer Terms). The Twelve College Exchange network includes Amherst, Bowdoin, Connecticut (including the Eugene O’Neill National Theatre Institute), Mount Holyoke, Smith, Trinity, Vassar, Wellesley, Wesleyan, Wheaton, and the Williams Mystic Seaport Program in American Maritime Studies.

Exchange programs also exist with Morehouse College and Spelman College (Atlanta, Georgia); a selected German university through the Federation of German American Clubs; the Hebrew University of Jerusalem (Israel); Keio University, Kanda University, and Waseda University (Japan); Keble College at Oxford University and University College London (United Kingdom); University of Copenhagen and Technical University (Denmark); Chulalongkorn University (Thailand); Bocconi University (Italy); The Chinese University of Hong Kong (CUHK); Yonsei University (South Korea); and the Consortium for Advanced Studies Abroad (Cuba).

Dartmouth College encourages interested students to participate in Dartmouth-sponsored study away programs. Details of the sponsored programs, such as Foreign Study Programs (FSP) and Language Study Abroad (LSA), are available on the Guarini Institute website: www.dartmouth.edu/~oep.

TRANSFER TERMS

Students may transfer up to four credits towards their Dartmouth degree by participating in a sponsored exchange program, or by independently arranging a Transfer Term through a non-Dartmouth sponsored program.

Students apply for exchange programs through The Guarini Institute for International Education. The students who are accepted apply to have their courses approved in the same manner as they would for Transfer Terms. Students apply for Non-Dartmouth Sponsored Programs, or Transfer Terms, through the Registrar’s Office by submitting their application for the specific upcoming term. Please see the Transfer Terms (Non-Dartmouth Study Away) section on the Registrar’s website for more information: www.dartmouth.edu/~reg/enrollment/studyaway/.

Dartmouth students are permitted to apply the maximum of four equivalent credits from non-Dartmouth sponsored programs to their Dartmouth degree. This limit includes any credit transferred to Dartmouth for college coursework completed prior to matriculating as a first-year student. Please see the Transfer Terms (Non-Dartmouth Study Away) section on the Registrar’s website for more information: www.dartmouth.edu/~reg/enrollment/prematriculation_credit.html.

CO-CURRICULAR OPPORTUNITIES

Students are encouraged to take advantage of Dartmouth’s rich variety of co-curricular opportunities. Engaging in these opportunities can provide a sense of community and continuity and allow you to integrate your learning inside and outside of the classroom.

• House Communities increase student access to faculty in residential spaces and create opportunities for enhanced social ties and shared experiences in the residential system. Every student has a house membership, regardless of where you live. https://students.dartmouth.edu/residential-life/house-communities/about-house-system

• Dartmouth has many Centers and Institutes, including the Dartmouth Center for Social Impact, Hood Museum of Art, Hopkins Center for the Arts, Institute for Writing and Rhetoric, John Sloan Dickey Center for International Understanding, Nelson A. Rockefeller Center for Public Policy, and Tucker Center. https://home.dartmouth.edu/centers-institutes

• The Life and Community tab on Dartmouth’s homepage describes many other opportunities, including the Collis Center for Student Involvement, Student Wellness Center, Office of Pluralism and Leadership, and the Dartmouth Outing Club. http://dartmouth.edu/life-community
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 fall-term courses recommended by each academic department and program. The 2019-2020 version of the course catalog, Organization, Regulations and Courses (ORC), will be available online in early September.

**Course Designations**
- The designations F (fall), W (winter), S (spring) and X (summer) indicate the term in which the course is 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):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Introduction to African-American Studies (W)</td>
</tr>
<tr>
<td>11</td>
<td>Introduction to African Studies</td>
</tr>
<tr>
<td>13</td>
<td>Black America Since the Civil War (W)</td>
</tr>
<tr>
<td>14</td>
<td>Pre-Colonial African History</td>
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<tr>
<td>18.03</td>
<td>Introduction to African Religions</td>
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<tr>
<td>20.50</td>
<td>Memory and Slavery at Dartmouth (F)</td>
</tr>
<tr>
<td>22</td>
<td>Religion and the Civil Rights Movement (W)</td>
</tr>
<tr>
<td>23</td>
<td>Black Sporting Experience (W)</td>
</tr>
<tr>
<td>35</td>
<td>African Literatures: Masterpieces of Literature from Africa (S)</td>
</tr>
<tr>
<td>40</td>
<td>Gender Identities and Politics in Africa (S)</td>
</tr>
<tr>
<td>51</td>
<td>African Literatures: Masterpieces of Literature from Africa (S)</td>
</tr>
<tr>
<td>56</td>
<td>The African Political Novel (F)</td>
</tr>
<tr>
<td>63</td>
<td>Race Matters: “Race” Made to Matter (S)</td>
</tr>
<tr>
<td>66</td>
<td>Black Migration – Black Immigration (W)</td>
</tr>
<tr>
<td>67.50</td>
<td>Black Consciousness and Black Feminisms (W)</td>
</tr>
<tr>
<td>80.06</td>
<td>Civil Rights in the US in the 20th Century</td>
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### SELECTED FALL TERM COURSES (AAAS)

11. Introduction to African Studies

This course introduces a global socio-historical framework within which to examine Africa in relation to multiple African Diasporas and notions of mobility. Considering the historical contexts of contact between Africa, Europe, and the Americas, we examine cultural, economic, and philosophic aspects of Africa. We will examine how ideas of what it means to be African culturally, racially, and politically are continually produced and contested. The moment of independence of many African nation-states from European colonial rule in the mid 20th century operates as a centering point from which we will examine economics, race, politics, and artistic expressions. We will consider ideas of “tradition” and “modernity,” representations of Africa, more recent processes of commodification, as well as various cultural and political responses to them. Dist: SOC, WCult: NW.

20.50 Memory and Slavery at Dartmouth

Beyond noting that Wheelock owned slaves, little is known of Dartmouth’s other historical connections, if any, to the institution of slavery. This research seminar investigates the college’s economic entanglement in the trade and slaveholding, as a site for the intellectual legitimation and contestation of...
slavery; and the contributions of enslaved persons to its development. We will also review the origins, findings and responses to similar collective memory projects at other institutions including Brown, Emory and Yale. Prerequisite: Any sociology course or permission of the instructor. Open to all classes. Cross List: SOCY 79.08. Dist: SOC.

56. The African Political Novel
This course examines the relationship between politics and the novel in Africa. I have selected novels from different parts of Africa. We will approach the selected novels as instruments of political interest and products of political contexts. We will then proceed to put these novels in a triangular conversation with political theorists of Africa and the political philosophies of African leaders. Topics include democracy and governance, clientelism and patrimonialism, failed states, gender, and grassroots activism. Cross List: COLT 51.03 Dist: LIT, WCult: NW.

80.06 Civil Rights in the US in the 20th Century
This course examines movements for civil rights, broadly defined, in the 20th-century US. Students explore concepts of American citizenship, considering struggles for political inclusion and efforts to participate fully in the nation’s social and cultural life. We focus on women’s and gay rights and the struggles of African Americans, Latinos, Native Americans and Asians, examining how these and other groups have envisioned and pursued full American citizenship. Cross List: HIST 22 Dist: SOC, WCult: CI.

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):
03. Introduction to Cultural Anthropology (WS)
06. Introduction to Biological Anthropology (F)
08. Rise and Fall of Civilizations (F)
09. Language and Culture (F)
11. Ancient Native Americans (W)
14. Death and Dying (S)
39. Archaeology of the Near East (F)
41. Human Evolution (S)

SELECTED FALL TERM COURSES (ANTH)
03. Introduction to Cultural Anthropology
Cultural anthropology is the study of human ways of life in the broadest possible comparative perspective. Cultural anthropologists are interested in all types of societies, from hunting and gathering bands to modern industrial states. The aim of cultural anthropology is to document the full range of human cultural adaptations and achievements and to discern in this great diversity the underlying covariances among and changes in human ecology, institutions and ideologies. Dist: INT or SOC; WCult: NW.

08. Rise and Fall of Civilizations
One of the most intriguing questions in the study of human societies is the origins of cities and states or the transformation from small kinship-based societies to large societies that are internally differentiated on the basis of wealth, political power, and economic specialization. Most of our knowledge of early civilizations comes from archaeology. This course examines the explanations proposed by archaeologists for the development of the first cities and state societies through a comparative study of early civilizations in both the Old World and the Americas. Dist: INT or SOC; WCult: NW.

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: SCI.

39. Archaeology of the Middle East
This course provides an introduction to the civilizations of the ancient Near East and to the history of archaeological research in this important region. Encompassing the modern nations of Iraq, Iran, Syria, Turkey, Jordan, Lebanon and Israel/Palestine, the Near East saw the emergence of the world’s first villages, cities, and empires, and is therefore central to our understanding of human history. Following an overview of its geography, this course offers a survey of Near Eastern cultural development, art, and archaeology from the earliest evidence of human settlement around 13,000 BC to the conquest of the region by Alexander the Great. Dist: INT or SOC; WCult: NW.

41. Human Evolution
The fossil record demonstrates that humans evolved from an extinct ape that lived in Africa more than 5 million years ago. Paleoanthropology is the branch of biological anthropology that seeks to document and explain the evolution of our lineage using paleontological and archaeological data. This course provides a survey of human evolution in light of current scientific debates in paleoanthropology. Emphasis will be placed on the use of bones and teeth to infer the biology and behavior of prehistoric species. Dist: SCI.

Arabic
(See program description under Middle Eastern Studies.)

Art History (ARTH)
The areas of interest represented among the art 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
Recommended Courses for First-Year Students

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 FALL TERM COURSE (ARTH)
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, art 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 global warming, economic development and migration, media and the arts, and technology. ASCL provides courses that present students with a range of methodologies used by Asian 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 FALL TERM COURSES (ASCL):
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 see our Welcome Class of 2023 page at https://biology.dartmouth.edu/welcome-class-2023.

For many students, BIOL 11 (The Science of Life) is the entrance course to the major and the minor. This is a topics-based course with no laboratory that is offered in the fall, winter and spring of the 2019-2020 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 2019-2020 academic year are:
Fall: Major Events in the History of Life and the Human Genome
Winter: Emerging Infectious Diseases-How Microbes Rule the World
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 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 FALL TERM COURSES (BIOL)
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/func-

As you explore this guide, circle seven to ten courses that interest or intrigue you. Keep your mind open and curious!
tion 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 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 energy, 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)
Please note that the Chemistry Department offers key local placement/credit-on-entrance exams only during Orientation. These are available to students only in their first year, so decisions regarding whether or not to take these exams need to be made at the beginning of Orientation. Because the departmental open houses may be held after the test offerings, you may wish to consult the Chemistry Department online. Biology 19 is open only to first-year students and enrollment is limited. Invitation to enroll will be based on performance on the Biology Placement Exam (online). Biology 19 is a foundation course equivalent of Biology 12. Dist: SLA.

5-6. General Chemistry (5E, W; 6E, S)
10. Honors First-Year General Chemistry (F)
Although there are many options for first-year students, it is important to have an early start, at least in planning, for those who wish to major in Chemistry or Biological Chemistry. Students who wish to keep open the option of majoring in Chemistry 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 interested in a combined program of chemistry and engineering should plan their programs in consultation with the undergraduate curriculum 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 well as 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 a credit-on-entrance for Chemistry 5. These students will be invited to take the Chemistry 6 credit test during Orientation. Students who have been given a 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. The department believes it has one of the best undergraduate programs in chemistry available at any college or university.
Recommended Courses for First-Year Students

mouth. Students who have a credit-on-entrance for Chemistry 5 and either a 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 who achieved a score lower than 5 on the CEEB Advanced Placement Examination, are strongly encouraged to take the Chemistry 5 credit exam at the beginning of Orientation. Please note that the Chemistry 5 test is offered only on this one occasion. Those students who pass this test will receive a credit-on-entrance for Chemistry 5 and be invited to take the Chemistry 6 credit test, which is scheduled later in Orientation. Students who pass the Chemistry 6 credit test will receive a credit-on-entrance for Chemistry 6. Students are strongly encouraged to prepare for these tests by reviewing their high school chemistry material and consulting the chemistry testing website, www.dartmouth.edu/~prep/chemistry/.

ELIGIBILITY FOR ENROLLMENT IN CHEMISTRY 10

There are two ways for first-year students to be eligible for enrollment in Chemistry 10. 1) First-year students with 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 offered at the beginning of Orientation, and who also have credit-on-entrance for, or exemption from, Mathematics 3 are eligible to enroll; 2) First-year students with credit-on-entrance for, or exemption from, Mathematics 3, but who do not have credit-on-entrance for Chemistry 5 can become eligible for enrollment in Chemistry 10 by satisfactory performance on a Chemistry 10 placement examination offered at the beginning of Orientation. Please note that enrollment is limited. All students who are admitted to the course will also receive credit-on-entrance for Chemistry 5 upon satisfactory completion of Chemistry 10.

TRANSFER CREDIT

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

SELECTED FALL TERM COURSES (CHEM) 5-6. General Chemistry

An introduction to the fundamental principles of chemistry, including stoichiometry; the properties of gases, liquids, and solids; solutions; chemical equilibria; atomic and molecular structure; an introduction to thermodynamics; reaction kinetics; and a discussion of the chemical properties of selected elements. The laboratory work emphasizes physical-chemical measurements, quantitative analysis, and synthesis. Prerequisite for Chemistry


10. Honors First-Year General Chemistry

Chemistry 10 is a general chemistry course for students with a strong background in chemistry and mathematics, and who may have an interest in majoring in the sciences. The course will cover selected general chemistry topics important for higher-level chemistry courses. These include thermodynamics, reaction kinetics, quantum mechanics, and bonding. Laboratory work will emphasize physicochemical measurements and quantitative analysis. Prerequisite: Credit for Mathematics 3 (or equivalent), and either credit for Chemistry 5, or satisfactory performance on the Chemistry 10 local placement exam. Dist: SLA.

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. Classics also sponsors two Foreign Study Programs, one in Greece and one in Italy.

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. Every Classics course addresses a wider set of critical concerns and aims explicitly to develop analytical thinking, speaking, and writing skills. The legacies of the ancient Mediterranean world are scrutinized as well as appreciated.

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 the study of Ancient Greek may take GRK 1 in Winter Term, follow 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 2019-2020:

FALL COURSES

CLST 4. Classical Mythology
CLST 6. Introduction to Classical Archaeology
CLST 20. Greek Archaeology: The Emergence of Civilization in the Aegean
GRK 10. Readings in Greek Prose and Poetry
LAT 1. Introductory Latin
LAT 10. Reading Latin Texts
LAT 15. Literature and the Romans

WINTER COURSES

CLST 7. First-Year Seminar: Greek Pessimism and the Pursuit of Happiness
CLST 10. Medical Literature of Antiquity
CLST 12. Who Owns the Past?
CLST 18. Roman History: Principate to Christian Empire
CLST 21. Greek Archaeology: From the Destruction of Mycenae to the Persian Wars
GRK 1. Introductory Ancient Greek
LAT 1. Introductory Latin
LAT 3. Intermediate Latin

SPRING COURSES

CLST 1. Introduction to Classical Studies
CLST 2. The Tragedy and Comedy of Greece and Rome
CLST 14. Greek History: Archaic and Classical Greece
CLST 25. Roman Archaeology: The First Emperors
GRK 1-3. Intensive Ancient Greek
GRK 3. Intermediate Greek
LAT 3. Intermediate Latin
LAT 10. Reading Latin Texts
illuminated manuscripts in Dartmouth’s collection. Including materials for reading Latin inscriptions and book production, textual transmission, and the nature of literacy, literature, and its academic study today: literacy, language, and study skills to allow them to take more advanced Latin courses.

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 language 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 will 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 (S)
- COGS 2. Philosophy and Cognitive Science (W)
- COGS 25/PHIL 25. Cognition (S)
- COSC 01. Introduction to Programming and Computation (F, W, S)
- LING 01. Introductory Linguistics (W, S)
- PSYC 01. Introduction to Psychology (F, S)
- PSYC 40. Introduction to Computational Neuroscience (F)

SELECTED FALL TERM COURSES (COGS)

COSC 01. Introduction to Programming and Computation (F, W, S)
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 its twin goals the scientific and engineering tasks of understanding 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 challenging interdisciplinary program that promotes the study of literatures in different languages as well as the relationships 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.

The following courses are recommended for first-year students (COLT):
- COLT 01. Read the World (F)
- COLT 10.11. Male Friendship: From Aristotle to Almodovar (F)
- COLT 10.22. Body Genres (S)
- COLT 21.01. Medieval Song (W)
- COLT 31.02. Obsessive Affinities: French and American Poetry (S)
- COLT 40.01. History of the Book (F)
- COLT 40.06. Global Comic Strip: US and Japan (S)
- COLT 40.07. Video Games & The Meaning of Life (F)
- COLT 42.03. Robbers, Pirates and Terrorists (W)
- COLT 49.07. Living in the City: Intersectional Performances in Urban Space (F)
- COLT 52.04. The Tropical Fantastic (S)
- COLT 57.07. Memories from the Dark Side: Political and Historical Repression in Europe (W)
- COLT 62.07. Cinematic City (W)
- COLT 63.02. The Conspiratorial Imagination (W)

SELECTED FALL TERM COURSES (COLT)
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 readings and 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.
10.11. Male Friendship: From Aristotle to Almodovar
This course examines representations of male relationships in literature, philosophy, psychoanalysis, and film. Texts will be drawn from the following literary and critical works: Aristotle, Martial, Montaigne, Balzac, Twain, Whitman, Nietzsche, Freud, D.H. Lawrence, Waugh, Ben Jalloul, Alan Bennett, and Derrida.

10.22. Body Genres
While both melodrama and horror as genres have often been scorned as low-brow entertainment, these kinds of narratives may also play with a certain amount of subversive self-awareness, as we will see in the works we will be studying in this class. In what ways might marking women’s bodies as “hysteric”—whether that means extreme emoting, or even physical, bodily collapse in the face of trauma—be critical of patriarchal narratives themselves? How might certain genre-specific stereotypes of female subjectivities (displayed through excesses of emotion, camp, or even the anti-realism and uncanniness of horror) actually work to deconstruct these stereotypes?

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. 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.

40.06. Global Comic Strip: US and Japan
This course focuses on comic strips from around the globe as a means of studying critical and literary theory, problems in visual translation, and a range of conventions for expressing caricature and visual humor. Topics will move from classic American comic strips to the Franco-Belgian and Japanese Manga traditions; thereafter, students will examine other traditions both collaboratively and independently.

40.07. Video Games & 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 mandomity (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.

42.03. Robbers, Pirates and Terrorists
Robin Hood, the archetypal, courteous, pious and swashbuckling outlaw of the medieval era, has become an English (literary) folk hero by way of robbing the rich to provide for the poor and fighting against injustice and tyranny. From Robin Hood via actual and legendary robbers, rebels, pirates, and corsair in the 17th and 18th centuries, to present day pirates, terrorists and guevara groups in Somalia, Latin America, Italy, Germany, and the U.S., individuals have always been involved with what they considered legitimate (though illegal) resistance against poverty, authority, patriarchy, feudalism, capitalism, and imperialism. This course will focus on representations of rebels in different cultural and historical contexts and genres such as novels, movies, dramas, and diaries, and operas.

49.07. Living in the City: Intersectional Performances in Urban Space
How do fictional characters present versions of their identities before others, especially within complex urban landscapes? How does living in cities like Paris, New York, Madrid, Hong Kong, Shanghai, and Barcelona influence one’s conception of who one is? This course will examine performances of gender, sexuality, class, and ethnicity in diverse cultural contexts as they are represented in literature, film, and other media. Works by Baudelaire, Benjamin, Butler, Gary, Colette, Varda, Wong Kar Wai, Baldwin, Woody Allen, Anyi Wang, Almodovar, and others.

52.04. The Tropical Fantastic
Magic transformations. Hauntings. Mystical worlds. Brazilian authors have been writing about the fantastic and unreal for centuries, a tradition that extends far beyond what has been characterized as “magical realism.” This course will explore this rich literature, both on its own and in a comparative perspective. In particular, we will examine the political, psychological, ecological, and historical questions that these works raise. How, for example, does fantastic literature shed light on psychoanalytic concepts such as the uncanny? How did Brazilian writers in the late 1960s use science fiction, horror, and fantasy to address the repression of the military dictatorship? What kinds of broad theoretical issues arise when looking at this genre? We will read works from “canonical” authors such as Machado de Assis, Lygia Fagundes Telles, Márcio de Andrade, and Guimarães Rosa as well as those by lesser-known and up-and-coming writers, comic artists, and filmmakers.

57.07. Memories from the Dark Side: Political and Historical Repression in Europe
On a continent where war, exile, extermination, and political and cultural repression have been pervasive over the centuries, new identities of resistance can emerge if Europeans place at their center the unforgivable memories of their shared atrocities. This course will address European integration not only as an economic or political concept but instead as a cultural practice of resistance in the arts, particularly in literature and film. Authors include Sempurn, Livi, Amery, Kis, Jelloum, Saramago and films by Resnais, Wajda, von Trotta, and CostaGavras.

62.07. Cinematic City
Since the origins of filmmaking, the urban metaphor, the city in its cultural, political, and social complexities, has been either a working political utopia of diversity, freedom, and change or a manifestation of dystopia, commodification, social inequities, and dehumanization. This course will address this contradictory conceptualization of the city as we discuss how films over the past eighty years have linked urban space with analyses of historical memory, mass culture, class relations, sexuality and identity, modernity and progress, borders and contestation, the spectral presences of power, etc. Beginning with Fritz Lang’s Metropolis (1926) and ending with Isabel Coixet’s The Secret Life of Words (2005), this course will provide a historical overview of the different kinds of political, cultural, and sexual metaphors the cinematic city articulates.

63.02. The Conspiratorial Imagination
Can we tell truth from fiction? Do our primary truth telling and reality constructing vehicles—narrative and hermeneutics—exist so that we can or can’t? In this course, we will explore two national traditions that have historically offered diametrically opposing portraits of reality: the Anglo-American and the Russian. Likewise, the object of our investigation is two-fold: conspiracy narratives and conspiracy theories. Are conspiracy theories, originally an oral genre with roots in rumor, a species of folklore? Can the same be said of conspiracies, which are hatched in whispers?

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 (F,W,S)
2. Problem Solving via Object-Oriented Programming (F, W, S)
3. Foundations of Applied Computer Science (W, S)
4. 3D Digital Modeling (F, S)
5. Computer Animation: The State of the Art (W)
6. Discrete Mathematics in Computer Science (F, W)
7. Software Design and Implementation (X, W, S)

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 advisor during Orientation to arrange to take an examination on the material.

SELECTED FALL TERM COURSES (COSC)
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 following 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.

These fall term courses are recommended for first-year students (EARS).

SELECTED FALL TERM COURSES (EARS)
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 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.

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, 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
## Recommended Courses for First-Year Students

The AP Statistics exam are also exempt from taking Economics 10.

### Non Major Courses

The majority of economics courses require Econ 1 as a prerequisite and can be used as part of the economics major. Econ 5, Adam Smith and Political Economy, will be offered in the Spring through the Political Economy Project.

### 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. Unless otherwise noted, all courses are offered in fall, winter, and spring terms.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>05. Adam Smith and Political Economy</td>
<td>10</td>
<td>Introduction to Statistical Methods</td>
</tr>
<tr>
<td>10. Introduction to Statistical Methods</td>
<td></td>
<td>(Econ 1)</td>
</tr>
<tr>
<td>15. Political Economy of China (Econ 1) (W)</td>
<td>10</td>
<td>Political Economy of Regulation (Econ 1)</td>
</tr>
<tr>
<td>20. Econometrics (Econ 10, Math 3)</td>
<td></td>
<td>(Econ 1)</td>
</tr>
<tr>
<td>21. Microeconomics</td>
<td></td>
<td>(Econ 1, Math 3)</td>
</tr>
<tr>
<td>22. Macroeconomics</td>
<td></td>
<td>(Econ 1, Math 3)</td>
</tr>
<tr>
<td>24. Development Economics</td>
<td></td>
<td>(Econ 1, 10)</td>
</tr>
<tr>
<td>26. Financial Intermediaries and Markets</td>
<td></td>
<td>(Econ 1)</td>
</tr>
<tr>
<td>27. Labor Economics</td>
<td></td>
<td>(Econ 1, Fall Only)</td>
</tr>
<tr>
<td>28. Urban and Land Use Economics (Econ 1) (S)</td>
<td></td>
<td>(Econ 1)</td>
</tr>
<tr>
<td>39. International Trade (Econ 1)</td>
<td></td>
<td>(Econ 1)</td>
</tr>
<tr>
<td>71. Health Economics and Policy (Econ 1, 10) (W)</td>
<td></td>
<td>(Econ 1)</td>
</tr>
<tr>
<td>77. Social Entrepreneurship (Econ 1, 10) (W)</td>
<td></td>
<td>(Econ 1)</td>
</tr>
<tr>
<td>79. The Clash of Economic Ideas. (Econ 1) (F)</td>
<td></td>
<td>(Econ 1)</td>
</tr>
</tbody>
</table>

### Selected Fall Term Courses (ECON)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01. The Price System: Analysis, Problems and Policies</td>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>38. Urban and Land Use Economics (Econ 1) (S)</td>
<td></td>
<td>This course is about the location of economic activities. The central focus is on urban areas and attendant problems in public economics, but some attention is given to agricultural, natural resource, and environmental issues. Topics include housing markets, transportation, local government structure, property taxes, resource depletion, and zoning and land use controls. Dist: SOC.</td>
</tr>
<tr>
<td>39. International Trade (Econ 1)</td>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

### 71. Health Economics and Policy

The goals of the course are: 1) to understand the economic forces that have created the current challenges in US healthcare; 2) to develop skills that enable you to determine what types of information, data, and analyses are needed to analyze the economics of health policies designed to expand coverage, improve quality, and contain costs; and 3) through in-class exercises and a project, to perform and present economic analysis of current topics relevant for state and federal health system reform.

### 77. Social Entrepreneurship

This course provides an introduction to the theory and practice of social entrepreneurship, defined as the process of finding innovative, sustainable solutions to social problems, particularly those related to poverty. Students will learn about the nature and causes of poverty, both domestically and internationally, 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.

### 79. The Clash of Economic Ideas.

Do the ideas of economists change the world? Or do major events change the ideas of economists? This course interweaves economic history with the history of economic thought to explore some of the major economic events that have changed our world over the past two centuries, such as the industrial revolution, the Great Depression, the collapse of socialism, and the globalization of the world economy. We will explore how the ideas of economists continue to influence how we think about how the economy works and the role of government in the economy. In particular, we will be studying the works of Adam Smith, Karl Marx, John Maynard Keynes, Friedrich Hayek, and Milton Friedman.

### 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 explore learning, development, and education at multiple levels of analysis. An interdisciplinary approach allows students to build a multifaceted and deep understanding of the complexities of the developing child, processes of learning, and the art and science of education; an understanding based on critical analyses of theory, practice, policy, and empirical data.

Most of our classes are open to all students, although we recommend taking EDUC 01 to start (see [http://educ.dartmouth.edu/undergraduate/courses](http://educ.dartmouth.edu/undergraduate/courses)). The department offers a minor in Education. The minor is designed to help students explore how children grow, think, reason, learn,
variety of skills and knowledge, and conceptualize their social and emotional worlds.

The following courses are recommended for first-year students (EDUC):
1. Introduction to Education: Learning, Development, and Teaching (F, S)
13. Disability in Children’s Education (S)
17. What Works in Education (W)
19. Educational Testing (S)
20. Educational Issues in Contemporary Society (S)
24. Education and Inequality (W)
27. The Impact of Poverty on Education (S)
30. Educational Psychology (F)

SELECTED FALL TERM COURSES (EDUC)
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 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 fall term courses have few or no prerequisites.

ENGS 4: Technology of Cyberspace (F)
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 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 (F)
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 Off-Campus Programs.
Recommended Courses for First-Year Students

In addition, we offer three 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), and a third with the Technical University of Denmark (DTU) in Copenhagen.

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/dec/ 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-semester 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
ENGL 10. Anglo-Saxon and Scandinavian Epic and Saga
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 from 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 FALL TERM COURSES (CRWT):
CRWT 10. Writing and Reading Fiction
An introductory workshop and reading course in fiction, designed to allow students to work in all fiction 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 10. Anglo-Saxon and Scandinavian Epic and Saga
An introduction both to Old English literature and to Old Norse sagas, including “The Wanderer,” “The Dream of the Rood,” “Beowulf,” “Egil’s Saga,” and “The Saga of the People of Laxardal.”

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

ENGL 52.16. God, Darwin, and the Literary Imagination
The publication of Charles Darwin’s The Origin of Species in 1859 caused a crisis in religious faith. How did the “divergent” systems of belief in God and belief in evolutionary theory shape how people understood the world and their place in it? This course emphasizes close reading as well as historical and scientific context, focusing on five themes that arose from the juxtaposition of God and Darwin in nineteenth-century British literature and culture. Creation and Design, Selection and Extinction, Heredity and Development, Time and Progress, and Human/Animal.

ENGL 53.41 Black Love & Its Discontents: Barry Jenkins
This course employs the films of contemporary writer and director Barry Jenkins, and places them in direct conversation with a larger constellation of writings within the African American literary tradition. Through our collective investigation of these texts, we will work together toward the elaboration of an aesthetics of black love.

ENGL 53.17. The Graphic Novel
With an emphasis on the careful analysis of a wide range of contemporary texts, this course examines the types of “stories” and “readings” that are made possible when normally separate symbol systems like pictures and words converge. Discussion will center on the narrative mechanics as well as the cultural work of graphic novels, as we consider the genre’s theoretical and formal preoccupations with autobiography, counterculture, parody, science fiction, and fantasy.

ENGL 53.39. Haunted Houses in American Literature
This course takes a tour of haunted houses in American literature and film. Visiting mansions and plantations, churches and asylums, apartments and cabins,
ENGL 54.15. 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 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 spend time talking about the emergence of the codex (book), medieval manuscript books, twelfth and twenty-first century artist's books, and the challenges posed by the digitality of the book form.

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 nation will receive credit on entrance for Environmental Science CEEB Advanced Placement Examination. Students who have scored a 4 or 5 on the Environmental Science AP Exam will receive advanced standing in Environmental Science 18.

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 2019-2020 courses are open to first-year students: All of the courses we teach except FS 31, 32, 34, 38, 40 and 50. Prerequisite courses especially recommended for first-year students interested in majoring in Film and Media Studies include:

1. Introduction to Film (F)
2. Introduction to Television (F)
3. Introduction to Digital Arts and Culture (X)
4. Film History I (Silent to Sound) (F)

SELECTED FALLTERM COURSES (FS)
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.

2. Introduction to Television
This course will provide and introduction to television as a form of communication grounded in earlier electronic media such as telephone and radio and looking forward to the internet, its representative stylistic confessions and genre/daytime drama/news/sports/reality (“shows”, sitcoms, etc) and the way the medium constructs audiences (e.g. age, race and gender consumer demographics). Through an exploration of concepts such as “liveliness”, segmentation and “flow”, and broadcasting, the class will also examine how television structures time and space. 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.

STUDY 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-
Relevant Courses for First-Year Students

prerequisite 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.

STUDY 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 CEEEB 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 CEEEB 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 (F, W, S)
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 (F, W, S)
Builds on skills acquired in French 1. Students deepen their understanding and further their practice of French grammar. A broad variety of assignments improves proficiency in listening, speaking, reading and writing and enhance understanding of French and Francophone culture.

2. French 11 Intensive French
   (an accelerated course that combines French 1 and 2 in one term) (F, W)
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 (F, W, S)
   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.

   Introduction to French Literature (F, W, S)
These courses improve proficiency in listening, speaking, reading and writing and enhance understanding of French and Francophone culture. OR

10. Introduction to French Literature (F, W, S)
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).

COURSE PLACEMENT AND EXEMPTION
The scores of the SAT II Subject Test and the CEEEB 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 CEEEB 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) will be used as follows:

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 frankd@dartmouth.edu.
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 (F, W, S)
Builds on skills acquired in Italian 1. 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) (F, S)
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 (F, W, S)
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 (F)
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).

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

SELECTED FALL COURSES
The following courses are recommended for First-year students:

Italian 14. Introduction to Italian Culture (F)
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)

FRIT 35. (COLT 59 INTS 17)
How to Be a Fascist (F)
Many people talk about fascism, but its definitions are at times confusing. This class will focus on the birth of fascism, its various interpretations in Italy, Germany, France, Spain, and Japan. We will look at the narratives that sustained fascism: art, architecture, propaganda, education, sport etc. The students will be in charge of drawing parallels with the present through research and discussions concerning global events. (Dist: INT; WCult: W)

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 (F, S)
2. Global Health and Society (F, W, S)
3. The Natural Environment (F)
4. 02 Introduction to Geospatial Thinking (S)
5. Global Climate Change (S)
6. Introduction to International Development (F, W)
9. Climate Change and the Future of Agriculture (W)
14. Water, Policy & Politics (F)
15. Food and Power (S)
22. Urban Geography (W)
24. American Landscapes & Culture (W)
28. Immigration, Race & Ethnicity (W)
29. Global Cities (S)
33. Earth Surface Processes and Landforms (S)
36. Climate Extremes (S)
44. Environment and Politics in S.E. Asia (S)
50. Geographical Information Systems (F, S)

SELECTED FALL TERM COURSES (GEOG)
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.
Recommended Courses for First-Year Students

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 response 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.

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: CI.

14. Water Policy and Politics
This course is designed to provide students with a general background to the issues confronting water resource management. The course covers the political, social and legal aspects confronting effective water policy decision making. One of the goals is to demonstrate that the technical aspects of hydrology occur within a socio-political arena. The material also covers the environmental aspects of water issues and the manner in which these issues are handled by regulatory agencies and the legal sector. Dist: INT or 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 fascinating city of Berlin, and its students frequently win internships and prestigious fellowships there and elsewhere in the German-speaking world. Its students also often go on to highly successful careers in business, law, medicine, education, engineering, and politics. 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, and 10.03) 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 greater 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, 10.03 and 10.06). 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).

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 FALL TERM COURSES (GERM)
1. Introductory German
2. Introductory German
Introduce German as a written and spoken language as well as salient issues of everyday and cultural life in German-speaking countries.

3. Intermediate German
Completes study of basic grammar, with emphasis on the expansion of vocabulary and development of conversational skills, as well as on the reading and discussion of texts 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 (F, S)
4. Politics of the World (F, S)
5. International Politics (F, W, S)
6. Political Ideas (F, W, S)

SELECTED FALL TERM COURSES (GOVT)
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 ideolo-
A student is advised to begin studying in history to be vigorously and genuinely contemporary. Historical inquiry is a unique means of freeing our awareness is more valuable than ever. Disciplined and epoch. In a rapidly changing world, a historical discipline of history offers a constant antidote to cultural myopia and parochialisms of nation, class, discipline, change, variety, conflict, and complexity, the experience throughout the world and across time. The aim informs all work in the department: to implement the department’s website for a complete list of history courses that are open to all students. 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.

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 (F, S)
This course will provide students with useful tools for undertaking empirical research in political science and will help them to become informed consumers 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.

2. #EverythingHasAHistory#: Understanding History Today (F & S)
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.

504. Introduction to Korean Culture (F)
This course provides an introduction to Korean culture and history, examining Korea’s visual and textual expressions from the pre-modern age to the twentieth century. What are the origins of Korean national and cultural identities? How have Korean claims of cultural distinctiveness been manifested and modified over time? Tracing answers to these questions simultaneously helps us to consider how and why Korea has entered America’s consciousness. As Korea matters to the US not simply as a fact but as a project, this course avoids portraying Korea through any generalized statements or uncritical categories. Rather, students are encouraged to explore novel perspectives on Korea and thereby unravel their own prejudices and agendas. No prior acquaintance with the Korean language is required.

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, French, Religion, Music, Russian) 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 philosophy to anthropology 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 must apply for acceptance into the sequence by July 24, 2019. For further information on how to apply, please see www.dartmouth.edu/~hum11-2/.

SELECTED FALL TERM COURSE (HUM) 1. Dialogues with the Classics
Through a selection of compelling books and artworks from antiquity to the present, the course...
Recommended Courses for First-Year Students

introduces students to key moments 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 Baudelaire, Homer, Munro, Vieux-Chauvet, Cervantes, Shakespeare, Salih and Morrison, as well as units on opera, Northern Renaissance art, 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 grounding in one discipline 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. 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 (F, W, S)
16. Introduction to International Development (F, W, S)
17. Cultures, Places, & Identities (F, W)
18. Global Health & Society (F, W, S)

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 students with a broad introduction to Judaism and Jewish culture, with a particular focus on the historical, literary, and philosophical aspects of the religion of Israel. The program offers a variety of courses designed to introduce students to the richness and diversity of Jewish experience, including the study of Jewish history, literature, religion, and culture. The program also offers opportunities for students to engage with Jewish thought and practice through seminars and workshops.

JWST 04 (REL 04) Religion of Israel: The Hebrew Bible (Old Testament) (S)
An introduction to the religion of ancient Israel through an examination of the biblical text. Open to all classes.

JWST 06. (REL 06) Introduction to Judaism (F)
This course offers an introduction to Judaism by examining three of its central spiritual manifestations: (1) development, observance, and study of the Halakah (religious law); (2) philosophical contemplation; and (3) mystical experience and theosophical speculation. Ancient and modern challenges to the tradition will be studied in some detail, and an attempt will be made to determine what might constitute a unity of such a diverse tradition.

JWST 07.06. Prague, Jews, and Mystery (W)
Today, Prague in general, and its Jewish Quarter in particular, have an air of mystery about them. Tour guides are ready to help fill in where walls maintain their silence. Some of their stories have a basis in fact; some most patently do not. How do professional historians relate to this complex, layered reality? How do we find meaning in the stories that have been told? What do they tell us about relationships of Jews to their non-Jewish surroundings and of non-Jewish Prague residents and visits to the city’s Jews? By designing, researching, and writing a short research paper, students will themselves act the part of professional historians, using existing research to identify specific questions about these relationships, and primary sources to respond to these queries.

JWST 28. (WGSS 43.5, REL 56) Women and the Bible (F)
As contemporary Jewish and Christian communities of faith face the question of the role of women within their traditions, many turn to the Bible for answers. Yet the biblical materials are multivalent and their position on the role of women unclear. This course intends to take a close look at the biblical tradition, both the Hebrew Bible (Old Testament) and the New Testament, to ask what the Bible does—and does not say—about women. Yet the course is called “Women and the Bible,” not “Women in the Bible,” and implicit in this title is a second goal of the course: not only to look at the Bible to see what it actually says about women, but also to look at differing ways that modern feminist biblical scholars have engaged in the enterprise of interpreting the biblical text. Open to all classes.

JWST 40 (GOVT 40) Politics of Israel/Palestine (F)
This course examines the history of Zionism, Palestinian nationalism, the formation and development of the State of Israel, conflicts in the Middle East, and Israeli cultural developments, including literature, film, religious thought, and new forms of Jewish identity.

JWST 53. (WGSS 33, REL 19) Gender and Judaism (F)
This class will draw upon contemporary gender theory, religious texts and contemporary interpretations of Jewish thought and culture to examine the construction of Jewish identity through a feminist lens. Authors will include Adler, Boyarin, Heschel, Gilman, Peskowitz, Levitt and Biale. The class will also investigate questions of race, ethnicity, assimilation and Jewish gender issues in popular culture, including films and the work of performers Cantor, Benny, Berg, Milder, and Sandler.

JWST 61. (REL 22) Modern Judaism (W)
This course will trace the ways Jews in modernity adapted modern thought, culture, and politics in their recalibration of Judaism. The role Jews played in modernity is well-known. But how did Jews re-think Judaism in ways that enabled it and them both to survive the challenges of modernity and also retain a sense of difference enough to enable Jews to assimilate yet not disappear. In this course we will look at some of the major trends and thinkers from the 17th through the 21st centuries as they struggled to reinterpret Judaism for the modern age. Open to all classes.

JWST 62. (REL 23) Jewish Mysticism (F)
The course examines the nature of claims to mystical experience or knowledge that appear in various aspects of the Jewish tradition, with primary focus on the enchanted and demonic worlds of the Kabbala. Forms of ecstasy and magic will be studied, along with their theoretical and social backgrounds and their impact on elitist and popular Jewish practice. Open to all classes.

JWST 65. Messianism in Comparative Perspective: Jewish, Christian, and Islamic Messianism (S)
This course will cover the development of the messianic idea from its antecedents in the Book of Esther to its elaboration in the New Testament and its interpretation in the understanding of the role of a Messiah among Judaism, Christianity, and Islam. The course will examine the messianic idea in its historical development and its significance in the religious and political thought of these traditions. The course will also consider the role of messianic ideas in popular culture and contemporary political movements. Open to all classes.
of Daniel and intertestamental literature up to the modern period. We will discuss the development of the messianic idea as it changed in response to historical events and how this idea influenced other dimensions of Judaism. We will also compare the Jewish notion of messianism to Christian and Muslim messianic thinking.

JWST 66. Jews and Arabs in American Society (F) This course analyzes different aspects of Arab and Jewish life in the United States. It explores cultural representations of Jews and Arabs in American literature, cinema and popular culture, with attention to aspects of class, race and gender as well as political images. The course analyzes the political expressions of Jewish-Americans and Arab-Americans and their relations to the Middle East, the Israeli-Palestinian conflict in particular.

JWST 74.01. (REL 57.02) Jewish Jesus (S) It is certain that Jesus of Nazareth lived in the first century C.E. and that his followers interpreted his life and death as harbingers of a new age. However, recent scholarship has made clear that Jesus was fully embedded in the Judaism of his time: the Jewish diversity of the period and Jewish resistance to the Roman Empire. This course will describe the life of Jesus the Jew prior to the early Church’s interpretation of Jesus as Christ.

Latin American, Latino and Caribbean Studies (LALACS) LALACS is an interdisciplinary program that offers courses in the social sciences and humanities 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 relationships. 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 and its Latin American and Caribbean neighbors. Courses in Latino Studies are well suited to help Dartmouth students understand the United States and its Latin American and Caribbean neighbors.

The following courses are recommended for first-year students:
LACS 1. Introduction to Latin America and the Caribbean (F, S)
LACS 24.5 Latsploitation (W)
LATS 3. Latinx Lives in the US (F)
LATS 17. Latinx Nineteenth Century (F)
LATS 44. Crossing Over (S)

SELECTED COURSES (LACS)

LACS 24.5 Latsploitation
Latinx audiences have long been an interest and target of the Hollywood studios. Applying theories of racialized spectatorialship 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 locales; and media and popular culture. Course materials will draw from the social sciences and the humanities, as well as from US and Latin American scholarship and cultural traditions.

LATS 17. Latinx Nineteenth Century
The course will proceed chronologically across a variety of genres, including political pamphlets, poetry, autobiography, historical novels, and sensational fiction. This class considers the imagination of a Latinx nineteenth-century as a set of changing entanglements between the US and Latin America, conditions of freedom and slavery, as well as forms of conquest and dispossession.

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 01, 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 (F, W, S)
11.12. Language and Cognition (F)
17. Sociolinguistics (S)
20. Experimental Phonetics (LING 01 Prerequisite) (S)
24. Discourse Analysis (LING 01 Prerequisite) (S)
27. Historical Linguistics (LING 01 Prerequisite) (W)

SELECTED FALL TERM COURSES (LING)
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. Staff. Dist: QDS.

11.12. Language and Cognition
This course examines some of the interrelationships between language and thought. Do people who speak different languages think differently? What does language tell us about the ways in which people conceptualize objects and ideas? How does language relate to other cognitive processes? Is language a uniquely human ability? Topics include linguistic relativism, folk taxonomies, metaphor, causation, space, time and gender. No prior courses in linguistics or cognitive science are required. Whaley. Dist: QDS; WCult: W.

18. History of the English Language
This course traces the development of English as a spoken and written language belonging to the Indo-European language family. We will work forward from Proto-Indo-European through Old English (Beowulf), Middle English (Chaucer), and Early Modern English (Shakespeare), up to contemporary American English. Our focus will be on the structural history of the language, especially changes in pronunciation and grammar, and the implications of those changes for English as spoken and written today. Poluž. Dist: QDS; WCult: W.

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.
Recommended Courses for First-Year Students

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

1. Introduction to Calculus (F)
2. Calculus (F, W)
3. Applications of Calculus to Medicine and Biology (S)
4. Exploring Mathematics (F, W)
5. First-Year Seminar (S)
6. Calculus of Functions of One and Several Variables (F, W, S)
7. Multivariable Calculus with Linear Algebra (F)
8. Introduction to Statistics (S)
9. Accelerated Multivariable Calculus (F)
10. Multivariable Calculus (F, W, S)
11. An Introduction to Mathematics Beyond Calculus (W, S)
12. Discrete Probability (F, S)
13. Linear Algebra (F, S)
14. Differential Equations (F, W, S)
15. Linear Algebra (Honors Section of Mathematics 22) (W, S)
16. Introduction to Combinatorics (W)

Credit and Advanced Placement

Qualified students may receive credit 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 Fall Term Courses (MATH)

1. Introduction to Calculus
   This course is an introduction to single variable calculus for students who have not taken calculus before. Students who have 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.

2. Calculus
   This course is an introduction to single variable calculus aimed at students who have seen some calculus, but not enough to place out of MATH 3, either before or after matriculation or in MATH 1. MATH 3 begins by revisiting the core topics in the calculus sequence are placed in Mathematics 11. Topics include vector geometry, equations of lines and planes, matrices and linear transformations, space curves (velocity, acceleration, arclength), 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.

3. Multivariable Calculus
   This course is a sequel to Mathematics 8 and provides an introduction to calculus of vector-valued functions. Topics include differentiation and integration of parametrically defined functions with interpretations of velocity, acceleration, and 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 FALL TERM COURSES

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.


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 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. Gliner.

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; or in voice. Students may also receive credit for our chamber music, jazz, and contemporary performance laboratories (MUS 30) and for performance in a Hop ensemble (MUS 59). A first-year seminar is offered in the winter quarter. 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 (F)
2. Global Sounds (S)
3. 502. History of Jazz since 1959 (F)
4. 6. Masterpieces of Western Art Music (S)
5. 7. First-Year Seminar (W)
6. 8. Programming for Interactive Audio-Visual Art (F)
7. 16.02. Music and Media in Everyday Life (W)
8. 20. Introduction to Music Theory (W)
9. 21. Melody and Rhythm (prerequisite: Music 20) (F)
10. 25. Introduction to Sonic Arts (F, S)
11. 30. Composition Seminar (S)
12. 34. Sound Art Practice (S)
13. 42. From Plato’s Republic to Mozart’s Magic Flute (Early Classical Music) (F)
14. 43. From the French Revolution to The (R)evolution of Steve Jobs (Modern Classical Music) (W)
15. 46. Video Games and the Meaning of Life (F)
16. 50. Performance Laboratories, Sections 1, 2, 3 (F, W, S)
17. 52–58. Studies in Musical Performance (Individual Instruction Program) (F, W, S)
18. 59. Ensemble Performance and Leadership (F, W, S)

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 FALL TERM COURSES (MUS)

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.

5.02. History of Jazz since 1959

This class examines developments in jazz, starting with historic 1959 recordings by Ornette, Coltrane and Miles Davis, followed by soul jazz, modal jazz, jazz funk, the avant-garde, big bands, Afro-Latin jazz and world jazz. Class work includes close listening, discussions, collaborations and in-class presentations. Students also complete required reading, listening and writing assignments and attend jazz performances, resulting in a deeper understanding and appreciation for jazz and improvisation, both
Recommended Courses for First-Year Students

worldwide and in our daily lives. No prerequisite. Dist: ART; WCult: W.

8. Programming for Interactive Audio-Visual Art This course introduces programming techniques necessary to generate interactive audio-visual art on a computer. Students write their own programs to create compositions with which users can interact whilst learning fundamental concepts of how to represent and manipulate color, two- and three-dimensional shapes, sounds, images, motion, video, and the Web. Coursework includes short programming assignments, to practice the concepts introduced during lectures, and projects to explore audio-visual composition. The course assumes no prior knowledge of programming. No prerequisite. Dist: TLA.

42. From Plato’s Republic to Mozart’s Magic Flute (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 Comtesse 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 (Ni-noche and Harvest Moon) to the perils of obedience (Arends and The Stanley Parable), from metaphors of illness (Susan Songt 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 repertoire 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 (F, S)
14. (HIST 14) The Invasion of America: American Indian History pre-contact to 1830 (F)
15. (HIST 15) American Indians and American Expansion: 1800 - 1924 (S)
16. (HIST 39) 20th Century Native American History (W)
18. (ENVS 18) Indigenous Environmental Studies (F)
25. Indian Country Today (F)
28. Native Americans and Sports
35. (ENGL 32) Native American Literature (S)

SELECTED FALL TERM COURSES (NAS)
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. Indigenous Environmental Studies 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: philosophy.dartmouth.edu.

The following courses are recommended for first-year students (PHIL):
1.01 The Problems of Philosophy (F, S)
1.03 Philosophy and Economics (W)
1.08 Philosophy of Time & Time Travel (S)
1.09. Science, Superstition, and Skepticism (F)
1.11 True, Beautiful, Nasty: Philosophy and The Arts (W)
3. Reason and Argument (F)
4. Philosophy and Gender (F)
5. Philosophy and Medicine (S)
6. Logic and Language (W, S)
7. First-Year Seminars in Philosophy (W)
8. Introduction to Moral Philosophy (S)
9.10. Reproductive Ethics (F)
9.07. Ethics of Freedom, Paternalism, and Intervention (F)

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 FALL TERM COURSES (PHIL)
1.01 The Problems of Philosophy This course acquaints the student with some of the fundamental problems in at least three main areas of Philosophy: Theory of Knowledge, Metaphysics, and Ethics. Questions treated in lectures normally include: Can we know anything, and, if so, how? Does God exist? What is the relation between mind and body? Are our actions free or determined? What makes an act morally right or wrong? Some attention will be paid to the ways in which answers to these questions can be combined to create philosophical systems or total world views. The readings might include both contemporary essays and classic works by such philosophers as Plato, Descartes, and Hume.

1.09 Science, Superstition, and Skepticism Most of us believe that matter is made up of atoms, that smoking causes emphysema, and that the universe is billions of years old. Few believe that Virgos are hot-tempered, that you can see the future through a crystal ball, or that baking soda cures AIDS. We often hear that the difference between such beliefs is that one sort is based on science and the other isn’t. But what makes a method of inquiring into the world distinctively scientific? And what makes us justified in believing on the basis of these methods? This course is an introduction to the philosophical theory of knowledge that focuses on the knowledge that science is purported to offer. Possible topics include competing theories of justification, scientific induction, the nature of explanation, probability, scientific revolutions, the goals of science, trust in scientific authority, and skepticism.

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 criti-
cism of arguments, the course will also consider the methods for constructing arguments that are both logically correct and persuasive.

4. Philosophy and Gender
This course will focus primarily on the following questions: What is feminism? What is sexism? What is oppression? What is gender? Is knowledge gendered? Is value gendered? What is a (gendered) self? What would liberation be? In exploring these issues, we will examine the ways feminist theorists have rethought basic concepts in core areas of philosophy such as ethics, social and political philosophy, metaphysics, epistemology, philosophy of law, and philosophy of mind.

9.01 Reproductive Ethics
What do we owe human life, once it has begun to develop? Is a woman morally required to continue gestating a fetus, once it has begun developing? Does the answer depend upon whether or not the fetus is a person? Some forms of assisted reproduction yield a surplus of human embryos. Is using these embryos for research moral? Is it moral to dispose of them? What may we do in the interest of creating human life? We tend to grant people broad procreative liberty. Should deaf couples be allowed to select for deafness? And what about choosing enhanced traits for our children? People worry we are facing a future where the rich can design their babies—choosing to create a musical prodigy or a baby Einstein—but the poor cannot. If so, is distributive justice the only concern about such a future?

9.07 Ethics of Freedom, Paternalism, and Intervention
We will begin by considering foundational issues in the morality of attempts to steer actors (people as well as states) towards better outcomes. We apply the resulting theories to concrete issues such as speech, health, drugs, guns, dangerous pursuits, incarceration, and intervention in the affairs of other nations.

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 one of them may be taken independently of the others. Students who have had a substantial physics background in high school. Students interested in majoring in astronomy should consult Professor John Thorstensen. A brochure describing the major, including research 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 (S, X)
2. Exploring the Universe (F, X)
3. Exploring the Universe with Laboratory (F, X)
4. Stars and the Milky Way (W or S)

Astronomy has a Foreign Study Program in South Africa, open to both majors and non-majors. Students intending to do the FSP should postpone taking Astronomy 15 until the FSP term. The FSP is offered in alternate winter term, with the next offering 21W.

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 (fall and winter) 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 a local placement exam offered by the department during New Student Orientation. These two courses together cover the material of Physics 13, Physics 14, and Physics 19. Students who complete Physics 15/16 and have sufficient math may move into intermediate physics (40’s level).

Physics 3 (F, X) and Physics 4 (W, S) 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 Kristina Lynch. 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 or 31

Students with exemption from Math 3 or 8 and placement into Physics 15 via the departmental local placement exam may opt to take:

F - Physics 15, Math 8 or 13
W - Physics 16, Math 13 or 23
S - Physics 31 or 40’s level

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 performance 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. Kristina Lynch) of the Department of Physics and Astronomy during Orientation. Such students may be required to pass a proficiency examination in order to obtain credit.
Recommended Courses for First-Year Students

### SELECTED FALL TERM COURSES

#### 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 majors. Prerequisite: Mathematics 3. Dist: SLA.

15. **Introductory Physics I**
The fundamental laws of mechanics. Reference frames. Harmonic and gravitational motion. Thermodynamics 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. Prerequisite: 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 mathematics enables them to study the material at a greater speed than is possible in regular sections. Classical dynamics of particles and rigid bodies. Special Relativity. Introduction to Quantum Mechanics including wave-particle duality of radiation and matter. The Uncertainty Principle and the Schrödinger equation in one spatial dimension. One laboratory period per week. Supplemental course fee may be required. Prerequisite: Mathematics 8 or 9 concurrently and achieving a threshold score on the physics department 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 understanding how the brain functions, drawing from psychology, biology, chemistry, engineering, medicine, and computer science. The Department of Psychological and Brain Sciences offers courses in social interaction, sensation and perception, the 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 I (Introductory Psychology) serves as a broad-based introduction to psychology as the science 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 (F, S)
2. General Psychology (F, S)
3. Exploration of Psychology (S)
4. Exploration of Psychology: Health, Sport, and Exercise (S)
5. Psychology of Social Interaction (S)
6. Introduction to Neuroscience (F, W)

#### 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 FALL TERM COURSES (PSYC)

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: SCI.

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

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Which courses in this guide excite you? Which courses pique your intellectual curiosity?
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 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 2020 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 Jane DaSilva, Public Policy Program Coordinator, via e-mail or at (603) 646-2229.

The following courses are recommended for first-year students (PBPL):
5. Introduction to Public Policy (W)
27. Affirmative Action in Higher Education (S)
28. Law, Courts and Judges (S, X)
41. Writing and Speaking Public Policy (S)
42. Ethics and Public Policy (F, S)
43. Social Entrepreneurship (W)
46. Policy Implementation (S, X)
48. Introduction to Public Policy Research (F)
50. Leadership in Civil Society (S)
52. Leadership in Political Institutions (W)

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 the minor or the major in QSS combine a specialization in one of the social sciences with foundational coursework in mathematics, computer science, data analysis, and modeling. 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 FALL TERM COURSE (QSS)
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 pursue coursework in QSS or continue in the social, biological, or physical sciences. Dist: QDS.

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: religion.dartmouth.edu.

The following courses are recommended for first-year students (REL):
1.01 What Matters (F)
1.05 Religion and Gender (W)
1.06 Getting Religion (F)
4. Religion of Israel: The Hebrew Bible (Old Testament) (S)
5. Early Christianity: The New Testament (S)
6. Introduction to Judaism (F)
7. First-Year Seminar in Religion (W)
9. Hinduism (W)
10. The Religions of China (F)
11.01 God and Money (F)
14. Introduction to African Religions (W)
18. Indian Buddhism (F)
19.14. Cosmos, Justice & Evil (S)

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 FALL TERM COURSES (REL)
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.

6. Introduction to Judaism
This course offers an introduction to Judaism by examining three of its central spiritual manifestations: (1) development, observance, and study of the Halakha (religious law); (2) philosophical contemplation; and (3) mystical experience and theosophical speculation. Ancient and modern challenges to the tradition will be studied in some detail, and an attempt will be made to determine what might constitute a unity of such a diverse tradition.

10. The Religions of China
An introduction to China’s three major religions—Confucianism, Daoism, and Buddhism—through the reading of classic texts. Also, a look at important elements in Chinese folk religion: ancestor worship,
Recommended Courses for First-Year Students

temples, heavens and hells, and forms of divination. Special attention will be paid to the importance of government in Chinese religious thought and to continuity and change in the history of Chinese religion.

11.01 God and Money
This course introduces students to the problems and concerns of the study of religion by examining the interaction between economic and religious discourse and practice. Money has long been an object of reflection in philosophical, ethical, and religious traditions. We will explore money as a social phenomenon, a way human communities construct meaning and relationships, deal with power and obligation, and communicate what matters to them. We seek to understand what money is, how it interacts with moral categories like guilt and human value, and how it shapes areas of life such as identity, friendship, love, and sex. We also examine perspectives emerging from religious and ethical traditions concerning the presence of money in modern life. In so doing, we grapple with issues of individual and communal meaning, identity, and value judgment, as well as the challenge of defining what counts as religion—concerns that are integral to the discipline of religious studies and central to humanistic inquiry more broadly.

18. Indian Buddhism
An introductory survey of the Buddhism of South Asia from its beginnings in the 6th century B.C.E. to its eventual demise in the 12th century C.E. Emphasis will be given to the major beliefs, practices, and institutions characteristic of Indian Buddhism, the development of its different varieties (Hinayana, Mahayana, and Vajrayana), and its impact upon South Asian civilization at large.

Russian (RUS)
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 the history of human rights in Russia—that bring to the classroom in small, intensive seminars and large introductory courses for non-majors. Our summer study abroad program is built around homestays but also includes travel to Russia's medieval cities and thriving centers. 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. Russian 3 satisfies the College language requirement and gives the student access to the LSA+ program at St. Petersburg. It also qualifies students for Russian 27, which serves as gateway courses 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 LSA+ at the University of 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 (RUS):

7. First Year Seminar (W)
13. Slavic Folklore: Vampires, Witches and Firebirds (F, S)
31. The World as Word: 19th Century Russian Fiction (W)
36. The Seer of the Flesh: Tolstoy’s Art and Thought (F)
50.01 Russia and the West (S)
50.02 The Russian Revolution (F)

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 FALL TERM COURSES (RUS)

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

7. First Year Seminar: Poetry without Borders
What is poetry and what can it do? How do poems come to be—how are they made? Without borders (the white space around the poem—the finitude of a line—the border dividing poetry from prose, music and other art forms—the national languages that poetry inhabits) can poetry exist? And how are we supposed to read poetry?

This course examines the cultural practice of poetry, with an emphasis on four different kinds of borders that both define poetry and are frequently overcome by poetry: formal features (repetition, rhythm, rhyme), language (what happens when poems cross languages—get translated?), other art forms (poetry and music, poetry and dance, poetry and visual arts, poetry and film) and finally, public life (when and how does poetry come off the page and begin to do things in public? can a poem be a force for good or evil?).

In addition to writing formal analyses of individual poems, students will write and translate poetry of their own, and conceive (through consultation with the professor) a final project that engages with one of the four “border” themes. Dist: LIT; WCult: W Morse

In this course, we will discuss a variety of genres from Russian folklore. As we move from the familiar genre of the riddle to the often mystifying beliefs and rituals of the ancient Slavs and then to the fairy tale, comfortably familiar from childhood, we will learn to not only recognize the richness and density of texts that may initially seem uncomplicated but also to discern the patterns and meanings behind the apparently exotic narratives and behaviors. By thoroughly studying one of the world’s richest oral traditions, Slavic folk life and folklore, we will acquire the tools and techniques necessary for collecting, documenting, and interpreting folklore—which is perhaps the most truly international of all arts. The course is based on materials in Russian and East European cultures, but also draws from other traditions. Open to all classes. Dist: INT or LIT; WCult: W

36. Seer of the Flesh: Leo Tolstoy’s Art and Thought
Leo Tolstoy—novelist, religious thinker, pacifist, international celebrity—was also a great seer. This course will ask: what is the relationship of seeing to literary art? What distinguishes Tolstoy’s seeing from our own mundane vision? What do we see with his help that would otherwise remain hidden? How is the way we see forever changed by reading Tolstoy? We will trace Tolstoy’s artistic and intellectual development from his earliest work, the luminous and semi-autobiographical Childhood, to the most incendiary of his post-conversion stories, the Kreutzer Sonata. The centerpiece of our course, however, will be War and Peace, one of the greatest novels of all time—if it is a novel at all. Dist: LIT; WCult: W

Juharyan
50.02 The Russian Revolution
The Russian Revolution of 1917 and the Bolshevik seizure of power proved to be among the most important events of the 20th century, and they had profound implications for the course of world history that continue to reverberate today. In this course, students will examine the causes and consequences of these momentous occurrences and grapple with a set of complex and intricate questions that still divide historians, from the fall of the Romanov dynasty to the origins of the Soviet experiment, the attempt under Lenin and then...
Pay attention to the breadth of the liberal arts curriculum as well as the potential depth of an area of study.

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 are recommended first-year courses (SOCY):

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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.

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 FALLTERM COURSES (SPAN)

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 languages 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 (F, W, S)
- Sculpture I (F, W, S)
- Special Topics (F, S)
- Architecture I (F, W, S)
- Photography I (F, W, S)
- Printmaking I (F, W, S)
- Figure Sculpture (S)
- Figure Drawing (W)

SELECTED FALLTERM COURSES (SART)

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 their own sculpture and taking in other other materials. 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 2D form to 3D 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 image-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
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.

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 fall MainStage or student-directed productions should visit our website for up-to-date information at http://theater.dartmouth.edu/. We also encourage students to visit our exciting Open House during orientation.

In order 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, as well as 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 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):

1. Introduction to Theater (F)
2. Special Topics in Theater (F, W, S)
3. Theater and Society I: Classical and Medieval Performance (F)
4. Theater and Society II: Early Modern Performance (W)
5. Theater and Society III: 19th and 20th Century Performance (S)
6. Black Theater, USA (F)
7. Asian Performance Traditions (S)
8. Movement Fundamentals I (F)
9. Acting I (F, W, S)
10. Technical Production (F, W, S)
11. Stage Management (W)
12. Lighting Design I (W)
13. Costume Design I (F)

SELECTED FALL TERM COURSES (THEA)

1. Introduction to Theater
   As a set of staged practices rich with social context, theater has sought to document, engage, and affect communities. This course introduces and explores theater from page to stage as a live performing art. Topics include the relationship between theater and society (historical and contemporary), dramatic structure, theatrical representation, and the crafts of theater artists such as directors, designers, playwrights, and actors. We will also engage with live performances and video archives of past performances. Dist: ART.

2. 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.

3. Black Theater, U.S.A.
   This course will examine African American playwrights, drama, and theater from 1959 to the present. Further exploration will focus on the impact of civil rights, the Black Arts movement, and cultural aesthetics on the form, style, and content of African-American plays. Readings will include plays of Hansberry, Baldwin, Baraka, Kennedy, Childress, Shange, Wolfe, Wilson, Parks and others. Dist: ART; WCult: CI.

4. 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.

5. 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 on the first day of classes 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.

48. Costume Design
   An introductory course in the appreciation of the costume design process as part of the dramatic production. Through weekly projects, students will study the principles of line, texture, and color as well as the history of costume from the Renaissance through the eighteenth century. Class includes lectures, design projects, and critiques. 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
Recommended Courses for First-Year Students

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 FALL TERM COURSE (WGSS)
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 student support services through RWTT (The Student Center for Research, Writing, and Information Technology). 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 two-term equivalent Writing 2-3, and a First-year Seminar. Humanities 1-2 may be taken as another way of fulfilling the first-year writing requirement. For details, see https://www.dartmouth.edu/~hum1-2.

DARTWRITE DIGITAL PORTFOLIO
Your DartWrite digital portfolio is a personal WordPress site where you can archive your best 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 WRITING 2-3 AND WRITING 5
In a separate mailing in early June, details and instructions are sent to invited students regarding the online directed self-placement process for writing courses. This web-based process has been designed to allow students to have their writing evaluated and to receive a recommendation about whether to take Writing 2-3 or Writing 5.

Students who did not receive an invitation by June 10 to complete the online placement process but feel that they would benefit from taking the Writing 2-3 course should contact the Institute for Writing and Rhetoric as soon as possible by email: writing.two.three@dartmouth.edu.

Students who complete the online writing placement process and accept placement into Writing 2-3 will be preregistered for Writing 2 when they arrive on campus in the fall. Students who take the Writing 2-3 sequence take their First-year Seminar in the spring term.

Students who are not invited to participate in the online directed self-placement process for writing courses will take Writing 5 or Humanities 1. Students taking 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 FALL TERM COURSES
WRITING (WRIT)
2-3. Composition and Research
This two-semester 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 them-selves 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.

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

5. Expository Writing
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.

Students must successfully complete Writing 5 (or Writing 2-3) and a First-Year Seminar in order to fulfill the first-year writing requirement. This course does not serve in partial satisfaction of the Distributive Requirement.

20. Understanding the Rhetoric of Media Culture
In this class, students will learn to read the media images that surround us daily. We’ll begin by understanding that use of images, whether print, digital, or even artworks, is always allied with class interests and intended to perpetuate those interests. Thus, while advertising images may sell products, they also sell (or shape) identities, values, and worldviews. We’ll look at the strategies of corporate narratives, then, to ask what else, besides the use value of the product itself, the narrative is selling. Why, for instance, would the popular American clothing company, Banana Republic, choose a brand reminiscent of colonialism? Or, alternatively, why would a coffee company promote its interest in fair trade and global sustainability over the quality of its coffee beans? Assuming that corporations exist to sell product and satisfy shareholders before promoting good will, we might ask what they know of consumers that we might not even know of ourselves? Students in this class will study the rhetorical strategies used when corporations develop cultural narratives designed to shape perspectives. This work will enable them to make informed and responsible choices as citizens and consumers. No prerequisites. Dist: ART.

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.
The Health Professions Program (HPP) is Dartmouth’s four-year pre-health 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 walk-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, 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 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. This allows for at least four years to take the prerequisite courses, develop as a person, and prepare for the MCAT. The average age of a student entering medical school is currently 24 or older which implies (at least) one year between graduation and medical school. 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 will 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 stu-dent. 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 a future 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 pre-pared 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 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 if 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 recom-mended; 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.
We intentionally chose these questions and prompts to inspire you to reflect on your intentions, and prepare for the transition from high school and secondary school to Dartmouth.

Use this worksheet as a starting point and refer back to it often! Bring your EXPLORE, ENGAGE, EXCEL and the completed worksheet to meetings with your Undergraduate Dean, your Faculty Advisor, other mentors, and peer advisors.

The primary purpose of Local 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 you are wondering where to begin with a particular academic sequence.

**LOCAL PLACEMENT EXAMS YOU PLAN TO TAKE DURING ORIENTATION:**

**WHAT MAKES YOU UNCERTAIN ABOUT ACADEMIC SUCCESS?**

**WHAT WILL HELP YOU SUCCEED ACADEMICALLY AT DARTMOUTH?**

**WHEN THINKING ABOUT THE ADJUSTMENTS NEEDED** to transition from high school to college learning, it helps to consider what skills you bring with you, and the areas in which you might need additional support.

**USING THIS GUIDE, LIST THE COURSES THAT INTRIGUE YOU.**
CONSIDER THESE THINGS WHEN CHOOSING COURSES FOR YOUR FIRST YEAR:

1) Take classes that EXPLORE academic interests (leave room for new, old, and unrealized opportunities of academic connection).

2) Distributive Requirements: We encourage you to choose distributive requirements with purpose and clear goals. We discourage you from choosing a class that just “checks off” a distributive requirement. These requirements are NOT intended to be completed in the first two years or prior to beginning a major.

3) First-year Writing Requirement: Be sure to allow space for these required courses during your first year. For details see pages four and five of this publication and https://writing-speech.dartmouth.edu/curriculum/placement-and-enrollment-policies.

4) The Language Requirement: When to start? Will you complete it using language course numbers 1-2-3? Are you thinking about finishing your language requirement with a Language Study Abroad program (LSA/LSA+)?

5) Pay attention to course sequencing and plan for prerequisite courses—especially for pre-health requirements, an off-campus program, or a potential major.

6) Remember: You do not need to take a course just because you were placed into the course.

WHAT ACADEMIC AND CO-CURRICULAR OPPORTUNITIES EXCITE YOU AS YOU IMAGINE YOUR FIRST YEAR AT DARTMOUTH?

Make sure to consider co-curricular opportunities, classes, clubs, campus jobs, getting to know faculty, and skills to develop.

POTENTIAL FIRST-YEAR COURSES

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New Student Orientation  
**SEPTEMBER 10-15, 2019**

Fall Term Classes Begin  
**SEPTEMBER 16, 2019**

Fall Term Classes End  
**NOVEMBER 19, 2019**

Fall Term Examinations  
**NOVEMBER 22 - 27, 2019**

Residence Halls Close at Noon  
**NOVEMBER 27, 2019**

Residence Halls Open  
**JANUARY 4, 2020**

Winter Term Classes Begin  
**JANUARY 6, 2020**

Winter Term Classes End  
**MARCH 6, 2020**

Winter Term Examinations  
**MARCH 9 - 13, 2020**

Residence Halls Close at Noon  
**MARCH 13, 2020**

Residence Halls Open  
**MARCH 28, 2020**

Spring Term Classes Begin  
**MARCH 30, 2020**

First-Year Family Weekend  
**MAY 1 - MAY 3, 2020**

Spring Term Classes End  
**JUNE 3, 2020**

Spring Term Examinations  
**JUNE 5 – 9, 2020**

Residence Halls Close at Noon  
**JUNE 10, 2020**

This Bulletin has been prepared for the benefit of incoming students. The officers of the College believe that the information contained herein is accurate as of the date of publication (June 2019).

However, Dartmouth reserves the right to make from time to time such changes in its operations, programs, and activities as the trustees, faculty, and officers consider appropriate and in the best interests of the Dartmouth community.

This publication can be made available in alternative media. Contact the Undergraduate Deans Office (see below).

**UNDERGRADUATE DEANS OFFICE**  
https://students.dartmouth.edu/undergraduate-deans/  
Undergraduate.Deans.Office@Dartmouth.Edu  
603-646-2243

**PHOTOGRAPHS BY:** Eli Burakian ’00, Robert Gill, Jacob Kupferman ’14, Joseph Mehling ’69

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