

# EXPLORE · ENGAGE · EXCEL

AN INTRODUCTION TO ACADEMICS AT DARTMOUTH COLLEGE







# How to Use This Guide



In order 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.

We will keep asking you questions, such as:

- · Why are you interested in that course?
- · Why are you not interested in this other course?
- · Which foreign language looks most interesting to you?
- · 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 here at Dartmouth to support and encourage your exploration and discovery. The offices in Student Academic Support Services (see page three), 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.

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 your 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.

- 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.



Coming Soon: We will email you about video chats that will offer a chance to discuss the curriculum with undergraduate deans and others.

# Advising at Dartmouth

# SASS

# STUDENT ACADEMIC SUPPORT SERVICES

A COLLABORATIVE
UNDERGRADUATE
ADVISING SYSTEM,
STRIVING TO PROVIDE
HOLISTIC ADVISING
TO ALL STUDENTS

### **UNDERGRADUATE DEANS OFFICE**

603.646.2243
Carson Hall, Suite 125
www.dartmouth.edu/~upperde
Dean.of.Undergraduate.Students@Dartmouth.edu

# OFFICE OF PLURALISM AND LEADERSHIP (OPAL)

603.646.1656

Carson Hall, Suite 125 www.dartmouth.edu/~opal Pluralism.and.Leadership.Office@Dartmouth.edu

# **ACADEMIC SKILLS CENTER (ASC)**

603.646.2014
Baker Library, Suite 224
www.dartmouth.edu/~acskills
Academic.Skills.Center@Dartmouth.edu

# STUDENT ACCESSIBILITY SERVICES (SAS)

603.646.9900
Collis Center, Suite 205
www.dartmouth.edu/~accessibility
Student.Accessibility.Services@Dartmouth.edu

# CENTER FOR PROFESSIONAL DEVELOPMENT (CPD)

603.646.2215
63 South Main Street, 2nd Floor
www.dartmouth.edu/~csrc
Career.Services@Dartmouth.edu



**YOUR ADVISING NETWORK** will support and encourage you throughout your entire academic journey at Dartmouth. As we begin to work together, 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.

### WHAT EXACTLY IS ADVISING?

Many students arrive with preconceived expectations for their education. The advising process will challenge these expectations and provide guidance as you explore the tremendous opportunities of a liberal arts education at Dartmouth. 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.

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 video chats or when reading our advising emails, you begin your own advising experience.

# **HOW DO I TAKE FULL ADVANTAGE OF ADVISING?**

You have a role to play in making your advising relationship successful. Academic advising works best when a student takes the initiative to seek guidance and maintains ongoing advising relationships. In order 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.

# **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 — General Advising

- Offer advice and assistance on academic, personal, and social matters throughout your entire time at Dartmouth.
- Possess a broad knowledge of the curriculum.
- 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 further resources.

### Faculty Advisors

- Each first-year student is assigned a faculty academic advisor.
- 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: DOSCs

# (Deans Office Student Consultants)

- Through interactions with individual students, DOSCs provide informal mentorship and preliminary advising information.
- Students who need further assistance are referred to appropriate offices for more in-depth advising.

# Other Faculty, Administrators, and Peers

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

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

# Academic Curriculum and Opportunities



# 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 www.dartmouth.edu/~reg/catalog. First-year students elect fall term courses during 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-matriculation 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, 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 (DegreeWorks, 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, your courses will engage you with the culture and compassion of the humanities, the creativity and passion of the arts, and the critical thinking of the sciences and social sciences.

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. 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. Another way of fulfilling the first-year writing requirement is to take Humanities 1-2, a special interdisciplinary two-term course for first-year students offered only in fall and winter terms. For details, see www.dartmouth. edu/~hums1-2.

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.

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.



more intensive guidance through the reading, writing, and research processes, including individual support from teaching assistants and a culminating research project. Students likely to benefit from more support in these areas are asked to complete an online placement process during the summer. They are then given a recommendation for placement in Writing 2-3 or Writing 5. Writing 2-3 is taken in lieu 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 (or Writing 2-3) is a prerequisite for enrollment in a First-year Seminar.
- 2) The First-year Seminar must be taken during the first year, in the term immediately following completion of Writing 5 (or Writing 2-3).
- 3) A student is not eligible to take part in an offcampus program until the First-year Seminar requirement is fulfilled.

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.

# **FOREIGN 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.

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 time to sit and reflect with this guide. Dive deep!

complete both the Distributive and World Culture Requirements with ten courses. These may also overlap with major requirements. The online course catalog (ORC) helps students to plan, and the termly Timetable of Class Meetings provides upto-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.

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)

All students are required to satisfactorily complete three credits of physical education by graduation. To receive credit for these courses/activities, stu-

# Academic Curriculum and Opportunities

dents must register in advance on BannerStudent. 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, TaeKwonDo, spinning, fencing, table tennis, mediatation and relaxation, weight training, plus skiing and snow-boarding 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 activities. These courses are Pass/No Pass and are in addition to the 35 credits you need to graduate. Students must also complete a 50-yard swim. More information is available at 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 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.

For the first-year fall term only, parents also receive a copy of the grade report so that they may be better informed of their student's academic adjustment to college life and provide support or assistance as necessary. Thereafter, the Undergraduate Deans Office considers its relationship with students to be confidential. This implies the need for good communication between students and parents about grades and other important matters.

### 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 (online).

# **Academic Opportunities**

# **OFF CAMPUS ACADEMIC PROGRAMS**

(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, cross-cultural competence,





and reflection in a global context. A distinguishing feature of Dartmouth's program model is strong involvement by departments and interested faculty that leads to the development of meaningful relationships between students and faculty directors/mentors. Consistently, over fifty percent of Dartmouth undergraduate students participate in one or more Foreign Study or Language Study Abroad programs before they graduate. Students returning to campus after participating in a program often speak of experiences that were rich — academically and culturally — as well as life changing.

At present, the College offers more than forty different faculty-led off campus programs and thirty exchange program options. For more information on foreign and domestic study programs, please visit the Guarini Institute 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). Dartmouth's LSA and Advanced Language Study Abroad Programs (LSA+) have been developed in response to the College's commitment to understanding, and communicating with, people of other cultures. To this end, Dartmouth maintains programs in a number of countries. Undergraduate students live with local families on most LSA and LSA+ programs. Life with local families gives students a personal context through which they gain access to the culture as a whole. Studying the language, literature, and civilization gives them an intellectual grasp of historical and contemporary cultural patterns. You and your faculty advisor will be making some preliminary decisions during New Student Orientation about whether to continue the foreign language that you studied in high school or to begin studying a new language. We have briefly outlined below the ways for Dartmouth students to complete their foreign language requirement so that you and your family can think seriously about which "route" to choose.

- 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 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, 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. 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, civilization, and literature during the term. Since enrollments in most programs are limited, not everyone who applies will necessarily have the opportunity to participate.

In addition to the LSA programs, many departments also offer Advanced Language Study Abroad programs (LSA+). The LSA+ is a program designed for students who have satisfied the language requirement and are prepared for a more advanced language study abroad experience. Dartmouth's LSA+ programs are offered in Salvador, Brazil (Portuguese); Beijing, China; Toulouse, France; Rabat, Morocco (Arabic); Rome, Italy; Tokyo, Japan; St. Petersburg, Russia; Cuzco, Peru (Spanish); and Santander, Spain.

# FOREIGN AND DOMESTIC STUDY

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

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

The College also offers a wide array of foreign and domestic study programs that are 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 to gain new perspectives on the United States.

Various departments maintain foreign study programs in Africa, Argentina, Brazil, the Caribbean,

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.

### **EXCHANGE PROGRAMS**

Dartmouth has several formal exchange programs in which students attend another institution with course credit being transferred back to Dartmouth. 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); McGill University ( Canada); a selected German university through the Federation of German American Clubs; 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 Danish 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's) and Language Study Abroad (LSA's), are available on the Guarini Institute website: www.dartmouth.edu/~ocp.

### 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.

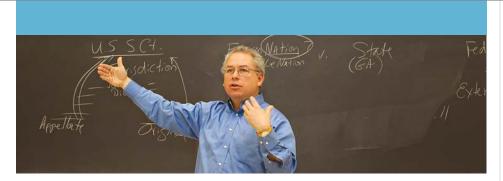
Students apply for exchange programs through The Guarini Institute for International Education. The students who are accepted apply to have their courses approved in the same manner as they would for Transfer Terms. Students apply for Non-Dartmouth Sponsored Programs, or Transfer Terms, through the Registrar's 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, many of which can be found within the robust and interconnected Dartmouth Centers Forum (www.dartmouth.edu/~centersforum/ about/). 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. Start with the Centers Forum website (above), and explore the websites of the centers and offices below:

- · Collis Center for Student Involvement
- Dartmouth Center for Service
- Hood Museum of Art
- Hopkins Center for the Arts
- Institute for Writing and Rhetoric
- John Sloane Dickey Center for International Understanding
- Nelson A. Rockefeller Center for Public Policy and the Social Sciences
- Office of Pluralism and Leadership (OPAL)
- Tucker Center



# THIS SECTION PROVIDES A BRIEF INTRODUCTION TO DARTMOUTH'S ACADEMIC DEPARTMENTS AND RECOMMENDED COURSES FOR FIRST-YEAR STUDENTS.

The following pages include descriptions for selected fall-term courses listed under each academic department. The 2016-2017 version of the course catalog, Organization, Regulations and Courses (ORC), will be available online in early September.

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.

### Credit on Entrance

As you begin to explore the course offerings provided, we highly recommend that you contemplate the choice of courses that offer an introduction to new intellectual challenges instead of repeating previously mastered course material. Information about credit on entrance, placement, and exemption can be found at the following website; please make sure you explore all the tabs for definitions, types of credit, and departmental guidelines: www.dartmouth.edu/~reg/enrollment/prematriculation\_credit.html. [When you see an asterisk (\*) in the course listings on the following pages, go to the website above to find answers to your credit on entrance, placement, and exemption questions.]

On the following pages, you will find information under the departmental headings about credit on entrance you may receive for work that you completed before coming to Dartmouth. The subject of credit on entrance and placement may be confusing, so it is important that you review the helpful websites accessed through the link above, as you will most likely find the answers to your questions within that information.

# **Local Placement Exams**

Dartmouth offers local placement exams, the primary purpose of which is to ensure that you are taking courses appropriate to your level of preparation. It is strongly recommended that you take them when there is a question of placement or if we lack sufficient information in the form of standardized test scores to evaluate advanced preparation during high school. Please refer to www.dartmouth.edu/~orientation later this summer for local placement exam information, and send questions about the exam schedule to New.Student.Orientation@Dartmouth.edu. [When you see an asterisk (\*) in the course listings on the following pages and have questions about local placement exams, visit the New Student Orientation website above for dates, forms of administration, and other information.]

Students requesting local placement exam accommodations on the basis of a disability should contact Student Accessibility Services as soon as possible at Student.Accessibility. Services@Dartmouth.edu.

Keep in mind that the deadline for all requests for credit on entrance and exemption is the end of the first term of study. You will have the opportunity to check the accuracy of the credit on entrance and placement information on your official record during your first term.

### 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 avenues of theoretical and empirical investigation, students explore questions and issues that shape the historical, social, political, and cultural dimensions of the African Diaspora within a global context. The multidisciplinary curriculum in AAAS offers a major, modified major, three minors, and an honors program for outstanding students.

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

- 10. Introduction to African-American Studies (F)
- 11. Introduction to African Studies (F)
- 12. Race and Slavery in US History (W)
- 19. Africa and the World (S)
- 40. Gender Identities and Politics in Africa (S)
- 41. The African Political Novel (S)
- 44. Contemporary Africa: Exploring Myths, Engaging Realities (F)
- 51. Masterpieces of Literature from Africa (F)
- 54. Postcolonial African Drama (S)
- 60. Slavery and Emancipation in Latin America and the Caribbean (S)
- 61. Caribbean History: 1898 to the Present (W) 87.09. African Pop Culture Studies (F)
- 88.14. The Politics of Beauty (W)

# SELECTED FALL TERM COURSES (AAAS)

10. Introduction to African-American Studies A multidisciplinary investigation into the lives and cultures of people of African descent in the Americas. Topics may include: the African background, religion and the black church, popular culture, slavery and resistance, morality and literacy, the civil rights movement, black nationalism, theories of race and race relations. Dist: SOC; WCult: CI.

# 11. Introduction to African Studies

Multidisciplinary in scope, the course will survey critical social change in African cultures and civilizations through a study of history, art, literature, religion, economy, and politics, paying particular attention to the cultural impact of colonial rule on contemporary societies and states. Dist: SOC; WCult: NW.

# 44. Contemporary Africa: Exploring Myths, **Engaging Realities**

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

# 51. Masterpieces of Literature from Africa

This course is designed to provide students with

a specific and global view of the diversity of literatures from the African continent. We will read texts written in English or translated from French, Portuguese, Arabic and African languages. Through novels, short stories, poetry, and drama, we will explore such topics as the colonial encounter, the conflict between tradition and modernity, the negotiation of African identities, post-independence disillusion, gender issues, apartheid and post-apartheid. In discussing this variety of literatures from a comparative context, we will assess the similarities and the differences apparent in the cultures and historical contexts from which they emerge. Readings include Chinua Achebe's Things Fall Apart, Naguib Mahfouz's Midaq Alley, Calixthe Beyala's The Sun Hath Looked Upon Me, Camara Laye's The African Child, and Luandino Vieira's Luanda. Dist: INT or LIT; WCult: NW.

# Anthropology (ANTH)

Anthropology crosses the disciplinary borders that have divided the humanities and the sciences and encourages students to explore the variety and underlying unity of peoples, societies, and cultures worldwide and across millennia. The common history and interests of the discipline's four subfields (archaeology, biological anthropology, linguistic anthropology, and social and cultural anthropology) acknowledge the diverse perspectives that generate research, allowing anthropologists to fashion a multidimensional picture of the human experience.

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

- 01. Introduction to Anthropology (F)
- 03. Introduction to Cultural Anthropology (W)
- 04. Peoples and Cultures of Native North America (S)
- 05. Reconstructing the Past: Introduction to Archaeology (S)
- 06. Introduction to Biological Anthropology (F)
- 09. Language and Culture (F)
- 11. Ancient Native Americans (F)
- 12.02. Archaeology of the Near East (S)
- 13. Who Owns the Past? (F)
- 14. Death and Dying (S)
- 17. Anthropology of Health and Illness (W)
- 20. Primate Evolution and Ecology (S)

# SELECTED FALLTERM COURSES (ANTH)

### 01. Introduction to Anthropology

A comprehensive study of humankind, the course will survey and organize the evidence of our biological and cultural evolution. It will explore the unity and diversity of human cultural behavior as exemplified in the widest variations in which this behavior has been manifest. Lectures and readings will describe the dialectic relationship between the material conditions of our existence on the one hand, and on the other, the unique human capacity for creativity both in thought and in action. The focus of this course will be not only to outline the conditions and conditioning of our cultural past and present, but also to indicate possibilities for future evolution of human culture and experience. Dist: SOC; WCult: CI.





Explore creative ways to complete the three WCult requirements.
There are dozens of ways to complete this requirement!

# 06. Introduction to Biological Anthropology

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

# 09. Language and Culture

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

# 13. Who Owns the Past?

Archaeology reconstructs life in ancient societies, but its contemporary practice and disciplinary future are complicated by questions about ownership of the past. This course will consider intellectual debates and cultural clashes over roles played by governments, cultural institutions, and indigenous peoples in archaeological inquiry. We will also study ongoing controversies about the ethical treatment of archaeological remains, from ancient human bodies to artifacts, monuments, and landscapes transformed through human actions. Dist: SOC; WCult: CI.

### Arabi

(See program description under Asian and Middle Eastern Languages and Literatures.)

# 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 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)

# 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 and Middle Eastern Languages and Literatures (AMELL)

The Department of Asian and Middle Eastern Languages and Literatures (AMELL) teaches four of the world's great old-new cultures; it offers state-of-the-art language training in Arabic,

Chinese, Hebrew, and Japanese, and courses and seminars (taught in English) on topics spanning the classical and contemporary literature and culture of each of these areas. There is also a full array of study abroad opportunities. The friendly, personal relationships that develop between the professors and the students often extend beyond the students' time on campus. Combining linguistic and area expertise with study in related departments (government, economics, history, etc.), AMELL students go on to careers in business, law, government, academia, and the sciences. Please note that our introductory language courses begin only in the fall term; we recommend starting out during your first year at Dartmouth.

### FALLTERM COURSE (AMELL)

# 17. Discourse, Culture, and Identity in Asia and the Middle East

### 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 and is 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 Jonathan Smolin for placement. Completion of Arabic 3 satisfies the Foreign Language Requirement at Dartmouth.

# FALLTERM COURSES (ARAB)

# 1. First-Year Courses in Arabic

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.

- 21. Intermediate Arabic
- 31. Advanced Arabic (Third-year level)
- 41. Advanced Arabic (Fourth-year level)

# 62. The Arabian Nights

This course takes The Thousand and One Nights as the focal point for a multidisciplinary study. It will cover the genesis of the text from Indian and Mediterranean antecedents, its Arabic recensions, its reception in the West, and influence on world literature. The course will examine leading stories from

the corpus of the Nights in translation. Analyses of the stories themselves will draw on the rich body of critical literature dealing with the Nights.

### CHINESE (CHIN)

The Chinese script is the oldest writing system — 3000+ years — still in use and the spoken language is the most commonly spoken language worldwide today. Modern Standard Chinese, which we teach at Dartmouth, is on the U.S. Department of State list of "super critical need" languages.

Why not start your journey into Chinese language and culture this fall with Chinese 1 (or 4)? If you already know modern Chinese, then take Chinese 51 (Introduction to Classical Chinese). The Chinese Language House is our own piece of China on campus! Live with a Chinese professor from Beijing Normal University, speak Chinese, eat Chinese style, host Chinese scholars and artists, and more.

# FALL TERM COURSES (CHIN)

### 1. First-Year Courses in Chinese

Designed for students with no background in Chinese language. Please remember that fall term is the only time to begin the introductory language sequence in Chinese. Completion of Chinese 1, 2, and 3 (three terms of language study) plus Chinese 10 (Introduction to Chinese Culture, offered in Winter) qualifies a student to participate in our study abroad programs in Beijing.

### 4. Advanced First-Year Chinese

Students with some study of the Chinese language usually fit best in this course. Please first take the local placement exam. Chinese 4 is an accelerated first-year course. Satisfactory completion of Chinese 4 (when not taken under the "non-recording option") satisfies the foreign language requirement. Completion of Chinese 4 prepares students for the 20-level series, which begins in Winter term. Either summer or fall on our Beijing program is an option.

# 31. Advanced Modern Chinese (Third-year level) 42. Advanced Chinese (Fourth-year level)

# 51. Introduction to Classical Chinese62. Chinese Calligraphy

### 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. We also offer two courses on the Hebrew of the Bible, suitable for beginners: Hebrew 51 in winter and Hebrew 52 in spring. Students with previous experience should take the local language placement test during New Student Orientation. If you have one year of Hebrew, you can apply for our new exchange program with the Hebrew University of Jerusalem. Interested students should contact Professor Lewis Glinert.

# FALLTERM COURSES (HEBR)

# 1. First-Year Course in Modern Hebrew

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.

# 21. Intermediate Modern Hebrew63. From Genesis to Seinfeld: Jewish Humor and its Roots

### JAPANESE (JAPN)

Measured by GDP (Gross Domestic Product), Japan has the third largest economy in the world. It is at the forefront of technology, computer gaming, animation, graphic novels, fashion and music. It also boasts grand traditional arts and a long, distinguished literary and visual culture.

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





Students new to the language should begin with Japanese 1, which is offered only in the fall term each year. Japanese 1, 2, and 3 constitute the beginning language sequence; in addition to satisfying Dartmouth's foreign language requirement, this sequence (along with Japanese 10: Introduction to Japanese Culture) also serves as a prerequisite for our summer study-abroad program outside of Tokyo. Students with previous experience should take the local language placement exam during New Student Orientation. They, and any student interested in Japan-related study and opportunities, are encouraged to contact Professor Jim Dorsey.

### FALLTERM COURSES (JAPN)

# 1. First-Year Course in Japanese

Offered only in the fall term, this course introduces written and spoken modern Japanese to students without any background. In addition to the basics of grammar, emphasis is placed on active, functional communication. Conversational drills and comprehensive exercises provide practice in pronunciation and the use of the basic patterns of speech.

- 22. Intermediate Japanese
- 31. Advanced Japanese (Third-year level)
- 41. Advanced Japanese (Fourth-year level)

# Asian and Middle Eastern Studies (AMES)

Study leading to a degree in AMES is interdisciplinary and normally focused on one of the following areas: East Asia, the Middle East, Central Asia, and South/Southeast Asia. Majors and minors work with advisors who specialize in these areas to design a program of study to ensure coherence of language study, disciplinary training, and off-campus experience. The AMES Program sponsors the Dartmouth-in-Fez, Morocco Foreign Study Program; the Dartmouth-in-Hyderabad, India Foreign Study Program, co-sponsored with the Women's, Gender, and Sexuality Studies Program; and a Foreign Exchange Program in Seoul, Korea.

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

- 4. Introduction to Arabic Culture
- 5. Thought and Change in the Middle East and Central Asia
- 6. Islam: Tradition and Transformation
- 8. Introduction to Islam
- 9. Hinduism
- 10. The Religions of China
- 11. Introduction to Korean Culture
- 12. Introduction to Chinese Culture
- 13. Introduction to Japanese Culture
- 15. Modern Islam
- 17. Introduction to Hebraic and Israeli Culture
- 19. Introduction to South Asia
- 21. Topics in Korean Studies
- 40.07 Discourse, Culture and Identity in Asia and the Middle East

# FALLTERM COURSE (AMES)

AMES 40.07/AMELL 17/LING 11 Discourse, Culture and Identity in Asia & the Middle East This course introduces theories of identity, discourse and communication and illustrates how Asian and Middle Eastern cultures employ language to construct and reflect values, identities and institutions, to create relationships and project personal status, and to perform actions (such as ending a phone call, apologizing, paying compliments and negotiating business deals). Particular attention will be paid to the language of health and healing. No prior knowledge of a particular language or culture is assumed. Linguistics 1 would be helpful but by no means essential. Dist: INT or SOC; WCult: CI.

### **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 interests and activities of its diverse 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 in tropical ecology that includes an introduction to studies of rain forests, coral reefs, and other tropical environments.

Please see our Welcome Class of 2020 page at: https://biology.dartmouth.edu/welcomeclass-2020. For many students, BIOL 11 (The Science of Life) is the entrance course to the major and the minor. This is a topics-based lecture course with no laboratory that is offered in the fall, winter and spring of the 2016-2017 academic year. The Biology department has established an online selfassessment exam for students to take and use as a guide to determine if they should take BIOL 11 or if they should enter a Foundation course directly. Students should determine their level of preparedness based on the self-assessment exam score. Only those students who are extremely well-prepared should elect to enroll directly into a Foundation course. BIOL 11 may be counted toward the Biology major or minor if it is taken as the first Biology major course.

# Topics for the three offerings of BIOL 11 during the 2016-2017 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) and

BIOL 16 (Ecology, fall and spring). Each Foundation course has a laboratory component, and students must successfully complete three of the five Foundation courses for the major. A Biology minor must successfully complete two Foundation courses.

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 include CHEM 5 and CHEM 6, and one quantitative course from among COSC 1 or 5, ENGS 20, EARS 17, BIOL 29, MATH 4, 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 courses intended primarily for non-majors: BIOL 2 (Human Biology, fall), and BIOL 6 (Dinosaurs, winter).

# SELECTED FALL TERM COURSES (BIOL)

# 2. Human Biology

A course designed to help students (biologists and non-biologists) understand the biological basis of human health and disease. The course will emphasize the fundamental aspects of biochemistry, genetics, cell and molecular biology, physiology, anatomy, reproductive biology, and structure/function of various organs as they relate to humans. Particular emphasis will be placed on specific topics in human health and disease and how these issues affect us all individually in our own health and collectively in our international society. Dist: SCI.

### 11. The Science of Life

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

# Fall Topic: Major Events in the History of Life and the Human Genome

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

### 12. Cell Structure and Function

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

# 14. Physiology

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

### 16. Ecology

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

# Chemistry (CHEM)

Please note that the Chemistry Department offers key local placement/credit-on-entrance exams only during Orientation. These are only open to students 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 once you arrive on campus, if you have questions related to the exams. Chemistry majors and non-majors alike have outstanding opportunities at Dartmouth. The department is characterized by excellent teaching and close faculty-student relations in nationally competitive research projects. A Ph.D. program and the presence of postdoctoral research associates help to ensure a stimulating scientific atmosphere supported by modern research

instruments that are accessible to undergraduates. Research in the general fields of inorganic, organic, physical, theoretical, materials, structural biology, and biological chemistry is supported by modern instrumentation, computers, and a first-rate library including computer-assisted literature searches.

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

The Department of Chemistry offers three parallel introductory sequences which are prerequisite to more advanced courses in chemistry. The normal sequence consists of Chemistry 5 and 6 (General Chemistry). Chemistry 10 is a limited enrollment honors course for those first-year students with a strong background and interest in chemistry, who may have interest in majoring in the sciences, and who have adequate mathematics preparation (credit-on-entrance for, or exemption from, Mathematics 3). Chemistry 10 is offered during the fall term, is only open to first-year students, and is the prerequisite equivalent to Chemistry 5 and 6; upon successful completion of Chemistry 10 students receive one credit-on-entrance for Chemistry 5, and one course credit for Chemistry 10. Eligibility for entrance into Chemistry 10 is discussed below. Students who plan to take general chemistry in their first year at Dartmouth and who have a crediton-entrance for, or exemption from, Mathematics 3 are strongly urged to take Chemistry 5 in the fall term. Students without a Math 3 credit-on-entrance or exemption must take this prerequisite mathematics course in the fall prior to taking Chemistry 5 in the winter.

# 5-6. General Chemistry (5 F, W; 6 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 both the curriculum advisor of the Thayer School and one of the members of the Undergraduate Advising Committee of the Department of Chemistry at the start of the first year. Students

contemplating a major in the physical sciences, but undecided between physics and chemistry, should note that the election of Mathematics 3 and 8, Chemistry 5-6 (or Chemistry 10), and Physics 13 and 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-onentrance 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. 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 encouraged to take the Chemistry 5 credit exam at the beginning of Orientation week. 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 week. 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 week, 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 week(\*). 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 credits-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 FALLTERM COURSES (CHEM)

# 5-6. General Chemistry

An introduction to the fundamental principles of chemistry, including chemical 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 5: Mathematics 3 or Mathematics 1 and 2. Prerequisite for Chemistry 6: Mathematics 3 (or Mathematics 1 and 2) and Chemistry 5. Dist: SLA.

# 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 at Dartmouth. Dist: SLA.

### Chinese

(See program description under Asian and Middle Eastern Languages and Literatures.)

# Classics (CLST)

The Department of Classics offers a broad range of courses in Latin and Greek language and literature; Latin and Greek literature in English translation; Greek and Roman history, archaeology, mythology, philosophy, and religion; and Modern Greek.

Designed to highlight all aspects and phases of Greek and Roman civilizations, the departmental curriculum appeals to students interested in exploring broadly the foundations of Western culture. Study of the Classics can be an ideal undergraduate liberal arts program for individuals preparing for careers in a wide variety of professions.

We work closely with our students in developing their skillsets so that they graduate with highly advanced competencies in creatively analyzing and synthesizing qualitative information, using texts and artifacts to examine cultural systems and systems of thought, communicating clearly with the written and spoken word, and collaborating effectively with others. Most of our classes are capped at 25 students or fewer, and we are committed to providing the sort of intensive faculty-student engagement for which Dartmouth is renowned.

In addition to a major program in the classical languages and literature, the department also offers majors in classical archaeology, ancient history, and classical studies, the last of which is ideal for those students who seek an area studies major in the humanities that can be completed without Greek or Latin language study.

The Classics Department offers courses under three different rubrics: Classical Studies (CLST), Ancient Greek (GRK), and Latin (LAT).

# CLASSICAL STUDIES (CLST)

Classical Studies encompasses courses on Greek and Latin literature (including philosophy) in English translation (CLST 1-5); Greek and Roman history (CLST 14-15, 17-19); classical archaeology (CLST 6, 20-26); and special topics in classical literature, history, archaeology, philosophy, and religion (CLST 10-12). All Classical Studies courses are open to first-year students, without prerequisites.

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

- 1. Antiquity Today: An Introduction to Classical Studies (W)
- 2. The Tragedy and Comedy of Greece and Rome (S)
- 3. Reason and the Good Life: Socrates to Epictetus (F)
- 6. Introduction to Classical Archaeology (F)
- 10.01. Rethinking the Divine (S)
- 10.02. War Stories (S)
- 11.09. Who Owns the Past (F)
- 15. Alexander the Great (F)
- 17. Roman History: The Republic (W)
- 22. Greek Classical Archaeology: City-States and Panhellenic Sanctuaries (W)
- 24. Etruscan and Early Roman Archaeology: The Rise of Rome (F)
- 25. Early Roman Imperial Archaeology: The First Emperors (S)

# GREEK (GRK)

If you have not studied ancient Greek before, the

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

place to begin is Greek 1, followed immediately by Greek 3. (There is no Greek 2 course.) Greek 1 and 3 introduce students to the grammar and syntax of classical Greek and provide an introduction to the study of Greek literature. Successful completion of Greek 3 satisfies the College language requirement. Greek 1-3, Intensive Greek, is a double course offered in the winter term.

A third one-term course (Greek 10, offered in both the fall and spring) devoted entirely to the reading of a significant, original Greek text, strengthens students' analytical and reading skills and qualifies them for more advanced offerings (20-30).

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

- 1. Introductory Ancient Greek (F)
- 1-3. Intensive Ancient Greek [double course] (W)
- 10. Readings in Ancient Greek Prose and Poetry (F, S)

# PLACEMENT IN GREEK COURSES

Students who have studied either Ancient or Modern Greek in high school should consult with the chair of the Classics Department concerning their placement in Greek courses. Those who can submit evidence of their prior achievement may also be considered by the department for exemption from the college language requirement.

# LATIN (LAT)

If you have not studied Latin before, the place to begin is Latin 1, followed immediately by Latin 3. (There is no Latin 2 course.) Latin 1 and 3 introduce students to the grammar and syntax of Latin and provide an introduction to the study of Latin literature. Successful completion of Latin 3 satisfies the college language requirement.

Intermediate courses (Latin 15 or Latin 10) strengthen reading skills and develop familiarity with the variety of literary, historical, and philosophical texts written in Latin. Latin 15, which is offered every fall, is specially designed for incoming first-year students. Students may take either Latin 10 or Latin 15 or both before proceeding to more advanced offerings (Latin 20-30).

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

- 1. Introductory Latin (F, W)
- 3. Intermediate Latin (W, S)
- 15. Literature and the Romans (F)

# PLACEMENT IN LATIN COURSES

Placement directly into higher level Latin courses depends on your level of achievement and confidence. This is a collaborative decision between you and members of the Classics faculty that is based in part upon your scores on the SAT II Achievement Test in Latin, on the AP Latin test, or on the placement test administered to incoming first-year students by the Department of Classics at Dartmouth.

Available only to first-year students during the orientation process, the Latin Placement Test is an online test consisting of 55 multiple-choice questions. Time allowed is 50 minutes. First-year students who have questions about the placement process are encouraged to contact the 2016 coordinator for Latin Placement (Professor Margaret Graver: margaret.graver@dartmouth.edu). All members of the incoming class who have reported studying Latin in high school should automatically receive access to the Latin Placement Test on Canvas (look under "Courses"). First-year students who do not receive access and wish to take the test can request access by emailing Professor Graver.

In order to be placed directly into Latin 3 without taking Latin 1, you should have a score of 570-670 on the SAT II Achievement Test in Latin or a passing mark on our placement test. All first-year students who have received a placement into Latin 3 are encouraged to visit the Classics department during Orientation week for a brief diagnostic that may make it possible to forego Latin 3 and move directly into Latin 15.

Placement into Latin 15 will also be granted to students who have scored 680 or above on the SAT II Achievement Test in Latin, who have received a score of "5" on the Latin AP test, or who performed suitably well on our placement test. An official placement into Latin 15 confers exemption from the college language requirement. First-year students who have questions about the placement process are encouraged to contact Professor Graver.

# SELECTED FALL TERM COURSES CLASSICAL STUDIES (CLST)

# 3. Reason and the Good Life: Socrates to Epictetus

An introduction to philosophical thought in antiquity, especially that of Socrates, Epicurus, and the Stoics. We will concentrate especially on ethical questions; e.g., what kind of life is best for humans to pursue, how thoughtful persons should weigh the potentially competing claims of reason, pleasure, and emotion; and on how intellectual activity was perceived at Athens and at Rome. Readings include Aristophanes' Clouds, Plato's Apology and Meno, and selected writings of Epicurus, Lucretius, Cicero, Seneca, and Epictetus. Open to all classes. Dist: TMV; WCult: W.

# 6. Introduction to Classical Archaeology

This course will familiarize students with the basic methods and principles of Classical archaeology through a survey of the principal types of sites and artifacts characteristic of Greco-Roman antiquity. Students will gain a good overview of the approaches useful in the interpretation of a wide variety of material evidence as well as of problems inherent in such evidence. At the same time, through the study of a number of major sites in roughly chronological sequence, students will acquire an appreciation of the development of



material culture in the Mediterranean world from prehistory to the collapse of the Roman Empire. The course thus serves both as an introduction to Greek and Roman civilization and to the particular goals of the discipline of archaeology. Dist: INT or ART; WCult: W.

### 11.09. Who Owns the Past

Modern archaeology grew out of antiquarianism, imperialism, and the attempts of early collectors and scholars to look to the past for aesthetics, to construct identities, and to satisfy their curiosities. This course examines how these legacies influence contemporary archaeology, museum practices, and policies to manage cultural heritage. The central question will be explored utilizing the perspectives of the relevant actors: archaeologists, collectors, museums, developers, descendant communities, national and local governments, and the tourism industry. Dist: SOC or INT; WCult: CI.

# 15. Alexander the Great and the Macedonian Kings (Identical to HIST 94.04)

This course has two aims: (1) to establish a basic understanding of the history of Alexander the Great and of Greek-speaking peoples in the eastern Mediterranean during the fourth through first centuries BCE and (2) to explore the cultural, military, political, and economic innovations of what was a singular age of experimentation. Open to all classes. Dist: SOC or INT; WCult: W.

# 24. Etruscan and Early Roman Archaeology: The Rise of Rome

This course begins with the archaeology of Late Neolithic and Iron Age Italy, then focuses upon the Etruscans, early Latium and the development of Republican Rome and her colonies, concluding with the death of Caesar in 44 B.C. In addition to the chronological development of the material culture of Italy, we will explore at least two important cultural topics: 1) Etruscan religion and its influence on the Roman sacro-political system; 2) the machinery of Roman government as expressed in the spaces in Rome (and other sites) that played

host to political ritual: the Arx, the Forum, the Comitium, the Curia, the Tribunal and the Basilica. Dist: SOC; WCult: W.

# GREEK (GRK)

# 1. Introductory Ancient Greek

An introduction to ancient Greek as a spoken and written language. Never serves in partial satisfaction of the Distributive or World Culture Requirement.

# LATIN (LAT)

# 1. Introductory Latin

An introduction to Latin as a spoken and written language. Never serves in partial satisfaction of the Distributive or World Culture Requirement.

# 15. Literature and the Romans

The two main goals of this course are to develop your ability read Latin, especially in multiple genres, and to acquire and improve a range of interpretive skills. In the first part of the course (approx. twothirds) we shall read a number of different types of source pertaining to the emperors Augustus and Nero. The aim here is to familiarize you with a selection of genres and authors in terms of their forms of expression and their particular contribution to the image of the emperor. The last third of the course will be devoted to the interpretation of poetry, especially theoretical issues of philology and reception. Our case-studies will include not only Latin texts by Seneca and Horace, but also several related works in translation and other media, from Greek tragedy to the modern English stage. The knowledge and skills gained in this course will enable you to begin to work with Latin and non-Latin texts for a variety of different purposes, including literary criticism, history, linguistics, and philosophy, among others. Dist: LIT; WCult: W.

# **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



Challenge yourself to find one obvious and one not-so-obvious course choice to complete the SCI distrib!

cognitive faculties, such as language or memory, on specific cognitive phenomena, such as empathy, or on understanding the fundamentals of cognition quite broadly, for example in information-theoretic terms. What sets cognitive science apart from its core areas is its commitment to cross-disciplinary methodology. Students wishing to pursue work in cognitive science take a defined group of core courses and then a series of electives selected from courses taught in a variety of departments.

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

COGS 1. Introduction to Cognitive Science (S) COSC 01. Introduction to Programming and

Computation (F)

LING 01. Introductory Linguistics (F)

PSYC 28. Cognition (S)

PSYC 40. Introduction to Computational Neuroscience (F)

### SELECTED FALLTERM COURSES (COGS)

# LING 01. 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. Dist: QDS.

# COSC 01. Introduction to Programming and Computation

CS 1 will teach you to design, write, and analyze code to solve computational problems from a range of disciplines. You'll also learn to think about problems the way a computer scientist thinks – a skill that is valuable in any field. The course is suitable

for students with no previous background in Computer Science, and no knowledge of mathematics beyond high-school algebra.

# PSYC 40. Introduction to Computational Neuroscience

The mind is what the brain does, and the brain is becoming understood computationally. Computational neuroscience has as its twin goals the scientific and engineering tasks of understanding of how brain computes mind, and using that understanding to characterize and reconstruct these computations. Scientific understanding of the brain will confer the ability not only to describe and characterize the mind, but to modify it, enhance it, diagnose and treat its illnesses, and, eventually, to imitate its operation.

# **Comparative Literature (COLT)**

Comparative Literature is a challenging interdisciplinary program that gathers the best faculty from across campus in promoting the study of literatures in different languages as well as the relationship between literature and other spheres of human activity. It also embraces broader inquiry into the relationship between literature and other disciplines and practices, such as the visual and performing arts, philosophy, history, the social sciences, religion, sciences and mathematics. The program provides students with ample opportunity to study literature and culture from a wide array of critical perspectives. Among these 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. Students devise and pursue a rigorous program of study tailored to their particular interests and intellectual strengths in close consultation with one or more faculty mentors.

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

1. Read the World

7.xx. Order and Chaos: Carnivals and Wild Celebrations (W)

07.xx. Letters to Email: Epistolary Fictions (S)

10.16. Flashes of Recognition in Modernist Literature (S)

19. Translation: Theory and Practice (W)

22.01. Love, Desire, Faith, and Individual Identity in Renaissance Literature

34.01. Theatre of Ideas in Britin, France, and the US (W)

42.01: Prada, Chanel, Ferrari:

History and Literature (W)

49.xx. Law and/as Literature (W)

49.02: From Hand to Mouth: Writing, Eating, and the Construction of Gender

51.01. Masterpieces of Literature from Africa 51.02/AAAS XX: The African Political Novel (S)

52.xx. Latin American Boom Novels and the Idea of Modernism (S)

55.01. Divine Love: Desire, Sex, and Romance in Traditions of India

56.01. The "New Man" on the Moon: Science Fiction Under Socialism (W)

57.05/INTS17.01/FS47.07: Migration Stories (S)

62.02. Shades of Noir: Film, Fiction, Politics

65.02. Medicine and Narrative (W)

65.03. Transpacific Ecologies (S)

67.06. Fictions of Sappho

70.03/JWST 26: European Jewish Intellectuals (W)

# SELECTED FALL TERM COURSES (COLT)

### 1. Read the World

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

# 22.01. Love, Desire, Faith, and Individual Identity in Renaissance Literature

This class will examine one of the major focal points of the Renaissance in diverse cultural contexts. What constitutes one's idea of self? To what extent is it a function of religious, political, social, and generic institutions and conventions? How do new philosophical and literary ideas about love, desire, faith, marriage, and power influence the development of public and private perceptions of identity, as well as their representations to others? Texts by Erasmus, Luther, Calvin, Rabelais, Montaigne, Shakespeare, Cervantes, Navarre, Castiglione, Machiavelli, Ariosto, Ficino, Valois, Thévet, and others. LaGuardia. Dist: LIT or INT; WCult: W.

# 49.02. From Hand to Mouth: Writing, Eating, and the Construction of Gender

This course will explore the role that food plays in the processes of gender and identity formation. We will consider the representation of food in literature and film as a complex intersection of production, consumption, and signification that can act as a creative extension of the Self as well as an ingestion of Otherness. Reyes. DIST: LIT.

# 51.01. Masterpieces of Literature from Africa

This course is designed to provide students with a specific and global view of the diversity of literatures from the African continent. We will read texts written in English or translated from French, Portuguese, Arabic and African languages. Through novels, short stories, poetry, and drama, we will explore such topics as the colonial encounter, the conflict between tradition and modernity, the negotiation of African identities, post-independence

disillusion, gender issues, apartheid and post-apartheid. In discussing this variety of literatures from a comparative context, we will assess the similarities and the differences apparent in the cultures and historical contexts from which they emerge. Readings include Chinua Achebe's Things Fall Apart, Naguib Mahfouz's Midaq Alley, Calixthe Beyala's The Sun Hath Looked Upon Me, Camara Laye's The African Child, and Luandino Vieira's Luanda. Coly. Dist: LIT or INT; WCult: NW.

# 55.01. Divine Love: Desire, Sex, and Romance in Traditions of India

"You've got the money, but we've got the love." Indians comparing their country with this one often make judgments in these terms. But isn't love a human universal? In this course we will examine how religious texts have helped construct Indian attitudes towards desire, sex, and romance. We will tour various historical genres: erotic how-to, epic, mystical poetry, drama. The ideal bond in many of these texts unites a human subject with a divine lover. Elison. Dist: TMV; WCult: NW.

# 62.02. Shades of Noir: Film, Fiction, Politics

"Film Noir" evokes memories of stylish, cynical, black-and-white movies from the 1940s and 1950s—melodramas about private eyes, femmes fatales, criminal gangs, and lovers on the run. In this course, we will examine noir in relation to its many contexts: the hard-boiled fiction of Chandler and Hammett; the experience of dislocation and alienation that reflect the exile status of many central-European professionals who worked in the US film industry in the 1940s; and Hollywood blacklisting and censorship during the anti-Communist witch hunt. The course will also trace the pervasive presence of noir and its continuing appeal for artists and audiences throughout the world. Because of its artistic and political complexity, noir is a key term for the study of US postwar cultural history: noir narratives revolve around questions of racial and national identity, around the postwar crisis of masculinity, and the convergence of modernism and mass culture. Gemunden. Dist: INT or ART; WCult: WC.

# 67.06. Fictions of Sappho

Goddess of poetry, sexual predator, exotic holiday destination, lovelorn suicide, schoolmistress, parchment scrap: these are among the associations clustering around Sappho. From antiquity to the twenty-first century her poems and the legends about her life and loves have fascinated writers, artists and musicians as different as Queen Victoria, Willa Cather, Boccaccio, Jeanette Winterson, Ezra Pound, Gounod, and Ovid. We sample some of the twists and turns in this seemingly endless stream of fantasy and creative reaproppriation. Williamson. Dist: LIT; WCult: CI.

# **Computer Science (COSC)**

Students interested in taking more than one course in computer science usually start with CS 1 (Introduction to Programming and Computation) in the

fall, winter, or spring, followed by CS 10 (Problem Solving Via Object-Oriented Programming) in the fall, winter, or spring. CS 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. CS 10 develops skills in solving problems computationally. It assumes previous programming experience (CS 1 prerequisite) and uses Java.

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

- Introduction to Programming and Computation
  (F. W. S)
- 10. Problem Solving via Object-Oriented Programming (F, W, S)
- 22. 3D Digital Modeling (F, W)
- 24. Computer Animation: The State of the Art (F, S)
- 30. Discrete Mathematics in Computer Science (F, W)
- 50. Software Design and Implementation (W, S)

### ADVANCED PLACEMENT

A student who receives a 4 or 5 on the Computer Science A Advanced Placement examination receives placement into CS 10 and CS 30. A student may instead take a departmental computer science exam (\*) to determine if he or she will receive placement into CS 10 and CS 30.

### 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 CS 1 can be placed out of CS 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. Prereq-

uisite: 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 offcampus 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 8 and 9 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).

# Have you registered for a video chat with the Undergraduate Deans?

# SELECTED FALLTERM 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, 6 or higher on the Higher Level International Baccalaureate exam, or an A in British A-Level Economics. Students who receive placement out of Math 10 via the AP Statistics exam are also exempt from taking Economics 10.

# NON MAJOR COURSES

The majority of courses offered by the economics department can be used as part of the economics major. We offer one course, Econ 2, designed for non-majors. This is a general survey course for students who have had no previous college-level economics and who do not plan to take further economics courses.

# MAJOR COURSES

If you have an exemption from Econ 1 you can take any class that has only Econ 1 as a prerequisite. Many students take Econ 10 right after Econ 1 to complete the economics prerequisites. Economics 21 and 22 are logical next choices for potential majors, but students are welcome to take any course that looks interesting to them as long as they have the prerequisites. The following courses are suitable for first year students. The required prerequisites are listed after each course. Unless otherwise noted, all courses are offered in fall, winter, and spring Terms.

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

- 1. The Price System
- 2. Economics Principals and Policies (S)
- 10. Introduction to Statistical Methods (Econ 1, Math 3)
- 20. Econometrics (Econ 10, Math 3)
- 21. Microeconomics (Econ 1, Math 3)
- 22. Macroeconomics (Econ 1, Math 3)
- 24. Development Economics (Econ 1, 10)
- 25. Competition and Strategy (Econ 1, Math 3, Winter)
- 26. Financial Intermediaries and Markets (Econ 1)
- 27. Labor Economics (Econ 1, Fall Only)
- 38. Urban and Land Use Economics (Econ 1) (S)
- 39. International Trade (Econ 1)
- 71. Health Economics and Policy (Econ 1, 10) (W)



# SELECTED FALL TERM COURSES (ECON)

# 01. The Price System: Analysis, Problems and Policies

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

# 02. Economic Principles and Policies

This is a general survey course for students who have had no previous college-level economics and who do not plan to take further economics courses. It is divided between microeconomic concepts — supply and demand, labor and capital markets, tax incidence, comparative advantage, international trade, and benefit-cost analysis — and macroeconomic issues, such as economic growth, unemployment, inflation, national income and product accounting, the banking system, and monetary and fiscal policy. Applications to current policy issues will be emphasized throughout.

The course has "negative" prerequisites: Students who have previously taken Economics 1 or who have been exempted from Economics 1 at matriculation may not enroll in Economics 2. Completion of Economics 2 does not, however, preclude subsequent enrollment in Economics 1. Dist: SOC.

# 10. Introduction to Statistical Methods

This course introduces the student to the basic

concepts and methods of statistics. It covers descriptive statistics and inference (estimation and hypothesis testing) for a single variable and for two variables. The probability theory required for these topics will be developed. Dist: QDS.

# 21. Microeconomics

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

### 22. Macroeconomics

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

# 26. The Economics of Financial Intermediaries and Markets

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

# 27. Labor Economics

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

# 38. Urban and Land Use Economics

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.

### 39. International Trade

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

### 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 — from neurons to classrooms to communities. 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). The department offers both a minor in Education and a teacher education program that leads to certification. Students may choose either option or both. The minor is designed to help students explore how children grow, think, reason, learn a variety of skills and knowledge, and conceptualize their social and emotional worlds. The teacher education program offers students the opportunity to become certified as public school teachers at the elementary (K-8) level.

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



- 1. The Learning Brain: Introduction to Child Development and Education (F, S)
- 15. History and Theory of Human Development and Learning (F)
- 16. Educational Psychology (F)
- 29. Policy and Politics in American Education (S)
- 50. The Reading Brain (S)
- 56. STEM and Education (W)
- 57. Social, Emotional, and Moral Development (S)
- 62. Adolescent Development and Education (W)
- 64. Development in the Exceptional Child (W)

# SELECTED FALL TERM COURSES (EDUC)

# The Learning Brain: Introduction to Child Development and Education

Education, development, and learning are inextricably intertwined. We will explore how the science of learning and development connects with education from preschool to high school. Survey topics include school structure, teaching, assessment, motivation, memory, higher-level thinking, math, reading, science, and social and emotional development. For each topic, we will consider research from multiple perspectives, including neuroscience, developmental psychology, and education, in order to build a complex, interdisciplinary understanding of the typically developing learning brain. Dist: SOC.

# 15. History and Theory of Human Development and Learning

In this course we will learn about the major theories that have influenced the study of human development throughout history. Readings and discussions will provide an in-depth historical lens onto the major conceptual approaches to the study of human development and learning including Freud, Piaget, Vygotsky, Behaviorism, Information Processing, Nativism, and Mind, Brain and Education. The course aims to explain the historical origins of current trends in the study of human development, learning and education. Dist: SOC.

# 16. 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,

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



the university, and any context in which explicit or implicit education takes place. Dist: SOC.

# **Engineering Sciences (ENGS)**

Engineers design devices, processes and systems that help to meet human needs, with due regard for the environment, ethics and economics. The engineering sciences department is dedicated to educating well-rounded engineers within the context of liberal arts. We regard the ability to think quantitatively as a valuable part of a liberal arts education and thus provide a variety of ways for students to increase their understanding of the relationship between technology and society.

The engineering sciences major followed by the Thayer School's Bachelor of Engineering (B.E.) program is the usual route taken into the engineering profession. The major is also excellent preparation for medicine, law, business or other careers that require an ability in quantitative analysis, design and problem solving. The major may be modified with other sciences or with studio art, economics, public policy or environmental studies. In addition to the straight major and to the modifications, we offer two other majors: Engineering Physics for students interested in applied physics or more fundamental aspects of engineering science, and Biomedical Engineering for students who wish to apply to medical school after Dartmouth. A new minor in Human Centered Design combines courses in engineering, computer science and social sciences. More information about all these programs is available at the Thayer School website, Bachelor of Arts (A.B.) | Thayer School of Engineering at Dartmouth.

The engineering sciences department offers a number of courses that serve in satisfaction of the TAS distributive requirement and/or are complementary to studies in other disciplines. For a list of these and other courses, consult the Thayer School website, Undergraduate Courses | Thayer School of Engineering at Dartmouth.

Most students who intend to study engineering begin by taking courses in mathematics and physics in the first year. One of the introductory courses Engs 20 or 21 may be taken in the spring term (CS 1 and 10 may be taken instead of ENGS 20). However, there are many routes into the major and paths through the major, and prospective students should consult with an engineering professor to work out a course of study appropriate to their interests and preparation.

The Bachelor of Engineering degree usually requires up to an additional year of study beyond the Bachelor of Arts (A.B.). Financial aid for the

additional terms is available from Thayer School. Some students with advanced standing are able to complete both the A.B. and B.E. degrees in as few as 12 terms. More information and sample programs are available at the Thayer School website, B.E. Degree Requirements | Thayer School of Engineering at Dartmouth.

# English (ENGL)

English is one of the most popular majors at Dartmouth. The standard English major comprises eleven courses: some of the courses must satisfy distribution requirements within the major. The culminating experience for the major is an advanced seminar or an honors thesis. (Honors students take a 12-course major.)

The English department offers a range of classes, from lecture courses to seminars. Courses on British, American, African-American, and Asian-American literatures, postcolonial literatures, new media, and literary history and theory are offered on a regular basis. Courses in all fields are also regularly offered with a focus on "special topics" that change from year to year. All English department courses pay close attention to the language and structure of texts, to the development of critical vocabulary and theoretical models, and to the cultural circumstances of textual production.

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

- 1, 2, and 3. The Literary Histories, each covering a distinct period of literary history.
- Reading with Attitude. These are outstanding opportunities for broad grounding in the field and an excellent introduction to the major in English.

The department offers a concentration in creative writing; for details on requirements, see the ORC.

For a complete listing of English department course offerings in fall term, please consult the department website at http://english.dartmouth.edu/.

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

# TRANSFER CREDIT

Transfer credit is not normally granted for English courses taken at other colleges and universities before matriculation at Dartmouth.

# 1. Literary History I: Literature up to the mid-Seventeenth Century

This course will provide an overview of English literature from the Anglo-Saxon period through

the Middle Ages and into the seventeenth century. Dist: LIT; WCult: W. Course Group I.

# 5. Reading with Attitude: Introduction to Literary Methods

This course introduces students to various methods for reading literature critically, including close reading, literary theory, practical criticism, and creative writing. By providing an overview of literary interpretation and analysis, this course enables students to look beyond the obvious, to challenge cliché or surface formulations, to, in short, read with attitude. Dist: LIT; WCult: W.

### **Environmental Studies (ENVS)**

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

# CREDIT ON ENTRANCE AND ADVANCED PLACEMENT

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

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

- 2. Introduction to Environmental Science (W)
- 3. Environment and Society: Towards Sustainability? (F)
- 10. Introduction to Environmental Statistics (W)
- 11. Humans and Nature in America (W)
- 12. Energy and the Environment (S)
- 15. Environmental Issues of the Earth's Cold Regions (S)
- 16. Business, Growth, and the Environment (F)
- 17. Marine Policy (F17)
- 18. Native Peoples in a Changing Global Environment (F)
- 19. Encountering Forests (S)

# SELECTED FALLTERM COURSES (ENVS)

# 3. Environment and Society: Towards Sustainability?

What does a sustainable relationship between humans and the environment look like? The co-evolution of society and the environment involves complex and dynamic interactions whose consequences are hard (or impossible) to predict because causes and effects are often far apart in time and space. This course examines interactions between environmental and social processes from the perspective of sustainability. This course explores: the historical roots of unsustainability and the underlying mental models contributing to this state of affairs; the idea that resilience is the key to a sustainable relationship between society and environment; how institutions and power dynamics influence sustainability; and possible actions to facilitate transitions to sustainability while being mindful of paradigms and ethics. Dist: SOC.

# 16. Business, Growth, and the Environment

We've all heard that green jobs will bring the U.S. out of this recession, but can Ben & Jerry's really save the economy and the planet? This course will cover the principles of green business, critiques of green business, and the role of green business in the global economy. Students will compare theory and practice by evaluating the green credentials of companies ranging from Patagonia to British Petroleum. Dist: INT or SOC.

# 18. Native Peoples in a Changing Global Environment

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

# 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 screen-writing, filmmaking, videomaking, new media production (including computer games), and animation.

The following 2016-17 courses are open to first-year students: All of the courses we teach except FS 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)
- 3. Introduction to Digital Arts and Culture (S) 20. 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.

### 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.

### FRENCH (FREN)

A series of three, one-term elementary courses (French 1, 2, and 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 French 8 (Exploring French Culture and Language) and French 10 (Introduction to French Literature).

# COURSE PLACEMENT AND EXEMPTION

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



# Course placement:

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

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

# The following scores/grades will exempt students from the Language Requirement:

- 1. A score of 5 on the CEEB Advanced Placement Examination.
- 2. A score of 720 or higher on the SAT II Subject Test.
- 3. A grade of 6 or 7 on the Higher Level International Baccalaureate (IB)
- 4. A grade of "A" on the British A-Level

# EXEMPTION FROM FRENCH 8: DARTMOUTH'S ADVANCED PROFICIENCY EXAM

An entering student who has been exempted from French 1, 2, and 3 is eligible to take the Advanced Proficiency Exam (APE) during New Student Orientation in September. A score of 90 percent or more earns exemption from French 8.

Note: French 8 (or exemption) and French 10 (see below) are prerequisites for participation in our Paris program; they are also required courses for all students who major or minor in French.

### STUDY PROGRAMS IN FRANCE

The Department runs term-long programs in France every year in Lyon, Toulouse and Paris. To go on the Lyon program (LSA - Language Study Abroad) the prerequisites are French 1 and 2; for the Toulouse program (LSA+), prerequisites are French 1, 2, 3; to go to Paris (FSP — Foreign Study Program), prerequisites are French 1, 2, 3, 8, 10.

# 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 FALL TERM COURSES (FREN)

# 1. Introductory French I (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.

# 2. Introductory French II (W, S)

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

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

# 8. Exploring French Culture and Language (W, S)

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

### 10. Introduction to French Literature (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. In Fall 2016, two sections of French Living in Paris/Habiter Paris. Prerequisite: French 8 (or exemption). Dist: LIT; WCult: W.

### ITALIAN (ITAL)

A series of three one-term intensive courses (Italian 1, 2, and 3) gives students the foundations they need in the language and allows them to satisfy Dartmouth's language requirement. They are then able to move on to the intermediate courses, Italian 9 (Italian Culture) and Italian 10 (Introduction to Italian Literature).

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

# COURSE PLACEMENT AND EXEMPTION

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

# Course placement:

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

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

# The following scores/grades will exempt students from the Language Requirement:

- 1. A score of 5 on the CEEB Advanced Placement
- 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 FALLTERM COURSES (ITAL)

# 1. Introductory Italian I (W, S)

The Italian language in all skill areas: classwork emphasizes listening, speaking, reading and writing. Students learn the basics of Italian grammar and acquire a broader understanding of Italian culture through materials that enable them to use the language in context.

### 2. Introductory Italian II (W, S)

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

# 3. Introductory Italian III (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.

# 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 (S)
- 5. Global Climate Change (S)
- 6. Introduction to International Development (F, W)
- 12. Wilderness, Culture and Environmental Conservation (S)
- 14. Global Water Resources (F)
- 15. Food and Power (S)
- 20. Economic Geography and Globalization (W)
- 22. Urban Geography (F)
- 24. American Landscapes & Culture (F)
- 25. Social Justice and the City (W)
- 28. Immigration, Race & Ethnicity (S)
- 32. The Physical City (W)
- 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 (Identical to International Studies 18)

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.

# 6. Introduction to International Development (Identical to International Studies 16)

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

# 14. Global Water Resources

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.

# 22. Urban Geography

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

### 24. American Landscapes and Cultures

Someone once said that Americans are a people in space rather than a people in time. A political configuration of relatively recent vintage, the United States, nevertheless, occupies a vast amount of space. The occupation and ordering of that space has produced distinctive landscapes with many regional variations. This course will examine the formation of these cultural landscapes beginning with those produced by Native Americans, and following the settlement process up to contemporary, post-modern America. Along the way, we will explore, among other things, the development of such American landscape elements as grid-pattern towns, cowboy ranches, skyscrapers, shopping malls, and corporate office parks. Dist: SOC; WCult: CI.

# 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 often win internships and prestigious fellowships there and elsewhere in the Germanspeaking world. Its students also often go on to highly successful careers in business, law, medicine, education, and engineering.

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 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, and 10.03). 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 (\*).

# 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:



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

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, W, S)
- 4. Politics of the World (F, W, S)
- 5. International Politics (F, W, S)
- 6. Political Ideas (F, W, S)

# SELECTED FALLTERM 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: NW.

### 4. Politics of the World (W, S)

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

### 5. International Politics

This course introduces the systematic analysis of international society, the factors that motivate foreign policies, and instruments used in the conduct of international relations. Particular attention is given to power and economic relations; to cultural

differences that may inhibit mutual understanding or lead to conflict; to nationalism and other ideologies; to the requisites and limits of cooperation; and to the historical structuring and functioning of international institutions. Dist: SOC or INT.

# 6. Political Ideas

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

# 10. Quantitative Political Analysis (W, 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.

### Greek

(See program description under Classics.)

### Hebrew

(See program description under Asian and Middle Eastern Languages and Literatures.)

# History (HIST)

The Department of History offers a major, a minor, a modified major, and an honors program for outstanding students. These four approaches share a common aim: to provide a general background to the history of humanity throughout the world.

With its inherently strong sense of time, change, variety, and complexity, the discipline of history offers a constant antidote to cultural myopia and to the parochialisms of nation, class, and epoch. In a rapidly changing world, a historical awareness is more valuable than ever, for only by knowing of the past can we be free to be vigorously and genuinely contemporary.

Most courses fall into one of four areas: 1) United States and Canada, 2) Europe, 3) AALAC (Africa, Asia, Latin America, and the Caribbean), or 4) inter-regional. The numbering system for history courses does not represent sequencing but rather designates subfields (e.g., all 40s- and 50s-level courses cover European history, all 60s- and 70s-level courses cover Latin American, African, and Asian history). Introductory-level courses that presume no prior work in the field are numbered 1-6.

A student is advised to begin studying in history with a course he or she finds interesting. The introductory surveys (History 1-6 as above) are encouraged as good entry points. Topics courses may demand greater amounts of reading and research, as well as more advanced writing proficiency and intellectual sophistication.

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

# ADVANCED CREDIT

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

# SELECTED FALL TERM COURSES (HIST)

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.

# 3. Europe in Medieval and Early Modern Times

Emphasizing the analysis of primary sources, this course examines the foundation of Western European civilization from the fall of the Roman Empire to 1715. Topics include the origins of European nation states, the intellectual and cultural achievements of the Middle Ages and Renaissance, the rise of constitutionalism and absolutism, the economic and technological roots of Europe's global dominance, as well as the social, political, and religious crises that divided the continent. Lectures and small discussion groups.

### 5.5. The Emergence of Modern Japan

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

# 5.10. Gandhi, Twentieth-Century India and the World

This course explores the political career of Mahatma Gandhi, the leader of the Indian nationalist movement and the key figure in formulating global theories of non-violence. It examines the formation of Gandhi's philosophy in England and South Africa, his impact on the struggle for independence in India, and his conflicts with Indian opponents. It will also discuss the legacy of Gandhi in India after his death and in civil rights movements elsewhere in the world.

# 8.03. Happiness: A History

The course aims to introduce students to a range of perspectives on human happiness, individual and collective, past and present. The course will explore happiness in different religious and wisdom traditions, while charting its emergence since the 18th century as a basic human expectation and even entitlement. The course draws on a wide range of disciplines, including history, philosophy, religion, literary studies, contemporary psychology, economics, and social science.

# 8.04. History of Sexuality

How have historical processes produced distinct sexual practices and identities over time? This course engages 300 years of a history that often evaded the historical record or was deliberately purged from it and asks how more traditional topics of U.S. historical inquiry—immigration, citizenship, economic organization, intellectual and artistic production, racialization, formal politics, law, religious practice—can yield new insights when sexual history is included as a legitimate dimension of analysis.

# **Humanities 1 and 2 (HUMS)**

Humanities 1 (Fall term, Dialogues with the Classics) and Humanities 2 (Winter term, Presenting the Past) 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 regularly with professors for individual writing conferences. Faculty from several humanities departments (e.g., French, Music, Classics, and Asian Studies) 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 books 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 religion 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 August 1. For further information on how to apply, please see www.dartmouth.edu/~hums1-2/.

### SELECTED FALL TERM COURSE (HUMS)

### 1. Dialogues with the Classics

Through a selection of compelling books and artworks from antiquity to the present, the course introduces students to key moments 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 multiple areas across the humanities and social sciences. Readings have recently included texts by Tolstoy, Homer, Munro, Woolf, Dante, Borges, Plato, Shakespeare, Vergil, Klay and Walcott, as well as units on opera, 20th-century European art, and contemporary theater.

# **International Studies (INTL)**

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 crises, global inequality, terrorism and violence — transcend boundaries by their very nature, and as such cannot be understood from a single disciplinary perspective. At the same time, a strong disciplinary grounding is essential for providing a rigorous training and relevant bodies of knowledge to ascertain facts and understand values. The international studies minor aims to make students cognizant of the interplay between local and global processes, human and environmental

interactions, and places, identities and culture, and to prepare them to live productive, responsible lives in an interconnected and rapidly changing world.

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

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

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

- 15. Violence & Security (W)
- 16. Introduction to International Development (F, W)
- 17. Cultures, Places, & Identities (F, W, S)
- 18. Global Health & Society (F, W, S)

### Italian

(See program description under French and Italian.)

# Japanese

(See program description under Asian and Middle Eastern Languages and Literatures.)

# Jewish Studies (JWST)

The Jewish Studies Program serves to provide a focal point for the various courses in Jewish religion, literature, history, society and culture that are given at Dartmouth as well as to sponsor special course offerings and a variety of academic activities related to the discipline. The program currently offers a minor.

# The following courses are recommended for first-year students:

- 06. Introduction to Judaism (F)
- 07. Temple, Synagogue, and (W)
- 11. History and Culture of the Jews II: The Modern Period (S)



Which academic departments and programs are represented in the courses you have circled?



16. Introduction to Hebraic and Israeli Culture (S)

21.01. Jewish in American Literature (W)

24.01. The Hebrew of the Bible (W)

24.02. From Genesis to Seinfeld: Jewish Humor and its Roots (F)

36.02. Jewish Views of Christianity (W)

42. Film, Fiction, and the Arab-Israeli Conflict (F)

62. Jewish Mysticism (W)

Although Hebrew is not required for the Jewish Studies minor, we strongly encourage students to consider studying Modern and/or Biblical Hebrew, which are offered through AMELL.

### SELECTED FALLTERM COURSES (JWST)

# 06. 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 Halaka (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.

# 24.02. From Genesis to Seinfeld: Jewish Humor and its Roots

What is Jewish humor, what are its roots, and what can it begin to tell us about Jewish society, its values and its self-image? Using Freudian and other humor theory, we examine 2000 years of Hebrew comedy and satire, from the Bible to contemporary Israel, in such genres as short stories, jokes, and strip cartoons, and its relationship to American Jewish humor.

### 42. Film, Fiction, and the Arab-Israeli Conflict

This course explores Israeli cinema in the context of the social and historical backdrop of the Arab-Israeli conflict and the painful emergence of a new Jewish-Israeli identity in the shadow of the Holocaust and constant warfare. We will study a dozen films in depth, situate them in the evolution of an Israeli cinema, and consider the problems of turning fiction into film.

# Latin

(See program description under Classics.)

# Latin American, Latino and Caribbean Studies (LALACS)

LALACS is an interdisciplinary program that offers courses on Latin America, Latinos in the United States, and the Caribbean. This region of the world includes the world's most — and least — dynamic economies, rich and complex cultures, and complicated and vital transnational relationships. Our courses in Latino Studies are well suited to help all Dartmouth students understand the United States and how to navigate in a country in which Latinos will soon comprise one third of the population. We teach students how to think critically about the relationship between the US and its neighbors. LALACS courses include anthropology, art history,

geography, government, history, literature, religion and theater. All courses are taught in English.

# SELECTED FALL TERM COURSES (LACS)

# 1. Introduction to Latin America and The Caribbean

This interdisciplinary course introduces students to the geographical conditions, historical roots, and enduring cultural diversity of Latin America and the Caribbean. After a brief survey of the physical and cultural geography of the region, the course examines the history of selected countries to highlight the way European conquest and colonialism have molded Latin American institutions and attitudes. The course then turns to particular case studies of contemporary life and society to analyze the ongoing problems of ethnicity, inequality, and political repression engendered by the region's colonial past. Finally, the course draws on these historical and anthropological understandings to assess recent economic, social, and political developments in Latin America. By juxtaposing historical realities with their living consequences, the course presents a multi-disciplinary perspective on the nature, dynamics — and future prospects — of the many peoples who inhabit this vast and diverse continent. Dist: SOC; WCult: NW. Voekel.

# 20. The Politics of Development

In LACS 20 we will consider the political and ethical issues of international development programs in Latin America with a focus on Nicaragua. This course promotes an expanded model of international community-based learning in the context of Nicaragua, through collaborative projects and community service that address the health care and development needs of this region. Through guided ethnographic research, group projects and presentations, reflections, and portfolios, students will examine some of the pitfalls and best practices of development in the region. Dist.: SOC; WCult: CI. Moody.

# 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 in linguistics take most of their courses in the program.

Linguistics 1, taught each fall, winter, and spring, offers an introductory description of human language and its use; this course serves as a prerequisite for subsequent study in linguistics.

# The following courses are open to first-year students (LING):

- 1. Introductory Linguistics (F, W, S)
- 17. Sociolinguistics (S)
- 18. History of the English Language (F)
- 21. Phonology (LING 01 Prerequisite) (S)
- 23. Semantics and Pragmatics (LING 01 Prerequisite) (W)

26. Morphology (LING 01 Prerequisite) (W) 33. Typology (LING 01 Prerequisite) (S)

# 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.

# 18. History of the English Language

The development of English as a spoken and written language as a member of the Indo-European language family, from Old English (Beowulf), Middle English (Chaucer), and Early Modern English (Shakespeare), to contemporary American English. Topics may include some or all of the following: the linguistic and cultural reasons for "language change," the literary possibilities of the language, and the political significance of class and race. Pulju. 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

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

- 1. Introduction to Calculus (F)
- 3. Calculus (F, W)
- 4. Applications of Calculus to Medicine and Biology (S)
- 5. Exploring Mathematics (F, W)
- 7. First-Year Seminar (S)

- 8. Calculus of Functions of One and Several Variables (F, W, S)
- 10. Introduction to Statistics (S)
- 11. Accelerated Multivariable Calculus (F)
- 13. Multivariable Calculus (F, W, S)
- 17. An Introduction to Mathematics Beyond Calculus (W, S)
- 20. Discrete Probability (F, S)
- 22. Linear Algebra (F, S)
- 23. Differential Equations (F, W, S)
- 24. Linear Algebra (Honors Section of Mathematics 22) (W, S)
- 28. Introduction to Combinatorics (W)

### CREDIT AND ADVANCED PLACEMENT

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

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

At the end of Mathematics 8, the student may elect to take Mathematics 13 (Calculus of Vector Valued Functions) or any other course (e.g., 20, 22) for

which Mathematics 8 is the sole prerequisite. Students with advanced credit for Mathematics 3 and who receive credit for Mathematics 8 based on the local placement exam, and wishing to continue with the calculus sequence are placed in Mathematics 11 in the fall. The most commonly chosen subsequent courses are Mathematics 24 (Honors Linear Algebra) in the winter, Mathematics 22 (Linear Algebra) in the spring, and/or Mathematics 23 (Differential Equations) in the winter or spring.

# SELECTED FALLTERM 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 seen some calculus, but not enough to place out of MATH 3, should take MATH 3. MATH 1 reviews relevant techniques from algebra and pre-calculus, covers the manipulation and analysis of functions, including polynomial, trigonometric, logarithmic, and exponential functions, an introduction to convergence and limits, continuity, rates of change and derivatives, differentiation rules, and applications to approximation. Students wishing to continue their study of calculus after MATH 1 take MATH 3. Dist: QDS.

### 3. Calculus

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

# 8. Calculus of Functions of One and Several Variables

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



### 11. Accelerated Multivariable Calculus

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

# 13. Multivariable Calculus

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

### 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, music technology, world music, and digital music composition are offered frequently. All qualified students may also receive private instruction for credit in string, brass, woodwind, and percussion instruments; classical or jazz piano; or in voice. For individual instruction in voice and instruments (Music 53 through 58), three terms of instruction count as one full course credit; the enrollment and credit are recorded in the third term. There is at least one first-year seminar taught in the department each year in addition to a number of experimental courses in contemporary composition or improvisational techniques. Introductory music courses are: Music 1-16, 20 and 25. Prerequisites for the major are Music 20 and 25.





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

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

- 1. Beginning Music Theory (X)
- 4. Global Sounds (F, W)
- 7. First-Year Seminar: (W)
- 8. Programming for Interactive Audio-Visual Art (W)
- 16. Music and Image (F)
- 18. Topics in Popular Music (F)
- 20. Introduction to Music Theory (F, S)
- 21. Melody and Rhythm (prerequisite: Music 20) (F)
- 25. Introduction to Sonic Arts (F, S)
- 31. Digital Music Composition (S)
- 45. Topics in World Music (F, W)
- 50. Performance Laboratories, Sections 1, 2, 3 (F, W, S)
- 53–58. Studies in Musical Performance (Individual Instruction Program) (F, W, S)

# ADVANCED PLACEMENT

Students may be exempt from Music 20 by passing a local placement exam administered by the Department of Music just before the start of classes in the fall term. Students who successfully pass placement tests for Music 20 will not be required to take this course as a prerequisite for the major. Students who have taken music theory in school or who have extensive knowledge of music through performance experience are encouraged to write to the chair of the Department of Music for additional information.

# 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)

# 2. The Music of Today

From Sonic Youth, They Might Be Giants,

Battles, Peter Schickele/PDQ Bach, John Zorn, Philip Glass, Arvo Pärt, Ligeti, Xenakis, Tan Dun, Christian Wolff, to Indonesian Quran Reciter Maria Ulfah, this course investigates the sound and ideas of punk/alternative/experimental rock bands, the avant-garde Jazz phenomenon, comic music parody, American and European minimalism, experimentalism, complexity, and ethnic fusion in contemporary classical music.

# 4. Global Sounds

A survey of music and music-making whose origins are at least partially in the non-European world. Examples have included Indian raga, Javanese gamelan, and Gnawa trance music. Course work will include listening, reading, and critical writing assignments. Where possible, visiting musicians will be invited to demonstrate and discuss the music under consideration. No prerequisite. Dist: ART; WCult: NW.

# 16. Music and Image

This course investigates how musical media stimulate social, cultural, and ideological exchange in the twenty-first century. Through global perspectives, we will consider the roles of film, television, video games, music videos, and related media—from autotune controversies to Guitar Hero tournaments, from the live-tweeting of Wagner's Ring to Tan Dun's Internet Symphony for the YouTube Orchestra. Prominent themes include: new media's purported democratizing effects on the production, circulation, and consumption of music; the changing roles and responsibilities of musicians in an age of digital globalization; and the power of musical media to structure human experience writ large. Dist.: ART.

# 18. Topics in Popular Music

Studies of popular music in social, political,

historical, aesthetic, and/or ethical perspectives in Western and/or non-Western cultures. Dist: ART.

# 20. Introduction to Music Theory

This course begins a sequence in harmony and theory and is intended for those who may consider a music major or minor. Topics include music notation, interval identifications, common practice scales and modes, harmonic function, melodic construction, and formal analysis. In addition, students will have an opportunity to improve skills in rhythmic, melodic, harmonic dictation, sight singing, and score reading. Prerequisite: the ability to read music in two or more clefs, or permission of the instructor. Dist: ART.

### 25. Introduction to Sonic Arts

This course provides an introduction to the study of music with sound technology, using notable examples in music, sound art, intermedia, and installation. Starting with the birth of electricity, Futurism, and Dada, students will examine the practices and innovations that led to the most current ideas about Sonic Art, and from here develop analytical methods for exploring music of more distant times and places. Students will be expected to develop a rounded 21st-century musicianship through the weekly Tonmeister labs, and the culmination of this course will be the creation of a basic original sonic arts composition using the technique and aesthetic principles learned throughout the course.

### 45. Topics in World Music

Ethnomusicology is the study of music – particularly that outside the Western classical tradition – in its social and cultural context. No prerequisite. Dist: ART; WCult: NW. Fall 2016: TBA

# 50. Performance Laboratories

Performance Laboratories provide weekly coaching and instruction in diverse forms of music making, and are open by audition to all Dartmouth students. Course work centers on musical readings, discussion, and informal performance of selected repertory chosen both for its intrinsic interest and for its relevance to the contents of course syllabi within the music department. Performance laboratories may be taken for credit (three terms equals 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)
- 10. (ANTHRO 4) Peoples & Cultures of Native North America (S)
- 15. (HIST 15) American Indians and American Expansion: 1800 - 1924 (S)
- 18. (ENVS 18) Native Peoples in a Changing Global Environment (F)
- 25. Indian Country Today (F)
- 32. (ENGL 67) Indian Killers: Murder & Mystery in Native American Literature and Film (F)
- 35. (ENGL 45) Native American Literature (S)

### SELECTED FALLTERM 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. Native Peoples in a Changing Global Environment

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

### Philosophy (PHIL)

Philosophy deals with questions like: What really exists? Does God exist? What can we know? Are there any universal moral standards? Philosophers do not simply try to answer these questions, they examine the questions themselves. Philosophy is the attempt to think clearly and precisely about the basic questions that we confront as individuals and as members of societies. This explains why logic, the study of both formal and informal reasoning, is such a basic part of philosophy. Two different logic courses are open to first-year students: Philosophy 3: Reason and Argument, and Philosophy 6: Logic and Language. Of the other courses open to first-year students, Philosophy 1: Introduction to Philosophical Topics, deals with all of the questions mentioned at the beginning of this paragraph, and Philosophy 8: Introduction to Moral Philosophy, concentrates on the final question, considering the answers that have been offered by the greatest philosophers of the past. Philosophy 9: Topics in Applied Ethics, considers the answers that have been given to this final question and tries to apply

them to a particular topic each year; for example, the environment, sex, or war. 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. Introduction to Philosophical Topics (F, W, S)
- 3. Reason and Argument (F, S)
- 5. Philosophy and Medicine (S)
- 6. Logic and Language (W, S)
- 7. First-Year Seminars in Philosophy (W)
- 8. Introduction to Moral Philosophy (W)
- 9. Topics in Applied Ethics (F, S)

### 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.

# 1.07. Life, Death, Relationships, and Meaning

In this course we will philosophize about what is valuable and how to live a life, asking how our answers to those questions are affected by the fact that lives don't go on forever.

# 3. Reason and Argument

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

# 8. Introduction to Moral Philosophy

A study of the main types of ethical theories from Plato to the pragmatists and existentialists. Attention will be paid to the relevance of major historical positions to contemporary issues.

# 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? Some 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?

### 9.02. Environmental Ethics

This course provides a general introduction to ethical problems concerning the environment. The course will cover some standard positions in the field, including biocentrism (the thesis that all living organisms have intrinsic moral worth) and eco-centrism (the thesis that entire natural systems have intrinsic moral worth). Topics considered may include: the ethics of food; the ethics of climate change; the moral status of non-human animals; population, consumption, and sustainability; GMOs and organic food; our duties to other persons, including future persons; and the difficulty of formulating comprehensive climate policy.

# 9.06. Friends, Lovers, and Comrades: Ethical Issues of Special Relationships

This course will investigate philosophical issues that arise in our relationships with other people. What kind of attitude is love? What makes someone a genuine friend? Is partiality to one's friends and family morally justifiable? Is patriotism? What are the moral responsibilities of sex? Readings from classic and contemporary sources, including Plato, Aristotle, Pufendorf, Hume, Kant, Freud, and Beauvoir.

# 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 wish a more technical introduction to astronomy and astrophysics are encouraged to take Astronomy 15 and/or 25.

Students interested in majoring in astronomy should consult Professor John Thorstensen. A



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

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)
- 15. Stars and the Milky Way (W or S)

Astronomy now 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 17W.

# 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 a local placement exam administered at the testing center during Orientation.

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.

# 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 sequence Physics 3-4 is designed primarily for students who do not intend to take Physics 19. Prerequisite: Mathematics 3. Dist: SLA.

# 13. 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 Schrodinger 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 departmental placement exam offered during New Student Orientation. 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 1 (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, W, 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 submit 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 FALLTERM COURSES (PSYC)

### 1. 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.

# 6. Introduction to the Neurosciences

This course provides students with an introduction to the fundamental principles of neuroscience. The course will include sections on cellular and molecular neuroscience, neurophysiology, neuro-anatomy, 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 a 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 socioeconomic interaction and applying them to the real world of public policymaking. The Public Policy minor complements any major offered at Dartmouth, whether in the sciences, social sciences, or arts and humanities. Many students build an international dimension into their minor.

The six-course sequence for the minor includes a gateway public policy process course, Public Policy 5: Introduction to Public Policy; a choice of two 40-level public policy tools and methods courses from among eight 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 2017 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)
- 26. Health Policy and Clinical Practice (S)
- 41. Writing and Speaking Public Policy (S)
- 42. Ethics and Public Policy (F)(S)
- 43. Social Entrepreneurship (W)
- 44. Polling, Public Opinion, and Public Policy (S)
- 45. Introduction to Public Policy Research (F)
- 52. Leadership in Political Institutions (W)
- 85. Global Policy Leadership (F)

# **Quantitative Social Science (QSS)**

The Program in Quantitative Social Science (QSS) offers a structured academic curriculum to undergraduate students seeking to combine an interest in a traditional social science field with strong methodological and technical training. QSS provides a curriculum grounded in computing and



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



quantitative analytical techniques whose primary focus is leveraging these techniques in the pursuit of data analysis in the social sciences.

The Program offers both a minor, and a major where the major is open to all students who have honors standing in the College (overall grade-point average of 3.0). Students pursuing either the minor or the major in QSS will 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 strong curriculum in data analysis and mathematics and to consult with faculty associated with the program.

# SELECTED FALLTERM 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 pursuing coursework in QSS or continue in the social, biological, or physical sciences. Dist: QDS.

# Religion (REL)

The Department of Religion offers a rich list of courses on a subject that you will encounter in many other departments. This is because religion is at the core of all cultures and societies. An objective understanding of this subject, therefore, is a crucial component of a liberal-arts education. The Department offers courses on the major religions of the ancient and modern world, as well as courses on religion and ethics, the nature of religious belief and language, myth and ritual, women and religion, and many other topics on the intermediate and advanced seminar levels.

The Department also offers a foreign study program at the University of Edinburgh in Scotland. Many students find that either a major or modified major in religion is an excellent choice for a 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 (W)

- 1.02. Contemporary Religion (S)
- 6. Introduction to Judaism (F)
- 7. Sin, Guilt, Debt (W)
- 9. Hinduism (S)
- 10. The Religions of China (F)
- 11. Religion and Morality (S)
- 16. Modern Islam (S)
- 18. Indian Buddhism (S)
- 19.14. Can the Universe Be Just? (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.

### Russian (RUSS)

The study of Russian offers you a passport to the culture of the world's largest country. Russia covers 11 time zones. Its vast forests are sometimes called "the lungs of Europe and Asia." Lake Baikal, which contains 20% of the Earth's fresh water, attracts tourists, scientists, and students alike (among them a number from Dartmouth). Representing the letter 'R' among the so-called BRIC nations, Russia has become a major global economy and is regaining its place as a military and political power. Russian gives you entrance to one of the world's richest artistic traditions, ranging from icon painting to Kandinsky and Chagall, from Chaikovksy to Stravinsky in music, and from pioneering filmmakers like Eisenstein to major directors of the late twentieth century, like Andrei Tarkovsky. Finally, a knowledge of Russian and Russian culture will open doors to careers in diplomatic and other government services, as well as journalism.

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+ in St. Petersburg. It also qualifies students for Russian 27 and 28, which serve as gateway courses for many of the department's more advanced language courses. Four years of the language are offered, as are many courses in literature and linguistics. 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, Geography, and Economics. Most of the literature courses are taught in English, with the Russian majors doing 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 (RUSS):

- 1, 2, 3. Introductory Russian (F, W, S)
- 7. First Year Seminar (W)
- 13. Slavic Folklore: Vampires, Witches and Firebirds (F)
- 17. Russian fairy Tales (S)
- 31. Transgressive Novels: Masterpieces of Russian Fiction (W)
- 32. 20th Century Russian Literature: Revolution, Terror, and Art (S)
- 36. The Seer of the Flesh: Tolstoy's Art and Thought (S)
- 38.04. Madmen, Holy Fools, and Fanatics in Imperial Russia (W)

# 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 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 (RUSS)

# 1. First-Year Course in Russian

An introduction to Russian as a spoken and written language.

# 13. Slavic Folklore: Vampires, Witches and Firebirds.

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, comfortingly 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.

# Sociology (SOCY)

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

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

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

- 1. Introductory Sociology (F, S)
- 2. Social Problems (W)
- 10. Quantitative Analysis of Social Data (W, S)
- 11. Research Methods (W, S)
- 15. Sociological Classics (F, W)
- 21. Political Sociology (S)
- 23. Social Movements (F)
- 26. Capitalism, Prosperity and Crisis (S)
- 31. Youth and Society (F)
- 33. Self and Society (F)
- 34. Health Disparities (S)
- 35. Sociology of Mental Health (F)
- 36. Sociology of Family (W)
- 38. Status and Power (S)
- 45. Inequality and Social Justice (W)
- 47. Race and Ethnicity (S)
- 49.17 Religion and Political Economy (S)
- 49.23 Critical Political Economy (F)

# SELECTED FALLTERM COURSE (SOCY)

# 49.23. Critical Political Economy

Political economy was formulated as a central field of research since the 19th century, designed to comprehend both fields — politics and economics — and how they interact, at the local, regional and global level. Since the 2008 financial crisis it became a very popular field of research, highlighting varied and opposed theoretical approaches. The course will focus on critical perspectives to political economy, including a. class conflict, race and ethnic relations and the world system; b. state institutions and their relation to civil society, capital and labor organizations; and c. late developments of the neoliberal economy, the social and economic implications of inequality, and global protests of the 99%. Dist: SOC; WCult: W. Grinberg.

# Spanish and Portuguese (SPAN) (PORT)

The Department of Spanish and Portuguese is one

of the language and literature departments that share Dartmouth Hall, the historic architectural center of the campus and the focal point for the study of foreign languages, literatures, and cultures. The faculty of the department represents a broad range of interests, specializations and perspectives on language learning, literature, and cultural studies. The department offers beginning language through advanced seminars, individual studies, and honors programs, and a varied array of overseas programs.

The majors offered are (a) Hispanic Studies, (b) Romance Studies, (c) Modified Major in Hispanic Studies, and (d) Modified Major in Lusophone Studies.

The minors offered are in Hispanic Studies and Lusophone Studies (Literature and Culture of the Portuguese speaking world).

### PORTUGUESE (PORT)

Two one-term intensive introductory courses (Portuguese 1 and 3) furnish the basic training in language sufficient to satisfy the language requirement and to prepare for intermediate courses (Portuguese 20 on campus or Language Study Abroad Plus in Brazil).

### SPANISH (SPAN)

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

# **COURSE PLACEMENT**

Which class should I take if I wish to continue with my studies in Spanish at Dartmouth College? If I have taken the SAT II test:

0 – 410: Spanish 1

420 - 590: Spanish 2

600 - 680: Spanish 3

690 or better: Spanish 9

If I have taken AP exams:

AP Language 4 or 5: Spanish 9

AP Literature 4: Spanish 9

AP Literature 5: Spanish 20

Students who scored 5 on the AP Literature exam receive one credit on entrance for Spanish 9.

If I have taken the British A Level exams: "A" on the A level exam: Spanish 20. Students receive one credit for Spanish 9. "B" on the A level exam: Spanish 9.

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

Students who have not taken SAT II, AP, British A level, or IB exam scores must take the Department placement exam if they wish to continue with their Spanish studies at Dartmouth. The exam is offered online for incoming first-year students



from August 1– August 29. 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 19 only for students who missed the August 1 – 29 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 Department 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



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

Department (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. Oral class activities, readings and compositions. Weekly practice in the virtual language lab includes viewing TV series and 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. 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. Open to first-year students by qualifying test and to others who have passed Spanish 1.

### 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. Open to first-year students by qualifying test and to others who have passed Spanish 2.

# 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 aural media (e.g., documentaries, TV and radio programs, films), grammar, vocabulary, and speech acts as presented in the course packet, students will actively practice listening and speaking skills with the goal of reaching an Intermediate

High Level (on the ACTFL scale). Additional written material may be added according to the professor's particular interests. Prerequisite: Spanish 3; AP Lang 4 or AP Lit 4; local placement exam 600+; or permission of the instructor. It serves as a prerequisite 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 8 or 9; exemption from Spanish 9 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.

There are no elementary Portuguese language courses offered in the fall term.

# 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, and Special Topics 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):

- 15. Drawing I (W, S, X)
- 16. Sculpture I (W, S, X)
- 17. Special Topics (W, S)

# SELECTED FALL TERM 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 skills and art terminology to critique their own sculpture and that of others. Supplemental course fee required. Dist: ART.

# 17.13 Special Topics: Drawing with Van Gogh

Students will learn to draw as Vincent Van Gogh did throughout various stages of his life, with similar instruction, purpose and drawing materials. They will see and draw from the art that influenced him, work from subject matter similar to his, and experiment with his particular techniques. Students will copy a range of Van Gogh drawings, draw directly from life as he did, and read many of his extraordinary letters. At the end of the term, each student will develop a suite of drawings embodying their own idea of how Van Gogh's work might have further evolved. Supplemental course fee required. Dist: ART.

# Theater (THEA)

The theater program offers a variety of ways for all Dartmouth students to participate in the study and practice of theater. While the department does offer a theater major and a theater minor, students do not have to be majors or minors to participate. Students from all parts of campus are invited to enroll in theater courses and to participate in the department's busy production program as actors,

directors, playwrights, designers, stage managers, dramaturges and technicians.

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. Traditional 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 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 30 performances at a variety of London theaters, all of which is paid for by the program. Students receive three Dartmouth credits for the FSP. Prerequisites for the FSP include either Theater 15, 16, or 17 and one course in theater practice: Theater 26, 27, 29, 30, 36, 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 (W)
- 10. Special Topics in Theater (F, W, S)

Human Rights and Performance (F)

The Sound of Silence: A Chekhov Writing Workshop (F)

Sex and Drama: Sexuality Theories/Theatrical Representation (F)

Acting for Musical Theater (W)

Creativity and Collaboration (W)

Violence & Pleasure in British Drama: Renaissance Corpses, Modern Bodies (W)

- 15. Theater and Society I: Classical and Medieval Performance (F)
- 16. Theater and Society II: Early Modern Performance (W)
- 17. Theater and Society III: 19th and 20th Century Performance (S)
- 23. Topics in African Theater and Performance (W)
- 24. Asian Performance Traditions (S)
- 26. Movement Fundamentals I (F)
- 30. Acting I (F, W, S)
- 36. Speaking Voice for the Stage (S)
- 40. Technical Production (F, W)
- 41. Stage Management (W)
- 42. Scene Design I (W)
- 44. Lighting Design I (F)
- 48. Costume Design I (S)
- 50. Playwriting I (F, S)
- 54. Directing I (S)

# SELECTED FALLTERM COURSES (THEA)

# 10. Special Topics in Theater: Human Rights and Performance



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.

This course explores performance texts and theater scholarship that engage with the discourse of human rights. The course examines various case studies of state-sanctioned violations of human rights and how theater and performance artists have responded to those violations. In addition to a series of short response essays, each student will develop an independent research project throughout the term. Dist: ART.

# 15. Theatre and Society I: Classical and Medieval Performance

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

### 26. Movement Fundamentals I

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

# 30. Acting I

This course is a basic introduction to acting technique for the stage. The course is designed to develop the ability to play dramatic action honestly and believably, using realistic/naturalistic material as well as self-scripted autobiographical writing. Course work includes exercises and improvisations, monologues and scene work. Out-of-class assignments include required readings from acting texts and plays, attendance at local stage productions, rehearsals, and journal writing. Permission to enroll will be given based on an interview with the instructor. 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 with instructor's permission. 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. Students will not be enrolled until



after an interview with 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, including a concentration in Sexuality and LGBT Studies. 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, transgendered, 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 and Middle Eastern Studies Program, we offer an annual Foreign Study Program in Hyderabad, India. Most courses are open to all students and may be taken for elective credit, as part of the Women's, Gender, and Sexuality Studies Major, Minor, Modified Major or to satisfy distributive requirements. For globally minded students, Women's, Gender, and Sexuality Studies works with the Gender Research Institute and the Dickey Center for International Understanding to co-sponsor international internships in gender-focused organizations. Recent experiences have taken students to India, Guatemala, and the Dominican Republic.

# SELECTED FALLTERM COURSE (WGSS)

# 10. Sex, Gender, and Society

This course will investigate the roles of women and men in society from an interdisciplinary point of view. We will analyze both the theoretical and practical aspects of gender attribution — how it shapes social roles within diverse cultures, and defines women's and men's personal sense of identity. We will discuss the following questions: What are the actual differences between the sexes in the areas of biology, psychology, and moral development? What is the effect of gender on participation in the work force and politics, on language, and on artistic expression? We will also explore the changing patterns of relationships between the sexes and possibilities for the future. Dist: SOC; WCult: CI.

# Writing and Rhetoric: The Institute for Writing and Rhetoric (WRIT)

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 RWIT (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 www.dartmouth.edu/~hums1-2.

# PLACEMENT PROCESS FOR WRITING 2-3 AND WRITING 5

In a separate mailing in early June, details and instructions regarding the online writing placement process are sent to invited students. This webbased process has been designed to allow students who might benefit from a two-term writing course 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 15th to complete the online writing 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 at: writing.two.three@dartmouth.edu.

Students who complete the online writing placement process and choose to take 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 writing placement process will take Writing 5. Students taking Writing 5 are assigned to take the course in either the fall or the winter; this assignment cannot be changed. Information about when a student is scheduled to take Writing 5 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: http://dartmouth.edu/writing-speech/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 FALLTERM COURSES WRITING (WRIT)

# 2-3. Composition and Research

This two-term course in first-year composition

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

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 in order 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.

# 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.





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 Deans Office Student Consultants (DOSCs).



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:

**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.

ACADEMICALLY AT DARTMOUTH?

WHAT WILL HELP YOU SUCCEED

WHAT MAKES YOU UNCERTAIN ABOUT ACADEMIC SUCCESS?



24

# WHAT OPPORTUNITIES EXCITE YOU AS YOU IMAGINE YOUR FIRST YEAR AT DARTMOUTH?

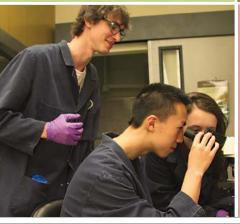
# Make sure to consider co-curricular opportunities, classes, clubs, getting to know faculty, and skills to develop.

# Academic Planning Worksheet

# 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) Prerequisite courses: Is the course an important prerequisite for an off-campus program, pre-health requirement, or an important sequence that is only offered this term?
- Remember: You don't need to take a course just because you were placed into the course.





# **POTENTIAL FIRST YEAR COURSES**

FALL	<u>WINTER</u>	<u>SPRING</u>
1		
2		
3		

# Preparation for Health Professions



**THE HEALTH PROFESSIONS PROGRAM (HPP)** is Dartmouth's four-year advising program that helps 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 as well as group workshops and other opportunities.

HPP's robust pre-health advising program also oversees the Pre-Health Peer Mentor Corps, as well as the Pathways to Medicine Initiative (which supports students from backgrounds underrepresented in medicine). HPP works in collaboration with the Nathan Smith Society student organization (NSS), the Minority Association of Pre-Health Students (MAPS), Geisel Medical School students, alumni, medical professionals, community members, and faculty to offer many opportunities for community events and personal encounters.

Meet with your pre-health advisors as soon as possible after arriving and throughout your first year. Make sure to attend the important pre-health advising Orientation events and come in during Walk-In Hours or make an appointment to meet with us.

Visit our primary HPP web site: www.dartmouth.edu/~nss. A new website is under construction.

Your pre-health advisors will assist you with: course election; 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 in the actual health profession school application.

The pre-health journey is also experiential. Participate in Dartmouth's local shadowing program with area physicians, vets, dentists, nurses, etc.; receive guidance for finding undergraduate research and internship opportunities; and attend workshops that help you learn about the pre-health process and clarify your goals.

# **FREQUENTLY ASKED QUESTIONS**

# WHAT IS ESPECIALLY USEFUL TO KNOW TO GET STARTED?

There is not a "one size fits all" path! Everyone arrives with different math and science backgrounds and levels of clarity about their aspiration. 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 first term. All students develop new problem solving skills and ways of thinking.

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 learn-

ing 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 www.shodor.org/unchem/ index.html. A summer community college class is another option, as are free courses on Coursera.

Prepare to study differently! You can get great tips on study strategies from us, the Academic Skills Center, your peers, and from your faculty.

Speak with a pre-health advisor early on! As you can see from the right hand column, there is a great deal of coursework on the path to many medical professions, and planning is involved. However, there are different paths and timelines to consider.

# 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. Humanities, Sciences, and Social Sciences majors 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, it can fit together. You will assess and adjust as you go. Your HPP advisors are here to support that journey.

# WHEN DO PEOPLE APPLY TO A HEALTH PROFESSIONS SCHOOL?

Eighty 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/ae). This means one or more "gap" years. This allows 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 for that "gap year(s)" during their senior year. Going "straight through" means applying early summer at the end of junior year.

# HOW DO I GAIN NEW STRATEGIES FOR SUCCESS IN PRE-HEALTH CLASSES?

You will be in a new learning environment and will continue to grow as a student! Your pre-health advisors, undergraduate deans, faculty, and the Academic Skills Center are here to assist! It is quite normal to need to develop effective new studying and learning strategies.

# SEE BELOW 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. We encourage students to adapt to science at Dartmouth and then decide if it is for them. It is the norm to take one lab class at a time.

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

SUBJECT: Biology - 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 or vet school. [See next page for course titles.] To help students determine if they are sufficiently prepared to enter a foundation course directly, the Biology department has established an online self-assessment exam for students. Either Biology 11 or Biology 2 are a good entry into Biology at Dartmouth, depending on student's previous

background. [Biology 12: Cell Structure and Function; Biology 13: Gene Expression and Inheritance; and for physiology preparation either Biology 14: Physiology or Biology 2: Human Biology.] To help you figure out your best path through the Biology preparation, come speak with pre-health advisors!

SUBJECT: Chemistry - 2 courses Gen Chem with lab; and 2 terms Organic Chem with lab

AT DARTMOUTH: Calculus (Math 3) is a prerequisite for Gen Chem.

Gen Chem: Chem 5 and 6: With a more advanced background (AP, IB) one might exempt out of one or both classes; however one must still take a general chemistry class at the college level.

Gen Chem 10 is an alternate course for students with advanced standing.

Organic Chem: Chem 51 and 52.

For students who have 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 taking Chem 2 as a starting place.

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

SUBJECT: Physics - 2 courses of general physics with lab AT DARTMOUTH: General Physics: Physics 3 and 4 (or Physics 13 and 14 for Chemistry, Engineering, or Physics majors). These courses have Calculus 3 prerequisite. With a more advanced background (AP, IB) one might exempt out of one or both classes. However, one must still take a general Physics class at the college level.

SUBJECT: Mathematics - 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 2) is sufficient as long as one Math class (which can be Statistics) is taken at college.

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:

There is a Psychology and Sociology section on MCATs. While these are not yet prerequisites for most health professions schools, they are often recommended; regardless, preparation will be necessary for an MCAT. If you choose to prepare at Dartmouth, Psychology 1 will give you much of the Psychology material you need and Sociology 1 or a health-related Sociology course could give you the material you need. There may be other ways to learn this material at Dartmouth, or on your own. Consult with your pre-health advisors!



# THE FOLLOWING IS A LIST OF DEPARTMENTS AND OFFICES THAT YOU MAY WISH TO CONTACT IF YOU HAVE QUESTIONS.

General questions may be directed to the Undergraduate Deans Office at (603) 646-2243 or dean.of.undergraduate.students@dartmouth.edu. For more information about New Student Orientation, please call (603) 646-3399. All numbers below are preceded by the 603 area code and the 646 exchange. If you are on campus, dial "6" before the number.

	2011		
Academic Skills Center	2014	Hopkins Center for the Arts	6868
African and African American Studies	3397	Humanities 1 and 2	2917
Anthropology	3256	International Students Program	2331
Art History	2306	International Studies	1040
Asian and Middle Eastern Languages	2011	Jewish Studies Program	0475
and Literatures (AMELL)	2861	Latin American, Latino, and	4.640
Asian and Middle Eastern Studies (AMES)	0434	Caribbean Studies (LALACS)	1640
Astronomy	2854	Linguistics	0332
Biology	2378	Mathematics	2415
Athletics	2465	Music	3531
Center for Professional Development	2215	Native American Program	2110
Chemistry	2501	Native American Studies	3530
Classics	3394	Off-Campus Programs (Guarini Institute)	1202
Cognitive Science	0332	Office of Pluralism and Leadership (OPAL)	1656
Collis Center for Student Involvement	3399	Office of Student Life	6979
Comparative Literature	2912	Office of Visa and Immigration Services (OVIS)	3474
Computer Science	2206	Philosophy	8172
Computer Store	3249	Physical Education and Recreational Sports	2478
Computing Services	2643	Physics and Astronomy	2854
Dartmouth Center for Service	3350	Psychological and Brain Sciences	3181
Dartmouth Dining Services (DDS)	2271	Quantitative Social Science	3995
Dartmouth (ID) Card Office	3724	Religion	3738
Dartmouth Outing Club (DOC)	2429	Reserve Officer Training Corps (ROTC)	3222
Dickey Center	2023	Residential Education	1491
DOC First-Year Trips	3996	Residential Operations	1203
DSGHP (Health Insurance)	9438	Rockefeller Center	3874
Earth Sciences	2373	Russian	2070
Economics	2538	Safety and Security, Department of	4000
Education	3462	Sociology	2554
Engineering Sciences	3677	Spanish and Portuguese	2140
English	2316	Student Accessibility Services	9900
Environmental Studies	2838	Student Center for Research, Writing, and	
Film and Media Studies	3402	Information Technology (RWIT)	9748
Financial Aid	2451	Student Financial Services	3230
French and Italian	2400	Studio Art	2285
Geography	3378	Theater 3104	4, 3691
German Studies	2408	Tucker Center	3780
Government	2544	Tutor Clearinghouse	2014
Health Professions Program/Pre-Health Advising 3377		Undergraduate Deans Office	2243
Health Services (Dick's House)	9400	Undergraduate Housing	3093
History	2545	Women's, Gender, and Sexuality Studies	2722
Hood Museum of Art	2808	Writing and Rhetoric, Institute for	9748

# DARTMOUTH COLLEGE CALENDAR 2016 - 2017



New Student Orientation **SEPTEMBER 6-11** 

Fall term classes begin **SEPTEMBER 12** 

Fall term classes end

NOVEMBER 15

Fall term examinations

**NOVEMBER 18-23** 

Residence halls close at noon

**NOVEMBER 23** 

Residence halls open

**JANUARY 2** 

Winter term classes begin

**JANUARY 4** 

Winter term classes end

**MARCH 8** 

Winter term examinations

**MARCH 11-15** 

Residence halls close at noon

**MARCH 17** 

Residence halls open

**MARCH 25** 

Spring term classes begin

**MARCH 27** 

First-Year Family Weekend

**MAY 5-7** 

Spring term classes end

**MAY 30** 

Spring term examinations

**JUNE 1-5** 

Residence halls close at noon

**JUNE 6** 



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 (July 2016)

However, Dartmouth College 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 available in alternative media. Contact the Undergraduate Deans Office at Dean. of.Undergraduate.Students@dartmouth.edu or at (603) 646-2243.



Eli Burakian '00 Jacob Kupferman '14 Joseph Mehling '69

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