We welcome you to experience a Berkeley lecture. Please keep in mind the following guidelines:

- This is an experience to attend a lecture, a physical pass is not required.
- This is not intended for groups, but rather for individuals or small families.
- Please arrive on time. (Note: Berkeley classes start 10 minutes after the time listed, a practice known as “Berkeley Time.”)
- Please take a seat in the back of the lecture hall and remain for the entire class.
- Please refrain from disrupting classes as Berkeley students are the only ones who may participate in discussions and ask questions.
- Courses may be unavailable to visitors without notice, for example, because of exams.

Monday, Wednesday & Friday Classes

- **ANTHROPOLOGY 2AC -- Introduction to Archaeology**
  Location: Lewis 100
  Time: **MWF 8:00 AM - 9:00 AM**

  Prehistory and cultural growth. Introduction to the methods, goals, and theoretical concepts of archaeology with attention to the impact archaeology has had on the construction of the histories of diverse communities - Native Americans, Hispanics, and Euro-Americans.

- **BIOLOGY 1B -- Introduction to General Biology**
  Location: Valley Life Sciences 2050
  Time: **MWF 8:00 AM - 9:00 AM**

  General introduction to plant development, form, and function; population genetics, ecology, and evolution.

- **POLITICAL SCIENCE 1 -- Introduction to American Politics**
  Location: Dwinelle 155
  Time: **MWF 8:00 AM - 9:00 AM**

  An introductory analysis of the structure and operations of the American political system, primarily at the national level.
● **ENGINEERING 7 -- Introduction to Computer Programming for Scientists and Engineers**
  Location: Dwinelle 155
  Time: **MW 9:00 AM - 10:00 AM**

Elements of procedural and object-oriented programming. Induction, iteration, and recursion. Real functions and floating-point computations for engineering analysis. Introduction to data structures. Representative examples are drawn from mathematics, science, and engineering. The course uses the MATLAB programming language.

● **CHEMISTRY 1A -- Introduction to General Chemistry**
  Location: Pimentel 1
  Times: **MWF 9:00 AM - 10:00 AM & 11:00 AM - 12:00 PM & 1:00 PM - 2:00 PM**

Stoichiometry of chemical reactions, quantum mechanical description of atoms, the elements and periodic table, chemical bonding, real and ideal gases, thermochemistry, introduction to thermodynamics and equilibrium, acid-base and solubility equilibria, introduction to oxidation-reduction reactions, introduction to chemical kinetics.

● **PHILOSOPHY 12A -- Introduction to Logic**
  Location: Lewis 100
  Time: **MWF 9:00 AM - 10:00 AM**

The course will introduce the students to the syntax and semantics of propositional and first-order logic. Both systems of logic will be motivated by the attempt to explicate the informal notion of a valid argument. Intuitively, an argument is valid when the conclusion ‘follows’ from the premises. In order to give an account of this notion we will introduce a deductive system (a natural deduction system), which explicates the intuitive notion of ‘follow’ in terms of derivational rules in a calculus. This will be done in stages, first for propositional reasoning (only connectives such as ‘and’, ‘or’, ‘if… then…’) and later for the full first-order calculus (including expressions such as ‘for all…’ and ‘there exists…’). In addition, we will also develop techniques for showing when a claim does not follow from the premises of an argument. This is done by developing the semantics for the propositional and the predicate calculus. We will introduce truth-tables for the propositional connectives and ‘interpretations’ for sentences of first-order logic. At the end of the course, if time allows, we will also cover some metatheoretical issues, such as soundness and completeness of the propositional calculus.
● **MOLECULAR & CELL BIOLOGY 55 -- Plagues and Pandemics**  
  Location: Valley Life Science 2060  
  Time: **MWF 9:00 AM - 10:00 AM**

Discussion of how infectious agents cause disease and impact society at large. We will examine historical and current examples of plagues and pandemics and consider the question of what we should do to ameliorate the impact of infectious disease in the future. The course is intended for non-majors and will begin by briefly providing necessary background in microbiology and immunology. The primary focus in each subsequent week, however, will be on discussing a particular infectious disease. The course will be broad in scope covering biological, historical, ethical and social implications of each disease.

● **PHYSICS 137A* -- Quantum Mechanics**  
  Location: LeConte 4  
  Time: **MWF 9:00 AM - 10:00 AM**

Introduction to the methods of quantum mechanics with applications to atomic, molecular, solid state, nuclear and elementary particle physics.

*NOTE: This is an advanced junior/senior level course with complex content, but taught by an engaging award winning instructor.

● **MATH 1A -- Calculus**  
  Location: Wheeler 150 on **MWF 9:00 AM - 10:00 AM**  
  Dwinelle 155 on **MWF 12:00 PM - 1:00 PM**  
  Stanley 105 on **MWF 12:00 PM - 1:00 PM**

This sequence is intended for majors in engineering and the physical sciences. An introduction to differential and integral calculus of functions of one variable, with applications and an introduction to transcendental functions.

● **ENGLISH 45C -- Literature in English: The Mid-19th through the 20th Century**  
  Location: Mulford 159  
  Time: **MW 10:00 AM - 11:00 AM**

This course will survey British, American, and global Anglophone literature from the end of the 19th century through the beginning of the 21st. Moving across a number of genres and movements, this course will examine the ways 20th- and 21st-century writers have used literary form to represent, question, and even produce different aspects of modernity. Particular attention will be paid to close reading and key concepts in literary study, as well as literature’s broader engagements with questions of race, gender and sexuality, colonialism, mass media, and economy.
PHILOSOPHY 2 -- Individual Morality and Social Justice
Location: Lewis 100
Time: MWF 10:00 AM - 11:00 AM

The course deals with fundamental ethical issues and is intended, at the same time, as an introduction to philosophy. It seeks to addresses questions concerning the self, our relations to others and our commitment to various human communities. It asks, thus: How can I lead a good life? Are there rules for my relations with others? How are we to settle questions of social living together? We will examine these issues with the help of writings from both Western and Non-Western sources, both classical and modern authors.

COMPSCI 10 -- The Beauty and Joy of Computing
Location: Li Ka Shing
Time: MW 10:00 AM - 11:00 AM

An introductory course for students with minimal prior exposure to computer science. Prepares students for future computer science courses and empowers them to utilize programming to solve problems in their field of study. Presents an overview of the history, great principles, and transformative applications of computer science, as well as a comprehensive introduction to programming. Topics include abstraction, recursion, algorithmic complexity, higher-order functions, concurrency, social implications of computing (privacy, education, algorithmic bias), and engaging research areas (data science, AI, HCI). Students will program in Snap! (a friendly graphical language) and Python, and will design and implement two projects of their choice.

ECONOMICS 1 -- Introduction to Economics
Location: Wheeler 150
Time: MW 10:00 AM - 11:00 AM

A survey of economics designed to give an overview of the field.

ENV DES 1 -- Introduction to Environmental Design
Location: Wurster 112
Time: MW 11:00 AM - 12:30 PM

This course will teach anyone how to start to be a designer, not just of drawings and objects, but also buildings, landscapes, and urban spaces. And not just in isolation, but in the complex web of ecological and man-made systems which makes up our shifting environment. You will take from the course first-hand experience of drawing, measuring, and design — which form the basis of the professions of architecture, landscape architecture.
What is the English literary tradition? Where did it come from? What are its distinctive habits, questions, styles, obsessions? This course will answer these and other questions by focusing on five key writers from the Middle Ages and the Renaissance: the anonymous Beowulf poet; Geoffrey Chaucer; Christopher Marlowe; John Donne; and John Milton. We will start with the idea that the English literary tradition is a set of interrelated texts and problems that recur over the course of several centuries. Some of these relationships are formal; we will pay special attention to the genres, techniques, and styles that poets use to create their works. Some of these relationships are linguistic; students will learn to read Middle English (out loud, too!) and explore the significance of linguistic change as the Middle Ages becomes the Renaissance. Other relationships are historical; we will explore not only the pressure of contemporary events on literature, but also literature's role in creating both historical continuity and change over time. And some of these relationships are cultural, as poets reflect upon, seek to change, furiously criticize, or happily embrace a variety of human behaviors, from religious practices to love relationships to debates about gender to death and dying.

An introduction to programming and computer science focused on abstraction techniques as means to manage program complexity. Techniques include procedural abstraction; control abstraction using recursion, higher-order functions, generators, and streams; data abstraction using interfaces, objects, classes, and generic operators; and language abstraction using interpreters and macros. The course exposes students to programming paradigms, including functional, object-oriented, and declarative approaches. It includes an introduction to asymptotic analysis of algorithms. There are several significant programming projects.

Do written words cause revolutions, and how might literature aid, absorb, or elude transformations of the social world? This course surveys the revolutionary middle of literary history in English, from 1688 to 1848: a period driven and riven by political revolutions (England, America, France, Haiti), imperial rivalry and anti-colonial struggle, industrialization and the lure of the wilderness, chattel slavery and sentimental sympathy, and new forms of media connectivity and alienation. Charting many passages between “Old Europe,” the “New World,” and the “Dark Continent,” we will pay special attention to the ways differently fictional and factual kinds of writing – novel, slave narrative, travelogue, autobiography, poem, polemic and proto-science fiction – shape and parry the period’s scientific, industrial and political transformations, helping to invent (but also to resist) the categories of social, psychic, racial and consumer experience that are familiar to us as inheritors of Anglo-American empire.
• **EARTH & PLANETARY SCIENCES 7 -- Introduction to Climate Change**
  Location: Li Ka Shing 245
  Time: **MWF 2:00 PM - 3:00 PM**

This course covers the physical processes that determine Earth's past, present, and future climate, with a particular focus on the essentially irreversible climate change (a.k.a., global warming) caused by the burning of coal, oil, and natural gas. Topics will also include the estimation of future warming and impacts, the Earth resources that can be used to combat climate change, and the policies being used to shift towards the use of those resources.

• **UGBA 10 -- Principles of Business**
  Location: Wheeler 150
  Time: **MWF 2:00 PM - 3:00 PM**

This team-taught course provides an introduction to the study of the modern business enterprise. It consists of four modules, the order of which may vary from semester to semester, and an online business simulation that runs during most of the semester. The four modules cover: Finance & Accounting, Marketing, Operations & Sustainability, and Leadership.

• **ESPM 15 -- Introduction to Environmental Sciences**
  Location: Dwinelle 145
  Time: **MWF 2:00 PM - 3:30 PM**

Introduction to the science underlying biological and physical environmental problems, including water and air quality, global change, energy, ecosystem services, introduced and endangered species, water supply, solid waste, human population, and interaction of technical, social, and political approaches to environmental management.

• **ASTRONOMY C10 -- Introduction to General Astronomy**
  Location: Wheeler 150
  Time: **MWF 3:00 PM - 4:00 PM**

A description of modern astronomy with emphasis on the structure and evolution of stars, galaxies, and the Universe. Additional topics optionally discussed include quasars, pulsars, black holes, and extraterrestrial communication, etc.

• **PHYSICS 8A -- Introductory Physics**
  Location: Pimentel 1
  Time: **MWF 3:00 PM - 4:00 PM**

Introduction to forces, kinetics, equilibria, fluids, waves, and heat. This course presents concepts and methodologies for understanding physical phenomena, and is particularly useful preparation for upper division study in biology and architecture.
● **PHYSICS 8B -- Introductory Physics**  
  Location: LeConte 1  
  Time: **MWF 3:00 PM - 4:00 PM**

Introduction to electricity, magnetism, electromagnetic waves, optics, and modern physics. The course presents concepts and methodologies for understanding physical phenomena, and is particularly useful preparation for upper division study in biology and architecture.

● **NUSCTX 10 -- Introduction to Human Nutrition**  
  Location: Wheeler 150  
  Time: **MW 6:00 PM - 7:00 PM**

This course focuses on relationships between diet and health, and responses of the human body to diet and food components, including macro and micro nutrients, water, phytochemicals, and alcohol. This course also provides an overview of the interplay between nutrients and physiological and behavioral responses. Lectures, which address contributions of diet to optimal health or disease risk, are based on current nutritional, biochemical, and medical knowledge. Goals include enabling students to make informed decisions about their nutritional needs and current issues concerning nutrition.

**Tuesday & Thursday Classes**

● **PHYSICS C10 -- Descriptive Introduction to Physics “Physics for Future Presidents”**  
  Location: LeConte 4  
  Time: **TTh 9:30 AM - 11:00 AM**

The most interesting and important topics in physics, stressing conceptual understanding rather than math, with applications to current events. Topics covered may vary and may include energy and conservation, radioactivity, nuclear physics, the Theory of Relativity, lasers, explosions, earthquakes, superconductors, and quantum physics. Please be cognizant that this class has a small enrollment.

● **AMERICAN STUDIES 10 -- Introduction to American Studies “Love, American Style”**  
  Location: Haviland 12  
  Time: **TTh 9:30 AM - 11:00 AM**

American culture and cultural change, with attention to the multicultural basis of American society and emphasis on the need for multiple methods of analysis. The course will consistently draw on the arts, material culture, and various fields affecting cultural production and meaning. Those areas include literature, film, history, architecture, history of art, religion, music, engineering, environmental studies, anthropology, politics, economics, law, and medicine.
● **PSYCHOLOGY 1 -- Introduction to Psychology**  
  Location: Dwinelle 155  
  Time: **TTh 11:00 AM - 12:00 PM**

Introduction to the principal areas, problems, and concepts of psychology.

● **EARTH & PLANETARY SCIENCE C20 -- Earthquakes in Your Backyard**  
  Location: Li Ka Shing 245  
  Time: **TTh 11:00 AM - 12:30 PM**

Introduction to earthquakes, their causes and effects. General discussion of basic principles and methods of seismology and geological tectonics, distribution of earthquakes in space and time, effects of earthquakes, and earthquake hazard and risk, with particular emphasis on the situation in California.

● **FILM 20 - Film and Media Cultures**  
  Location: Dwinelle 142  
  Time: **TTh 11:00 AM - 12:30 PM**

This course is intended to introduce undergraduates to the study of a range of media, including photography, film, television, video, and print and digital media. The course will focus on questions of medium "specificity" or the key technological/material, formal and aesthetic features of different media and modes of address and representation that define them. Also considered is the relationship of individual media to time and space, how individual media construct their audiences or spectators, and the kinds of looking or viewing they enable or encourage. The course will discuss the ideological effects of various media, particularly around questions of racial and sexual difference, national identity, capitalism, and power.

● **GLOBAL 45 -- Survey of World History**  
  Location: Lewis 100  
  Time: **TTH 11:00 AM - 12:30 PM**

This course focuses on the history of global interaction, with a particular emphasis on the relationships between states and societies. Though it begins with a brief exploration of antiquity, it emphasizes world developments since the 15th century. The purpose of the course is to gain a better understanding of the rise and decline of states, empires, and international trading systems. Taking a panoramic view of the last 500 years, it explores the ways in which disparate places came closer together, even while it seeks to explain how those places maintained their own trajectories in the face of outside intervention.
● PHYSICS 8A -- Introductory Physics  
   Location: Pimentel 1  
   Time: TTh 11:00 AM - 12:30 PM

Introduction to forces, kinetics, equilibria, fluids, waves, and heat. This course presents concepts and methodologies for understanding physical phenomena, and is particularly useful preparation for upper division study in biology and architecture.

● PHYSICS 8B -- Introductory Physics  
   Location: Pimentel 1  
   Time: TTh 12:30 PM - 2:00 PM

Introduction to electricity, magnetism, electromagnetic waves, optics, and modern physics. The course presents concepts and methodologies for understanding physical phenomena, and is particularly useful preparation for upper division study in biology and architecture.

● PHYSICS 89* -- Introduction to Mathematical Physics  
   Location: LeConte 3  
   Time: TuTh 12:30 PM - 2:00 PM

Complex numbers, linear algebra, ordinary differential equations, Fourier series and transform methods, introduction to partial differential equations, introduction to tensors.

*NOTE: This is a sophomore/junior class and very mathematical, but enrollment is smaller than other courses.

● GENDER & WOMEN’S STUDIES 50AC -- Gender in American Culture  
   Location: Dwinelle 145  
   Time: TTh 12:30 PM - 2:00 PM

A multi-disciplinary course designed to provide students with an opportunity to work with faculty investigating the topic gender in American culture.

● MCELLBI 32 -- Introduction to Human Physiology  
   Location: Dwinelle 155  
   Time: TTh 12:30 PM - 2:00 PM

A comprehensive introduction to human biology. The course will concentrate on basic mechanisms underlying human life processes, including cells and membranes; nerve and muscle function; cardiovascular, respiratory, renal, and gastrointestinal physiology; metabolism, endocrinology, and reproduction.
● **HISTORY 7A -- Introduction to the History of the United States: The United States from Settlement to Civil War**  
  Location: Haas Faculty Wing F295  
  Time: TTh 2:00 PM - 3:30 PM

This course is an introduction to the history of the United States from the beginning of the European colonization of North America to the end of the Civil War. It is also an introduction to the ways historians look at the past and think about evidence. There are two main themes: one is to understand the origin of the "groups" we call European-Americans, Native-Americans, and African-Americans; the second, is to understand how democratic political institutions emerged in the United States in this period in the context of an economy that depended on slave labor and violent land acquisition.

● **ESPM 60 -- Environmental Policy, Administration, and Law**  
  Location: Moffitt Library 101  
  Time: TTh 2:00 PM - 3:30 PM

Introduction to U.S. environmental policy process focuses on history and evolution of political institutions, importance of property, federal and state roles in decision making, and challenges of environmental policy. Emphasis is on use of science in decision making, choices between regulations and incentives, and role of bureaucracy in resource policy. Case studies on natural resource management, risk management, environmental regulation, and environmental justice.

● **STATISTICS 2 -- Introduction to Statistics**  
  Location: Li Ka Shing 245  
  Time: TTh 2:00 - 3:30 PM


● **POLITICAL SCIENCE 3 -- Introduction to Empirical Analysis and Quantitative Methods**  
  Location: Hertz 320  
  Time: TTh 2:00 PM - 3:30 PM

Analytical and methodological problems of political inquiry, with an emphasis on quantification and measurement.

● **POLITICAL SCIENCE 5 -- Introduction to International Relations**  
  Location: Dwinelle 155  
  Time: TTh 2:00 PM - 3:30 PM

This course is designed to introduce students to the major theoretical approaches to international politics, to explore important historical and contemporary questions and debates in international affairs, and to teach students to think critically about international relations.
• **BIOENG 10 -- Introduction to Biomedicine for Engineers**  
  Location: Stanley 105  
  Time: TTh 3:30 PM - 5:00 PM

This course is intended for lower division students interested in acquiring a foundation in biomedicine with topics ranging from evolutionary biology to human physiology. The emphasis is on the integration of engineering applications to biology and health. The goal is for undergraduate engineering students to gain sufficient biology and human physiology fundamentals so that they are better prepared to study specialized topics, e.g., biomechanics, imaging, computational biology, tissue engineering, biomonitoring, drug development, robotics, and other topics. The specific lecture topics and exercises will include the key aspects of genomics and proteomics as well as topics on plant and animal evolution, stem cell biomedicine, and tissue regeneration and replacement. Medical physiology topics include relevant engineering aspects of human brain, heart, musculoskeletal, and other systems.

• **GEOGRAPHY C32/GLOBAL C10A -- Introduction to Global Studies**  
  Location: Valley Life Sciences 2060  
  Time: TTh 5:00 PM - 6:30 PM

This course is designed as an introduction to comparative development. The course will be a general service course, as well as a prerequisite for the upper division 100 series. It is assumed that students enrolled in 10 know little about life in the Third World countries and are unfamiliar with the relevant theory in political economy of development and underdevelopment. The course will be structured around three critical concepts: land, labor, and work.

• **GEOGRAPHY 50AC -- California**  
  Location: Dwinelle 145  
  Time: TTh 5:00 PM - 6:30 PM

California had been called "the great exception" and "America, only more so." Yet few of us pay attention to its distinctive traits and to its effects beyond our borders. California may be "a state of mind," but it is also the most dynamic place in the most powerful country in the world, and would be the 8th largest economy if it were a country. Its wealth has been built on mining, agriculture, industry, trade, and finance. Natural abundance and geographic advantage have played their parts, but the state's greatest resource has been its wealth and diversity of people, who have made it a center of technological and cultural innovation from Hollywood to Silicon Valley. Yet California has a dark side of exploitation and racialization.

• **ETHSTD 10AC -- A History of Race and Ethnicity in Western North America 1598-Present**  
  Location: Kroeber 160  
  Time: TTh 5:00 PM - 6:30 PM

This course explores the role of "race" and ethnicity in the history of what became the Western United States from the Spanish invasion of the Southwest to contemporary controversies surrounding "race" in California. Rather than providing a continuous historical narrative, or treating each racialized "other" separately, the course works through a series of chronologically organized events in which issues of racial differences played key roles in creating what became a western identity.
Comparing the experience of three out of five ethnic groups (e.g. African Americans, Asian Americans, Chicano/Latino, European Americans, and Native Americans) we shall examine historically how each people entered American society and built communities and transformed their cultures in the process. Students will be introduced to the sociological perspective, characteristic methods of research, and such key concepts as culture, community, class, race, social change, and social movements.