FIRST-YEAR SEMINAR PROGRAM

The First-Year Seminar program offers a diverse array of courses open only to first-year students and designed with first-year students in mind. Enrollment in seminars is limited to fifteen or eighteen students, depending on the nature of the course. Most seminars meet twice each week and do not, unless otherwise noted, presume any prior experience in the field. Students must apply and preregister for first-year seminars before the beginning of each term. To ensure that all applicants share an equal chance at enrolling in a seminar, students are admitted by lottery from among those who apply. Students who do not preregister may be considered for placement at the instructor’s discretion if space is available. Information regarding application procedures may be found on the program website.

Courses

For a regularly updated list of first-year seminars refer to Yale Course Search.

* **ANTH 011a, Reproductive Technologies**  Marcia Inhorn
Introduction to scholarship on the anthropology of reproduction. Focus on reproductive technologies such as contraceptives, prenatal diagnostics, childbirth technologies, abortion, assisted reproduction, surrogacy, and embryonic stem cells. The globalization of reproductive technologies, including social, cultural, legal, and ethical responses. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  SO

* **APHY 050a / PHYS 050a, Science of Modern Technology and Public Policy**  Daniel Prober
Examination of the science behind selected advances in modern technology and implications for public policy, with focus on the scientific and contextual basis of each advance. Topics are developed by the participants with the instructor and with guest lecturers, and may include nanotechnology, quantum computation and cryptography, renewable energy technologies, optical systems for communication and medical diagnostics, transistors, satellite imaging and global positioning systems, large-scale immunization, and DNA made to order. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  SC  RP

* **ANTH 061a, Understanding Human Origins**  Jessica Thompson
This course deals with scientific questions of what we know about human origins and human evolution. It presents evidence from evolutionary and life history theory, geochronology, paleontology, paleoenvironmental reconstruction, phylogenetic analysis, genetics, archaeology, and functional morphology. It also tackles the issue of how we know what we think we know of our own ancestry over the past 6 million years. In other words, what constitutes evidence for human evolution and how is that evidence interpreted? Students are introduced to basic milestones in human evolution and learn how they have shaped us into the species we are today, using diverse lines of evidence from evolutionary and life history theory, geochronology, paleontology, paleoenvironmental reconstruction, phylogenetic analysis, genetics, archaeology, and functional morphology. We critically examine key debates that have taken place over the last century of exploration in human evolutionary research, learning how unconventional thinking and spectacular discoveries have shaped current knowledge of our origins. Students meet strange and fascinating historical characters, and then meet our fossil ancestors via the cast collection. Students also receive hands-on and interactive learning about the morphology, life history patterns, locomotion, social behavior, and diet of our nearest fossil relatives; observe living primates to assess what they can tell us about our own deep past; dive into data collection by locating real archaeological and fossil sites; and learn how molecular techniques such as ancient DNA have transformed understanding of the origins of our own species. By formally debating controversial issues with classmates, students learn what a surprising amount of information scientists can discern from fragmentary fossils, and are brought up to date with the most current discoveries in human evolution. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  SO

* **ARCH 006a, Architectures of Urbanism: Thinking, Seeing, Writing the City**  Michael Schlabs
What is architecture, and how is it conceived, relative to notions of the urban – to the broader, deeper, messier web of ideas, forms, and fantasies constituting “the city”? Can architecture play a role in defining the city, as such, or does the city’s political and social construction place it outside the scope of specifically architectural concerns? Likewise, what role can the city play in establishing, interrogating, and extrapolating the limits of architecture, whether as a practice, a discourse, or a physical manifestation of human endeavor in the material environment? This course addresses these and other related questions, seeking to position architecture in its broader urban, social, cultural, political, intellectual, and aesthetic contexts. In so doing, it assumes the position that the nature and character of the urban can largely be characterized in terms of the manner in which we, as a society, conceive, construct, and contribute to notions of “the public,” or “the common.” Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. Prerequisite: general knowledge of 20th-century history.  HU

* **ART 004a, Words and Pictures**  Halsey Rodman
Introduction to visual narration, the combination of words and pictures to tell a story. Narrative point of view, counternarrative and counterculture, visual satire, personal history, depictions of space and time, and strategies and politics of representation. Sources include illuminated manuscripts, biblical paintings, picture-stories, comic strips, and graphic novels. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  HU  RP

* **ART 006a, Art of the Printed Word**  Richard Rose
Introduction to the art and historical development of letterpress printing and to the evolution of private presses. Survey of hand printing; practical study of press operations using antique platen presses and the cylinder proof press. Material qualities of printed
matter, connections between content and typographic form, and word/image relationships. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* ART 007b, Art of the Game  Sarah Stevens-Morling
Introduction to interactive narrative through video game programming, computer animation, and virtual filmmaking. Topics include interactive storytelling, video game development and modification, animation, and virtual film production. Students produce a variety of works including web-based interactive narratives, collaboratively built video games, and short game-animated film production (machinima). Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* ART 012b, On Activism: The Visual Representation of Protest and Disruption  Pamela Hovland
An introduction to the visual representations of protest, struggle, and revolution in this country from the Vietnam War to the present moment. The course explores a range of historically significant social and political movements, visual (communication) and dissemination strategies, and working methods. The primary goal of this studio-based course is to investigate and expand the designer/artist's ability to express a point of view, transform contemporary understanding of local and national issues through a series of exercises, iterative making and experiments in distribution methods via solo and collaborative work. The students' practice is supported by close readings, independent research, case studies, field trips, and presentations from a diverse collection of people directly involved in activism. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* ART 013a, Temperamental Spaces  Markus Schinwald
Spaces can sometimes appear as idiosyncratic as the people within them, taking on characteristics we usually ascribe to ourselves. They can appear erratic, comforting, unanny–even threatening. Working like a therapy session for architecture, the body, and the objects around us, this seminar analyzes a diverse collection of readings and works, ranging from Renaissance mysticism to conceptual art and film, to explore how the visual arts have utilized a productive, but skeptical, relationship with space. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* ART 014b, Research in the Making  Karin Schneider
Artistic research expands the research form to focus on haptic and tactile study of physical and historical objects. Through field trips to various special collections and libraries, including the Beinecke, the Yale Art Gallery, and the Map Collection, students respond to specific objects in the vast resources of Yale University. Group discussions, lectures, and critiques throughout the term help foster individual projects. Each student conducts research through the artistic mediums of drawing, photography, video, and audio, to slowly build an interconnected collection of research that is also an artwork. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* ASTR 040a / PHYS 040a, Expanding Ideas of Time and Space  C. Megan Urry
Discussions on the nature of time and space. Topics include the shape and contents of the universe, special and general relativity, dark and light matter, and dark energy. Observations and ideas fundamental to astronomers' current model of an expanding and accelerating four-dimensional universe. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. SC

* CLCV 034a / HIST 037a / HSHM 002a, Medicine and Disease in the Ancient World  Jessica Lamont
Examination of ancient medicine considering modern fields of pathology, surgery, pharmacology, therapy, obstetrics, psychology, anatomy, medical science, ethics, and education, to gain a better understanding of the foundations of Western medicine and an appreciation for how medical terms, theories, and practices take on different meanings with changes in science and society. All readings in English. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. SC

* CPSC 035b / MUSI 035b, Twenty-First Century Electronic and Computer Music Techniques  Scott Petersen
Exploration of twenty-first century electronic and computer music through the diverse subjects and issues at the intersection of technology and new music. How computers have changed and challenged the analysis, composition, production, and appreciation of music over the last fifty years. Knowledge of basic music theory and the ability to read Western musical notation is assumed. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* E&E 035a, The Ecology of Food  Linda Puth
Food and ecology are inextricably linked, both in the production of domesticated food through agriculture and livestock, and in the harvesting of wild plants and animals. Furthermore, the production and consumption of food has downstream consequences through energy consumption, food waste, trophic interactions and the transportation of food around the globe. These topics link to many of the fundamental concepts of ecology, including population biology, the niche, trophic interactions, nitrogen cycling and the effects on biodiversity. In this class we explore each of these topics intensively through a combination of lectures, readings and interactive field trips to local ecosystems, the Marsh and Yale Biology Building greenhouses, the Yale Sustainable Farm, and local food producers. The course meets twice a week: for 50 minutes for a combination of lecture and discussion, and for 110 minutes for field trips and guest lectures.

* ENGL 010a, Jane Austen  Stefanie Markovits
Close study of Austen's novels, with special attention to the critique of social and literary convention. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* ENGL 023b / HUMS 072b, Reading Recent North American Short Fiction  Joseph Gordon
The short story is generally considered to be North American in origin. As one of its goals, the course examines the ways in which the genre has developed in recent decades into a vehicle for storytelling from marginalized or subaltern voices such as those of people of color, women, LGBT people, immigrants and refugees, war veterans, students, and children. The course also explores how collections of stories
enrich our understanding of politically-informed poetic composition today?  

* EVST 007a, The New England Forest  
Marlyse Duguid  
Exploration of the natural history of southern New England, with specific focus on areas in and around New Haven. Pertinent environmental issues, such as climate change, endangered species, and the role of glacial and human history in shaping vegetative patterns and processes, are approached from a multi-disciplinary framework and within the context of the surrounding landscape. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  

* EVST 020a / F&ES 020a, Sustainable Development in Haiti  
Gordon Geballe  
The principles and practice of sustainable development explored in the context of Haiti’s rich history and culture, as well as its current environmental and economic impoverishment. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  

* EVST 040a, Collections of the Peabody Museum  
David Skelly  
Exploration of scientific questions through the study and analysis of objects within the Peabody Museum’s collections. Formulating a research question and carrying out a project that addresses it are the core activities of the course. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  

* FREN 096b, Women’s Narratives of Self in Modern French Literature  
Maryam Sanjabi  
The course explores women’s autobiographical literature, demonstrating their uniqueness from an individual perspective and capturing the social, economic, religious, and ethnic themes of the period and their authors’ intellectual standpoints. The selected books represent a variety of literary genres ranging from memoir to journal, graphic novel, and film scripts with a focus on the 20th and 21st centuries as they appear in the works of: Colette, Simone de Beauvoir, Nathalie Sarraute, Lucie Aubrac, Hélène Berri, Assia Djebar, Ken Bugul, Agnès Varda, Marjane Satrapi, Marguerite Duras, Annie Ernaux, and Camille Laurens among others. This course thus aims at a critical awareness of what modernity has meant in women’s experiences and why debate about its consequences often revolves around women’s lives. While some authors explore the coming of age of European gender awareness, others deal with the war and resistance and more recent non-Western voices in French pose the question of identity of the “Other.” Course readings include short theoretical essays.
and a number of secondary works. Conducted in French and English. Papers in French or in English. Readings in French. There is no prerequisite, but students who took FREN 170 or an equivalent will feel comfortable. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* G&G 010a, Earth, Resources, Energy, and the Environment  Mary-Louise Timmermans
A first-year science seminar devoted to the understanding of humankind’s interactions with, and place within, the natural world. Topics include: Earth’s history and early life, evolution and mass extinction, human population growth, industrialization, fossil fuels, pollution, the carbon cycle and global warming, and a planetary perspective on the Earth. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  SC

* GMAN 051b / LITR 024b, Game of Thrones and the Theory of Sovereignty  Kirk Wetters
Introduction to the classical and modern theory of sovereignty in the context of G.R.R. Martin’s popular Game of Thrones series (primarily the books, which are formally more complex and narratively more sophisticated than the television series). Although The Game of Thrones is obviously not a work of German literature, it addresses theoretical and literary-historical discourses that are prominently represented in the German context. Emphasis on strategies of literary and theoretical analysis; literature as a testing ground for theoretical models; theory as an analytic framework for evaluating literary and cultural depictions. Questioning the basis of the contemporary relevance and popularity of this material in light of questions of tragedy, individual agency, myth (vs. history), realism (vs. fantasy), environmental catastrophe and geopolitics. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR

* HIST 006b / HSHM 005b, Medicine and Society in American History  Rebecca Tannenbaum
Disease and healing in American history from colonial times to the present. The changing role of the physician, alternative healers and therapies, and the social impact of epidemics from smallpox to AIDS. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HIST 012b / AMST 012b, Politics and Society in the United States after World War II  Jennifer Klein
Introduction to American political and social issues from the 1940s to the present, including political economy, civil rights, class politics, and gender roles. Legacies of the New Deal as they played out after World War II; the origins, agenda, and ramifications of the Cold War; postwar suburbanization and its racial dimensions; migration and immigration; cultural changes; social movements of the Right and Left; Reaganism and its legacies; the United States and the global economy. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* HIST 017a, American Indians in Higher Education: Introduction to the Indigenous History of American Education  Ned Blackhawk
Education remains an essential element in Native American history, a complex arena full of conflict, resistance, adaptation, and social change. Charting the centuries-long relationships between Native Americans and Euro-American institutions of higher education, this seminar seeks to expose students to the educational history of Native North America. Through in-class assignments, discussion, and sets of experiential campus and off-campus tours, this class both introduces the educational history of Native North America and links it with the broader political history of federal Indian law and policy. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HIST 019b / AMST 028b, The History of the Book in the American West  Staff
This course focuses on the history of making, selling, buying, collecting, and reading printed objects in America by focusing especially on western United States. We focus not only on the history of print in the American West, but also on the representation of the American West in print. As a regional examination of the history of the book, this course investigates the historical development of the business models and technologies by which printed materials were created and circulated after about 1790. It examines the social and cultural histories of authorship and reading, both learned and popular. This course also pays particular attention to cultural production of Western Americana as a relatively finite number of collectible materials through the creation of influential lists like the Zamorano 80. Yale alumni have played an outsized role in that historical process, and so this class intersects significantly with the institutional history of this institution. Through conversations with rare book sellers and collectors—and perhaps a field trip or two—students learn about the antiquarian book trade. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HIST 020b / ARCG 031b / CLCV 056b / EVST 030b / NELC 026b, Rivers and Civilization  Harvey Weiss
The appearance of the earliest cities along the Nile and Euphrates in the fourth millennium B.C. Settlements along the rivers, the origins of agriculture, the production and extraction of agricultural surpluses, and the generation of class structures and political hierarchies. How and why these processes occurred along the banks of these rivers; consequent societal collapses and their relation to abrupt climate changes. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU, SO

* HIST 022a, What History Teaches  John Gaddis
An introduction to the discipline of history. History viewed as an art, a science, and something in between; differences between fact, interpretation, and consensus; history as a predictor of future events. Focus on issues such as the interdependence of variables, causation and verification, the role of individuals, and to what extent historical inquiry can or should be a moral enterprise. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU
Introduction to the history of Western fashion from the mid-eighteenth century to the present, with a focus on Paris and London. Approaches, methods, and theories scholars have historically employed to study fashion and dress. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HIST 034b, Cuba from Slavery to Revolution  Anne Eller
Cuba's rich history from the early colonial period to the present. Topics include colonialism, slavery, independence, emancipation, the Cuban Revolution, and the nation's relationship with the United States. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HIST 055b, A History of Modern London  Becky Conckin
Chronological and thematic exploration of modern London as a metropolitan and imperial center from the late-nineteenth-century to the present day. Topics include race, gay rights, women’s rights, consumer culture, the experience of war, and the development of a multi-racial society. The fashion, food, and popular music of London emerge as important components of the city’s global identity in the twentieth century. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HIST 072a, The History of Sport  Valerie Hansen
How the great historians of ancient Greece, Rome, China, the Islamic world, and nineteenth-century Europe created modern historical method. How to evaluate the reliability of sources, both primary and secondary, and assess the relationship between fact and interpretation. Using historical method to make sense of our world today. Strategies for improving reading, writing, and public speaking skills. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HIST 078b, Truth and Post-Truth  Marci Shore
This European intellectual history seminar explores the epistemological question in philosophy: does the world really exist? How do I know it’s really there and not just a projection of my consciousness? is there such a thing as truth? We begin with European philosophy, moving through Descartes, Kant and Husserl and through the role of ideology and lies in 20th century totalitarianism, then to dissident thought in Eastern Europe in the 1970s and 1980s, and finally to the emergence of “post-truth” in the 20th century and its implications in both philosophy and life. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* HIST 081b, MMES 080b, Nationalist Myths in the Modern Middle East  Lauren Banko
This course introduces students to the myth-making processes involved in the creation of nation-states in the post-Ottoman Middle East, including Iraq, Palestine, Israel, Lebanon, Turkey, as well as in Iran and Egypt. It explores the ways in which national identities and nation-states formed—in ways both organic and forced—around certain myths and ideologies. It examines the impact of these national/ nationalistic myths on revolutions and uprisings in the late Ottoman and post-Ottoman Middle East. The course readings, sources, and discussions examine the relationship between myths of national origin, revolution, and state-making. The class also addresses the ways in which the control over the creation of myths of origin and ethnic, racial, national, and religious identity shaped society and politics in nation-states, republics, and monarchies especially after 1918. The course focuses partly on the theoretical underpinnings of national myth-making and ideologies of nationalism in order to offer historical understandings as to how states, majority and minority groups, and different national movements in post-Ottoman society created and re-made ‘imagined communities’ of nationals and citizens, sometimes through violence. The course surveys the ways in which new identities became manifested in a number of often-revolutionary ideologies including pan-Arab nationalism, Zionism, Kemalism, Phoenicianism, Baathist socialism, and various anti-imperial and anti-colonial movements. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* HIST 090a, The History of World History  Angela Gleason
Sport has been called both the new world religion and the modern global language. Despite this, modern sport remains one of the least examined aspects of social history. This seminar examines the history of modern American sport from the mid-19th century through the 21st century. Regular discussion themes include race, identity, gender, religion, nationalism, commercialism, professionalism, drugs, technology, and whatever else we decide. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HLTH 081a, Current Issues in Medicine and Public Health  Robert Bazell
Analysis of issues in public health and medicine that get extensive media attention and provoke policy debates. Topics include vaccination, the value of cancer screening and genetic testing, determinants of a healthy lifestyle, the U.S. role in global health, and the cost of health care. Enrollment limited to freshmen with a score of 4 or 5 on the Advanced Placement examination in Biology or the equivalent. Preregistration required; see under Freshman Seminar Program.

* HSAR 002a / AMST 007a, Furniture and American Life  Edward Cooke
In-depth study and interpretation of American furniture from the past four centuries. Hands-on experience with furniture in the collection of the Yale University Art Gallery to explore such topics as materials, techniques, styles, use, and meaning. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HSAR 015a / SAST 060a, Ten Indian Objects  Subhashini Kaligotla
A 5000-year-old stone seal, a 20th century comic book, an emperor’s painted portrait, a processional bronze god, a miniature temple, an inscribed pillar, a rock crystal reliquary, a serene Buddha, an animated film, and a towering female figure. Through rigorous explorations of these ten objects from South Asia this seminar teaches close looking, vivid writing, and narrating history through things. It considers both the biographies of the objects and their involvement in the wider social, political, artistic, and cultural histories of the Indian subcontinent. Students engage some of the most exciting scholarship in the field of South Asian art, and observe, draw, and write about
things in museums and art collections on a weekly basis. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* HSAR 016a / EAST 016a, Chinese Painting and Culture  Quincy Ngan
This course focuses on important works of Chinese painting and major painters from the fourth century CE to the twentieth century. Through close readings of the pictorial contents and production contexts of such works of art, this course investigates the works' formats, meanings, and innovations from social, historical, and art-historical perspectives. In this course, students become familiar with the traditional Chinese world and acquire the knowledge necessary to be an informed viewer of Chinese painting. Discussions of religion, folkloric beliefs, literature, relationships between men and women, the worship of mountains, the laments of scholars, and the tastes of emperors and wealthy merchants also allow students to understand the cultural roots of contemporary China. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* HUMS 065a, Education and the Life Worth Living  Matthew Croasmun
Consideration of education and what it has to do with real life—not just any life, but a life worth living. Engagement with three different traditions of imagining the good life and of imagining education: Confucianism, Christianity, and Modernism. Students will be asked to challenge the fundamental question of the good life and to put that question at the heart of their college education. Enrollment limited to freshmen. Preregistration required; see under First-Year Seminar Program. HU

* HUMS 071a, Intellectual Circles  Charles Hill
Study of the creative interactions produced by informal associations of innovative minds in literature, philosophy, politics, science, psychology, the arts, war, and law. Courtiers, advisors, disciples, and disputers around Confucius, Socrates, Lincoln, Freud, Wittgenstein, and Niebuhr are among the circles considered. Groups include American Founders, quantum physicists, computer scientists, Gertrude Stein's "Lost Generation" of Americans in Paris, "The Georgetown Set" of Cold War friends and rivals, and the Supreme Court. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* HUMS 075a, Mastering the Art of Watercolor  Adam Van Doren
An introductory course on the art of watercolor as a humanistic discipline within the liberal arts tradition. Readings, discussions, and studio work emphasize critical, creative thinking through a tactile, "learning by doing" study of the watercolor medium. Students analyze and imitate the classic techniques of J. M.W. Turner, John Singer Sargent, Georgia O'Keeffe, and Edward Hopper, among others. Studio components include painting en plein air to understand color, form, perspective, composition, and shade and shadow. Basic drawing skills recommended. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. HU

* HUMS 083b / ENGL 030b, Fantasy in Literature and Film  Alfred Guy
Study of how fantasy ideas about race and gender, good and evil, and religion and culture reflect and influence changing ideas about what it means to be human. Authors include Neil Gaiman, Ursula K. LeGuin, Octavia Butler, & Nalo Hopkinson. Major fantasy films include Prisoner of Azkaban and Get Out. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* HUMS 094a, The Two Cultures: Science and the Humanities  Brianne Bilsky
The relationship between the sciences and the humanities has never been a comfortable one. Nearly sixty years ago, C. P. Snow, a British physical chemist and novelist, commented on this uneasiness in his now famous work, The Two Cultures. Snow argued that the rift between scientists and literary scholars prevented modern societies from solving many of their problems. But what happens when science and the humanities actually do come together? What might be gained by putting these seemingly disparate ways of understanding the world in conversation with each other? This first-year seminar considers such questions by looking at several intersections between science and the humanities throughout the twentieth and twenty-first centuries. These intersections include: astrophysics and religion; modern science and modernist literature; quantum mechanics and postmodernism; and medicine and ethics. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* LING 077a, Mapping the Dialects of American English  Jim Wood
We all know that languages have different regional dialects, and American English is no exception. But what are the dialects of American English, and how are they determined? Does every town have its own dialect, or are there broader patterns across larger regions? Are the patterns different for different demographic categories? Are there different dialect regions depending on gender? Race? How do we know where one dialect region stops and another begins? It turns out that there is no one answer to these questions. Moreover, the answers we find depend greatly on what aspect of language we are looking at. This hands-on seminar explores different ways of visualizing how language varies across geographical space, with a focus on dialect variation. Students study recent research discussing new techniques for analyzing geographic patterns of linguistic variation, and apply those techniques to survey data collected in recent years by the Yale Grammatical Diversity Project. Students develop their own mapping projects based on these data, and discover novel ways to visualize and analyze regional dialect variation. The course involves an introduction to some basic concepts in linguistics, as well as an introduction to Geographic Information Systems (GIS) software. SO

* LITR 022a, Music and Literature  Candace Skorupa
This seminar explores the rivalry between music and literature, the attraction and repulsion between these two art forms, and the dialogue between writers and composers. In select fiction and poetry spanning a variety of cultures and times, we look at the aesthetic challenges of conveying music in words; in select music from the same periods, we study the use of literary themes and narrative. How does music inhabit literature, and literature influence music? We read fiction describing music and borrowing musical forms; we study symphonies and opera inspired by literature; we look at films that bring together these two arts. Students examine theoretical approaches
and learn comparative methods useful for literature and culture courses. Though not required, musical experience and/or interest is welcomed for the seminar, which may be taken simultaneously with gateway courses in the humanities. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. WR, HU

* MBB 060b, Topics in Cancer Biology  Sandy Chang
Introduction to cancer as a genetic disease, with a focus on major discoveries in cancer biology that offer mechanistic insights into the disease process. A brief history of cancer; influence of the genomic revolution on cancer diagnostics; molecular defects underlying specific cancers; current and future cancer therapeutics. Patient case studies highlight specific molecular pathways and treatment strategies. Enrollment limited to first-year students with a strong background in biology and/or chemistry, typically demonstrated by a score of 5 on Advanced Placement examinations. Preregistration required; see under First-Year Seminar Program. WR, SC

* MBB 060a, Molecular Medicine  Sandy Chang
The main purpose of this course is to use benign and malignant hematological disorders to introduce fundamental concepts in molecular and cellular biology. Students emerge from this course with a firm understanding of the molecular pathways perturbed in various hematological disorders and the therapeutics currently used to exploit these pathways for disease treatment. Through lectures and reading of primary scientific literature, students learn about landmark discoveries in hematology and how these discoveries contribute to understanding of the normal hematopoietic system, and when perturbed, how diseases arise. Students also learn to (1) read primary scientific literature, (2) synthesize this material to present to the class and (3) learn how to write a short grant proposal. These skills are essential for any successful scientist or physician, and it's important to master them early. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. Prerequisite: score of 5 on the AP Biology exam or AP Chemistry exam. WR, SC

* MCDB 040b, The Science and Politics of Cancer  Robert Bazell
Fundamentals of cell biology, Darwinian evolution, immunology, and genetics that underlie cancer; the history of cancer science and treatment; historical and current policy issues. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. SC

* MCDB 040a, Immunology and Microbes  Paula Kavathas
Introduction to the immune system and its interaction with specific microbes. Attention both to microbes that cause illness, such as influenza, HIV, and HPV, and to microbes that live in harmony with humans, collectively called the microbiome. Readings include novels and historical works on diseases such as polio and AIDS. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. SC RP

* MCDB 065a, The Science and Politics of HIV/AIDS  Robert Bazell
Study of the basic virology and immunology of HIV/AIDS, along with its extraordinary historical and social effects. Issues include the threat of new epidemics emerging from a changing global environment; the potential harm of conspiracy theories based on false science; and how stigmas associated with poverty, gender inequality, sexual preference, and race facilitate an ongoing epidemic. For all first-year students regardless of whether they are considering a science major. Prerequisite: AP Biology or equivalent. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* MUSI 050a, Transformations in 20th and 21st Century Music  Trevor Baca
Introduction to outstanding pieces of 20th- and 21st-century instrumental music. Students examine details of the music and the social/historical context of each piece, in chronological order: one piece for each of the twelve decades from 1900 to the present. Composers include Mahler, Stravinsky, Ravel, Varèse, Copland, Cage, Reich, Xenakis, Eastman, Takemitsu, Czernowin, and Monk. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* NELC 001b / AFST 001b / ARCG 001b, Egypt and Northeast Africa: A Multidisciplinary Approach  John Darnell
An introduction to Egyptology, examining approximately 10,000 years of Nile Valley cultural records and 3,000 years of Egyptian history. The course presents an overview of the historical and archaeological study of Egypt and her southern neighbor Nubia. Various original written and visual sources are used, including the collections of the Peabody Museum and the Yale Art Gallery, with some material accessible in the classroom. Students gain a basic understanding of the hieroglyphic script and the Ancient Egyptian language, and are able to read some inscriptions in museum visits at the end of the course. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* NELC 004b, Earliest Literature of the Ancient World  Benjamin Foster
Selections from ancient Near Eastern literature, such as myths and epics, stories, fables, letters, magic spells, and poetry, with emphasis on themes that resonate with a modern reader: memory, entertainment, success, love, heroism, violence, suffering, redemption, devotion, faith, sexuality, anxiety, humor, wonder, cynicism, and going to school. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* PHIL 091a, Philosophy of Games  Mark Maxwell
In this class, we critically discuss a variety of puzzles that arise when thinking about games. Just what are games, anyway? And, how can thinking in terms of games help us understand the world? The notion of ‘game’ is a topic of interest in its own right, but games can also serve as a model and metaphor for other parts of the world, including life as a whole and the exploration of other philosophical debates. As such, the study of games serves as an entry point to a number of topics of potential interest, rather than just an in-depth study of one topic. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.
* PHYS 040a / ASTR 040a, Expanding Ideas of Time and Space  C. Megan Urry
Discussions on the nature of time and space. Topics include the shape and contents of the universe, special and general relativity, dark and light matter, and dark energy. Observations and ideas fundamental to astronomers' current model of an expanding and accelerating four-dimensional universe. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  SC

* PLSC 028a, American Constitutionalism: Power and its Limits  Gordon Silverstein
What happens when a modern superpower tries to govern itself under an 18th Century Constitution? Using original documents, contemporaneous books, and U.S. Supreme Court cases, this course explores the debates that have defined America's struggle to live up to its sometimes conflicting commitments to liberty, equality and the consent of the governed. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  SC

* RLST 007a, What Didn't Make It into the Bible  Maria Doerfler
Over two billion people alive today consider the New Testament to be sacred scripture. But how did the books that made it into the bible get there in the first place? Who decided what was to be part of the bible and what wasn't? How did these decisions affect the structure of nascent Christian communities, their relationship to surrounding Greco-Roman and Jewish society, and the subsequent development of Christian churches? How would the history of the world's largest organized religion look differently if a given book didn't make the final cut and another one did? Hundreds of ancient Christian texts are not included in the New Testament. This course focuses on these excluded writings and uses them to help reconstruct the earliest Christian communities. We explore Gnostic gospels, hear of a five-year-old Jesus throwing temper tantrums while killing (and later resurrecting) his classmates, peruse ancient Christian romance novels, tour heaven and hell, read the garden of Eden story told from the perspective of the snake, and learn how the world will end. In critically examining these ancient narratives and the communities that wrote them, you will learn about the content and history of the New Testament, better appreciate the diversity of formative Christianity, understand the historical context of the early church, examine the earliest social forms of Christianity, and explore the politics behind what did and did not make it into the bible.  WR, HU

* RLST 014a / SAST 057a, Gods and Heroes in Indian Religions  Phyllis Granoff
The basic doctrines and practices of India's three classical religions, Buddhism, Jainism, and Hinduism, explored through close reading of texts in translation. Lives of the founders, great monks, nuns, and lay followers of Buddhism and Jainism; myths of the major Hindu gods; heroines and goddesses in the three traditions. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  HU

* RLST 018a / SAST 058a, Yoga in South Asia and Beyond  Supriya Gandhi
The history of yoga practice and thought from the earliest textual discussions of yoga until the present day. Topics include the body, cosmology, cross-cultural interactions, colonialism, and orientalism. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  HU

* SCIE 030a and SCIE 031b, Current Topics in Science  Douglas Kankel
A series of modules in lecture and discussion format addressing scientific issues arising in current affairs. Topics are selected for their scientific interest and contemporary relevance, and may include global warming, human cloning, and the existence of extrasolar planets. Credit for SCIE 030 upon completion of SCIE 031; one course credit is awarded for successful completion of the year's work. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  SC ½ Course cr per term

* SPAN 060a, First-Year Colloquium: Literary Studies in Spanish  Leslie Harkema
Introduction to the study of literature in general and to some of the most important texts in Hispanic literature. Selected texts in Spanish include short stories, essays, lyric, and theater. Open to students who have placed into 1.5 courses. Counts toward the requirements of the Spanish major with permission of the director of undergraduate studies. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  1.5, HU

* THST 097b, Anatomy in Motion  Bronwen MacArthur
The connection between advances in human anatomy and kinesiology—the science of human movement—and dance practices from the early 1900s to the present. Study of seminal texts and practical exercises that drove the research of Frederick M. Alexander, Mabel Elsworth Todd, Barbara Clark, and Lulu Sweigard and the application of their ideas in contemporary movement practices today. Topics include the synthesis of dance and science; the reeducation of alignment, posture and balance; the use of imagery; and the unification of mind and body. No prior dance experience required. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  HU

* THST 098a, Composing and Performing the One Person Play  Hal Brooks
First-year actors, playwrights, directors, and even students who have never considered taking a theater class, create their own work through a combination of reading, analysis, writing, and on-your-feet exercises. Students read texts and view performances that are generated by one actor in an attempt to discover the methodology that works best for their own creations. The course culminates with a midterm and final presentation created and performed by the student. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* WGST 030a, Neoliberalism and Sexuality  Evren Savci
Sexuality is often imagined as a private and intimate affair, experienced individually, marked by personal histories and preferences. This course argues otherwise. Specifically, we consider the intersections between the current dominant political economic mode, referred to as neoliberal capitalism, and sexuality as a field of power. We analyze how subjectivities are formed under this current system, how desires are produced and discourses incited, and how the particular moralization of economic behavior has implications for a range of
issues including reproductive justice, definitions of kinship, sexual liberation movements, and contemporary states of war and emergency. Thinking of sexuality as a field of power that is predicated on notions of normality and abnormality enables us to see what other “undesirable” subjects are produced under conditions of neoliberal capitalist modernity with whom sexual others are always in kinship. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.

* WGSS 032b, History of Sexuality  Maria Trumpler
Exploration of scientific and medical writings on sexuality over the past century. Focus on the tension between nature and culture in shaping theories, the construction of heterosexuality and homosexuality, the role of scientific studies in moral discourse, and the rise of sexology as a scientific discipline. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program.  WR, HU