• **Individual Morality and Social Justice**, Philosophy 2  
  - Hearst Field Annex A1  
  - MWF 9:00–10:00AM  
  - 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.

• **Introduction to General Biology**, Bio 1B  
  - Valley Life Sciences 2040  
  - MWF 8:00–9:00AM  
  - General introduction to plant development, form, and function; population genetics, ecology, and evolution.

• **Introduction to General Chemistry**, Chem 1A  
  - Moffitt Library 145  
  - MWF 4:00–5:00PM  
  - 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.

• **Introduction to Computer Programming for Scientists and Engineers**, Engineering 7  
  - Valley Life Science 2050  
  - MW 9:00–10:00AM  
  - 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. Sponsoring departments: Civil and Environmental Engineering and Mechanical Engineering.

• **Introduction to Environmental Sciences**, EPSM 15  
  - Dwinelle 155  
  - MWF 11:00AM–12:00PM  
  - An introduction to how culture affects the way we use and manage fire, wildland and urban forests, rangelands, parks and preserves, and croplands in America. The basic concepts and tools for evaluating the role of culture in resource use and management are introduced and used to examine the experience of American cultural groups in the development and management of western natural resources.

• **Introduction to American Politics**, PS1  
  - Valley Life Sciences 2050  
  - MWF 10:00–11:00AM  
  - This class is an introduction to the American political system. The course is designed to make you think about the logic of our government's institutions, and the consequences – both intended and unintended – of these institutions
for the political behavior of citizens, legislators, and other political leaders and activists. Topics to be covered include the Constitution, American political culture, civil rights, the presidency, Congress, the Supreme Court, political parties, elections, public opinion, and interest groups.

- **Introduction to Economics**, Econ 1
  - Wheeler 150
  - **MW 8:00–9:00AM**
  - A survey of economics designed to give an overview of the field.

- **Calculus**, Math 1A
  - Valley Life Sciences Building 2050
  - **MWF 11:00–12:00PM**
  - 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.

- **Literature in English: The Mid–19th through the 20th Century**, English 45C
  - Barrows 60
  - **MW 1:00–2:00PM**
  - This course will focus on the formal consequences of the cultural and social revolutions of the late nineteenth and early twentieth centuries. After examining the changes in narrative strategy and poetic diction that have come to be known as "modernism," we will trace their reverberations by examining key texts and genres across the century. We will also analyze the pressures brought to bear on formal innovation by diverse national and ethnic traditions, the legacies of colonialism, the unprecedented violence of two world wars, and the rapid development of technology.

- **Introduction to Logic**, Philosophy 12A
  - Dwinelle 145
  - **MWF 1:00–2:00PM**
  - Syntax, semantics, and proof theory of sentential and predicate logic.

- **Principles of Business**, UGBA 10
  - Wheeler 150
  - **MWF 2:00–3:00PM**
  - This course provides an introduction to the study of the modern business enterprise. The course is taught in five modules, the order of which may vary from semester to semester. The first examines the role and governance of business enterprise in a market economy. The second concentrates on financial issues, while the third looks at the problems of managing people in organizations. The fourth examines product pricing, marketing, and distribution issues and the last concentrates on the international business environment.

- **The Structure and Interpretation of Computer Programming**, CS 61A
  - Wheeler 150
  - **MWF 12:00–1:00PM**
  - Introduction to programming and computer science. This course exposes students to techniques of abstraction at several levels: (a) within a programming language, using higher-order functions, manifest types, data-directed programming, and message-passing; (b) between programming languages, using functional and rule-based languages as examples. It also relates these techniques to the practical problems of implementation of languages and algorithms on a von Neumann machine.
• **Introductory Physics**, Physics 8a
  - Pimental 1
  - MWF 3:00–4:00PM
  - 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.

• **The Beauty and Joy of Computing**, CS 10
  - Li Ka Shing 245
  - MW 3:00–4:00PM
  - An introduction to the beauty and joy of computing. The history, social implications, great principles, and future of computing. Beautiful applications that have changed the world. How computing empowers discovery and progress in other fields. Relevance of computing to the student and society will be emphasized. Students will learn the joy of programming a computer using a friendly, graphical language, and will complete a substantial team programming project related to their interests.

• **Introduction to General Astronomy**, Astro C10
  - Wheeler 150
  - MWF 3:00–4:00PM
  - 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.

• **Introduction to Biomedicine for Engineers**, BioEng 10
  - Latimer 120
  - MWF 12:00–1:00PM
  - 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.

• **Introduction to Archaeology**, Anthro 2AC
  - Stanley 105
  - MWF 8:00–9:00AM
  - 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.

• **Oceans**, IB C82
  - Pimental 1
  - MWF 10:00–11:00AM
• Why are oceans important to us? The course begins with the basics: history of voyaging and navigation, continental/ocean geology and geophysics, ocean sediments and paleo-oceanography, water properties, atmosphere circulation, wind-driven and thermohaline (or overturning) circulation, waves and tides, and water dynamics and chemistry (with an emphasis on carbon dioxide). We introduce the alien world of sea life and the importance of the ocean to the global carbon cycle; next come the principles of ecology with a focus on the important concept of energy flow through food webs. Perhaps the most important lesson is how an individual species must have enough energy above and beyond that needed to survive in order to reproduce. Humans have tapped into seemingly unlimited fossil fuel energy and have escaped such energy limitation, leading to explosive population growth with related ocean impacts including over fishing, pollution, and CO2 ocean acidification. By the end of the course students will have a multidisciplinary appreciation of the oceans and how oceans relate to us.

• **Introduction to Climate Change**, EPS 7
  - Li Ka Shing 245
  - **MWF 2:00–3:00PM**
  - 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.

• **Introduction to Psychology**, Psych 1
  - Pimental 1
  - **W 6:00–8:00PM**
  - Introduction to the principal areas, problems, and concepts of psychology.

• **California**, Geography 50AC
  - Morgan 101
  - **MWF 2:00–3:00PM**
  - 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.

• **Introduction to Human Nutrition**, NUSCTX 10
  - Wheeler 150
  - **MW 5:00–6:00PM**
  - 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.

- **Plagues and Pandemics**, Molecular and Cell Biology 55
  - Valley Life Science 2060
  - MWF 9:00–10:00 AM
  - 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.

- **Introduction to Statistics**, Statistics 2
  - Stanley 105
  - MWF 3:00–4:00 PM

- **Introduction to Environmental Design**, Environmental Design 1
  - Wurster 112
  - 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.

**Tuesday & Thursday Classes**

- **Introduction to International Relations**, Political Science 5
  - Valley Life Sciences 2050
  - TTH 9:30–11:00 AM
  - 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. It is a prerequisite for most upper division international relations courses in Political Science.

- **Introduction to Empirical Analysis and Quantitative Methods**, Political Science 3
  - Valley Life Sciences 2050
  - TTH 5:00–6:30 PM
  - Analytical and methodological problems of political inquiry, with an emphasis on quantification and measurement.

- **Introduction to the History of the United States: The United States from Settlement to Civil War**, History 7A
  - Stanley 105
  - TTH 2:00–3:30 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.

- **Survey of World History**, International and Area Studies 45
  - Haas Faculty Wing F295
  - TTH 11:00 AM–12:30 PM
  - This course focuses on benchmarks of the history of various nations and civilizations. It begins with the ancient Greeks, Romans, and Chinese, but 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. Therefore, political and economic structures and developments as well as military factors will be presented along with the more traditional historical perspectives.

- **Introduction to Development**, Development Studies C10
  - Hearst Mining 390
  - TTH 2:00–3:30 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.

- **Introduction to Human Physiology**, Molecular and Cell Biology 32
  - Valley Life Science 2050
  - TTH 12:30–2:00 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.

- **Introduction to Peace and Conflict Studies**, Peace and Conflict Studies 10
  - Dwinelle 145
  - TTH 5:00–6:30 PM
  - This course introduces students to a broad range of issues, concepts, and approaches integral to the study of peace and conflict. Subject areas include the war system and war prevention, conflict resolution and nonviolence, human rights and social justice, development and environmental sustainability. Required of all Peace and Conflict Studies majors.

- **Principles of Sociology: American Cultures**, Peace and Conflict Studies 10
  - Li Ka Shing 245
  - TTH 5:00–6:30 PM
  - 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.

- **A History of Race and Ethnicity in Western North America 1598–Present**, Ethnic Studies 10AC
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.

**Film and Media Cultures, Film 20**
- Dwinelle 142
- **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.

**Introductory Physics, Physics 8A**
- Dwinelle 142
- **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.

**Africa: History and Culture, African American Studies 4A**
- Donner Lab 155
- **TTH 3:30–5:00 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.

**Introduction to American Studies, American Studies 10**
- LeConte 3
- **TTH 11:00 AM–12:30 PM**
  - 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. This course may include discussion sections depending on available funding. Some versions of this course need four in-class contact hours because of the extensive use of media.

**Introduction to Asia, Asian Studies 10**
- Lewis 100
- **TTH 12:30–2:00 PM**
This course is designed to interest students in Asian cultures early in their undergraduate studies. Topics such as trade, social and political formations, religions, food, and expressive culture that have been important in history as well as in contemporary times in East, South, and Southeast Asia will serve as unifying themes. Comparative thinking across regions of Asia and the perspectives of multiple disciplines will be brought to bear on the themes.

**Earthquakes in Your Backyard, Earth and Planetary Sciences C20**
- Li Ka Shing 245
- **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.

**Gender in American Culture, Gender and Women Studies 50AC**
- Dwinelle 145
- **TTH 2:00 –3:30 PM**
- A multi-disciplinary course designed to provide students with an opportunity to work with faculty investigating the topic gender in American culture.

**Environmental Policy, Administration, and Law, Environmental Science, Policy, And Management (ESPM) 60**
- Mulford 132
- **TTH 2:00 –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.