# Attending a lecture at UC Berkeley

# Interested in visiting a UC Berkeley class?

## **Important Information**

- The classes listed are some of the largest lectures at Cal, and they represent only one type of learning opportunity. UC Berkeley prides itself on fostering student and faculty interaction through small classes, undergraduate research, and seminars. Average class size is about 30 students, and our student-to-faculty ratio is 15:1.
- When attending a class, please observe classroom visitor etiquette:
  - Arrive on time (Cal classes start 10 minutes after the time listed, a practice known on campus as "Berkeley Time") and remain for the entire class.
  - o Take seats at the back of the lecture hall.
  - Remain an observer and avoid participation in any discussion.
- Sometimes a class may be unavailable to visitors without notice (for example, during an exam).
- Many academic schedules and majors include courses from a variety of departments and disciplines. You may want to consult your prospective department or website to find classes that match your interests and requirements.

# If you have any questions, please email rohpberkeley2014@gmail.com

Enjoy your visit to Berkeley!

# **FAQs**

# Why were these particular courses chosen?

On the basis of their benefit to prospective students, how they showcase the quality of UC Berkeley's faculty, and the diversity of the material covered. They are generally the campuses' large introductory courses, and visitors will not interfere with normal classroom activity.

## Can we attend courses not on this list?

Please attend only those classes on the list. If a department you are looking for is not on the list and you are having trouble finding a related class, feel free to ask us for a recommendation (email us at rohpberkeley2014@gmail.com).

# Do we need to check in with ROHP or the professor before attending the class?

No, you're not required to check in to attend a class, but if you have any questions, please email rohpberkeley2014@gmail.com.

# Can I attend only a portion of the lecture?

As a courtesy to professors and students, please arrive on time and stay for the entire lecture. Even in large lecture halls, entering a class late or leaving early can be disruptive. The goal is to provide you with a rewarding experience that interferes only minimally with normal classroom activity.

## May I participate in class discussion or ask questions during lecture?

As a visitor, please remain an observer as to not disrupt the pace of the class for the professor and the students.

# What if a professor is not accepting visitors or asks us to leave?

There may be times (such as an exam) when visits are not appropriate. Please observe and respect the requests of campus faculty and staff. We apologize in advance for any inconvenience this may cause.

# Where can I find more information about these courses or professors?

Most department web pages have detailed faculty and course information. You can find these pages by performing a search for the department at <a href="https://www.berkeley.edu">www.berkeley.edu</a>.

Please don't ask professors about their respective departments or programs. Professors are not admissions officers or department representatives. If you have any questions, please email <a href="mailto:rohpberkeley2014@gmail.com">rohpberkeley2014@gmail.com</a>

#### Classes to Visit on Thursday 2/27/14

### Chemical Structure and Reactivity Chemistry -- Chemistry 3A

TuTh 8:00-9:30 and 2:00-3:30; 1 Pimentel; Professor Marsden

Introduction to organic chemical structures, bonding, and chemical reactivity. The organic chemistry of alkanes, alkyl halides, alcohols, alkenes, alkynes, and organometallics.

#### Music in American Culture -- Music 26AC

TuTh 9:30-11:00: 320 Hertz Hall: Professor Roberts

Two perspectives are developed: 1) diverse music of groups in America, and 2) American music as a unique phenomenon. Groups considered are African, Asian, European, Hispanic/Latino, and Native American. Lectures and musical examples are organized by topics such as music of socio-economic subgroups within large groups, survival of culture, pan-ethnicity, religious and concert music, and the folk-popular music continuum.

# Brain, Mind, and Behavior -- Molecular Cell Biology 61

TuTh 9:30-11:00; Wheeler Auditorium; Professor Caporale

Introduction to human brain mechanisms of sensation, movement, perception, thinking, learning, memory, and emotion in terms of anatomy, physiology, and chemistry of the nervous system in health and disease.

#### Introductory Physics -- Physics 8B

TuTh 11:00-12:30; 1 Pimentel Hall; Professor Speliotopoulos

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.

#### Introductory Physics -- Physics 8A

TuTh 12:30-2:00; 1 Pimentel Hall; Professor Mickelson

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 Comparative Politics -- Political Science 2

TuTh 2:00-3:30; 2050 Valley Life Sciences Building; Professor Fish

This course deals with the basic problems and processes that all political systems face and examines their particular expression in Western, Communist, and Third World settings.

#### Discrete Mathematics and Probability Theory -- Computer Science 70

TuTh 3:30-5:00; 1 Pimentel Hall; Professor Sahai

Logic, infinity, and induction; applications include undecidability and stable marriage problem. Modular arithmetic and GCDs; applications include primality testing and cryptography. Polynomials; examples include error correcting codes and interpolation. Probability including sample spaces, independence, random variables, law of large numbers; examples include load balancing, existence arguments, Bayesian inference.

#### Introduction to Peace and Conflict Studies -- Peace And Conflict Studies 10

TuTh 5:00-6:30; 145 Dwinelle Hall; Professor Zook

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.

## Classes to Visit on Friday 2/27/14

# General Biology Lecture -- Biology 1A

MWF 8:00-9:00; 1 Pimentel Hall; Professors Firestone, Dillion, and Doudna

General introduction to cell structure and function, molecular and organismal genetics, animal development, form and function.

## Physics for Scientists and Engineers -- Physics 7B

MWF 8:00-9:00; 1 LeConte Hall; Professor Speliotopoulos Heat, electricity, and magnetism.

# **General Chemistry -- Chemistry 1A**

MWF 9:00-10:00 and 1:00-2:00; 1 Pimentel Hall; Professor Saykally

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.

## Principles of Business -- Undergraduate Business Administration 10

MWF 9:00-10:00; Wheeler Auditorium; Professors Banks, Nordorf, Romero-Hernandez, and Thomas 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.

#### Introduction to Solid Mechanics -- Mechanical Engineering C85

MWF 9:00-10:00; 106 Stanley; Professor Papadopoulos

A review of equilibrium for particles and rigid bodies. Application to truss structures. The concepts of deformation, strain, and stress. Equilibrium equations for a continuum. Elements of the theory of linear elasticity. The states of plane stress and plane strain. Solution of elementary elasticity problems (beam bending, torsion of circular bars). Euler buckling in elastic beams.

#### Introduction to Roman Civilization -- Classics 10B

MWF 10:00-11:00; 2060 Valley Life Sciences Building; Professor McCarthy

Investigation of the main achievements and tensions in Roman culture from Romulus to the High Empire. Key sources for literature, history, and material culture are studied in order to reveal Roman civilization in its political and social context.

#### The Ecology and Evolution of Animal Behavior -- Integrative Biology 31

MWF 10:00-11:00; 50 Birge Hall; Professor Caldwell

Principles of evolution biology as they relate to animal behavior and behavioral ecology with broad coverage of animal groups. Special attention will be paid to the emerging discipline of behavioral ecology.

#### Physics for Scientists and Engineers -- Physics 7A

MWF 11:00-12:00: 1 LeConte Hall: Professor Zettl

Mechanics and wave motion.

## Biological Transport Phenomena -- Bioengineering 104

MWF 11:00-12:00: 160 Kroeber Hall: Professor Johnson

The transport of mass, momentum, and energy are critical to the function of living systems and the design of medical devices. Biological transport phenomena are present at a wide range of length scales: molecular, cellular, organ (whole and by functional unit), and organism. This course develops and applies scaling laws and the methods of continuum mechanics to biological transport phenomena over a range of length and timescales.

## The United States from Civil War to Present -- History 7B

MWF 11:00-12:00; Wheeler Auditorium; Professor Einhorn

What does it mean to be American? Whatever your answer is to this question, chances are it is deeply connected to the themes and events we will discuss in this class. Here we will track America's rise to global power, the fate of freedom in a post-Emancipation political setting, and the changing boundaries of nation, citizenship, and community. We will use landmark events to sharpen our themes, but we will also take care to analyze the equally important (and shifting) patterns of where and how Americans lived, worked, and played.

### Ecosystem Ecology -- Environmental Science, Policy, and Management 111

MWF 11:00-12:00; 132 Mulford Hall; Professor Silver

This course will develop principles of ecosystems ecology, emphasizing terrestrial ecosystems, and will consider how these principles apply to ecosystem recovery and to regional and global fluxes of carbon and nutrients.

## Wealth and Poverty -- Public Policy C103

F 12:00-2:00; Wheeler Auditorium; Professor Reich

This course is designed to provide students with a deeper understanding both of the organization of the political economy in the United States and of other advanced economies, and of why the distribution of earnings, wealth, and opportunity have been diverging in the United States and in other nations. It also is intended to provide insights into the political and public-policy debates that have arisen in light of this divergence, as well as possible means of reversing it.

#### The Structure and Interpretation of Computer Programs -- Computer Science 61A

MWF 2:00-3:00; Wheeler Auditorium; Professor Hilfinger

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. There are several significant programming projects.

#### Machine Structures -- Computer Science 61C

MWF 2:00-3:00: 1 Pimentel Hall: Professor Garcia

The internal organization and operation of digital computers. Machine architecture, support for high-level languages (logic, arithmetic, instruction sequencing) and operating systems (I/O, interrupts, memory management, process switching). Elements of computer logic design. Tradeoffs involved in fundamental architectural design decisions.

#### Introduction to Sociology -- Sociology 1

MWF 2:00-3:00; 2050 Valley Life Sciences Building; Professor Bakehorn

Introduces students who are considering majoring in sociology to the basic topics, concepts, and principles of the discipline.

### Introduction to General Astronomy -- Astronomy C10

## MWF 3:00-4:00; Wheeler Auditorium; Professor Filippenko

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. Individual instructor's synopses available from the department.

# Fluid Mechanics -- Mechanical Engineering 106

MWF 3:00-4:00; 105 North Gate; Professor Marcus

This course introduces the fundamentals and techniques of fluid mechanics with the aim of describing and controlling engineering flows.