

**PHI 003 INTRODUCTION TO PROBLEMS
IN ETHICS 3.0 UNITS**

Total Lecture: 54 hours

Prerequisite: ENG 001A or ENG 001AX

Acceptable for credit: University of California, California State University

This course critically examines questions of value and obligation. Students explore prominent ethical theories, including Kantianism, the Utilitarians and virtue ethics. The student then applies these ethical theories to case studies, such as bioethics and environmental ethics. Much of the course is devoted to critical thinking and writing skills. This course is approved for credit by exam. *Pass/No Pass Option. C-ID # PHIL 120. CSUGE: A3, C2; IGETC: 1B.*

**PHI 005 INTRODUCTION TO SOCIAL AND
POLITICAL PHILOSOPHY 3.0 UNITS**

Total Lecture: 54 hours

Acceptable for credit: University of California, California State University

This course introduces students to a critical study of some major social and political problems. What is society? What is a state? What is freedom? What is authority? What is the nature of political obligation? What constitutes justice? What constitutes a right? What are the relationships, if any, between the individual and society? *Pass/No Pass Option. CSUGE: C2, D2; IGETC: 3B, 4G*

PHYSICAL EDUCATION

See Kinesiology for program and course information.

PHYSICS (PHY)

**PHY 002A GENERAL PHYSICS - MECHANICS
AND THERMODYNAMICS 5.0 UNITS**

Total Lecture: 72 hours, Total Lab: 54 hours

Prerequisite: MAT 000D or higher.

Acceptable for credit: University of California, California State University

This is the first lecture/lab course in physics for majors in subjects other than engineering or the physical sciences. Topics covered include Newton's laws of force, dynamics of rigid bodies, the concepts of potential and kinetic energy, momentum, thermodynamics, hydrodynamics, and wave motion. Analytical solutions of numerical problems at the trigonometric and algebraic level are emphasized. NOTE: UC credit may be limited. See a counselor. Materials Fee. *Grade only. C-ID # PHYS 100S, PHYS 105. CSUGE: B1; IGETC: 5A.*

**PHY 002B GENERAL PHYSICS - ELECTRICITY,
MAGNETISM AND OPTICS 5.0 UNITS**

Total Lecture: 72 hours, Total Lab: 54 hours

Prerequisite: PHY 002A

Acceptable for credit: University of California, California State University

This lecture/lab course is a continuation of PHY 002A as a lecture/lab course with the study of electricity, magnetism, geometrical and wave optics and atomic physics. NOTE: UC credit may be limited. See a counselor. Materials Fee. *Grade only. C-ID # PHYS 100S, PHYS 110. CSUGE: B1; IGETC: 5A.*

PHY 004A ENGINEERING PHYSICS-MECHANICS 5.0 UNITS

Total Lecture: 72 hours, Total Lab: 54 hours

Prerequisite: MAT 003A or MAT 003AH

Acceptable for credit: University of California, California State University

This course in mechanics, the first in a series of engineering physics courses, is a calculus-based study of forces, energy and momentum. Kinematic problems are solved using position, velocity and acceleration. Conservation of momentum and energy is applied to moving and interacting systems, rotational mechanics, simple harmonic motion, gravity, mechanical properties of matter, fluid statics and dynamics. Materials Fee. *Grade only. C-ID # PHYS 205, PHYS 200S. CSUGE: B1; IGETC: 5A.*

**PHY 004B ENGINEERING PHYSICS-ELECTRICITY
AND MAGNETISM 4.0 UNITS**

Total Lecture: 54 hours Total Lab: 54 hours

Prerequisite: PHY 004A and MAT 003B

Acceptable for credit: California State University, University of California

This lecture/laboratory course is the second in the calculus-based engineering physics series. The course continues the concept of field theory and develops the concepts of Maxwell's equations. Topics include: Coulomb's Law, Gauss' Law, Electric Potential, Biot-Savart Law, Ampere's Law, and Faraday's Law. Kirchhoff's Laws and AC circuits are introduced. Solutions to numerical and theoretical problems are emphasized at the calculus level. *Grade only. C-ID # PHYS 210, PHYS 200S. CSUGE: B1; IGETC: 5A.*

**PHY 004C ENGINEERING PHYSICS-
LIGHT AND HEAT 4.0 UNITS**

Total Lecture: 54 hours Total Lab: 54 hours

Prerequisite: MAT 003B PHY 004A

Acceptable for credit: California State University, University of California

This lecture/laboratory course is the third semester in the engineering physics series. The course content includes thermodynamics, geometrical and wave optics, atomic and modern physics. The dual nature of light is investigated in lecture and laboratory by the use of interference and diffraction effects. The laws of heat transfer, thermodynamics, and the Carnot cycle are covered. Numerical and theoretical solutions to problems are emphasized. Materials Fee. *Grade only. C-ID # PHYS 215, PHYS 200S. CSUGE: B1; IGETC: 4C.*

PHY 004D ENGINEERING PHYSICS-ATOMIC 2.0 UNITS

Total Lecture: 36 hours

Prerequisite: PHY 004B

Acceptable for credit: University of California, California State University

This course is an introduction to quantum physics with an emphasis on the electronic structure of atoms and solids, waves and particle duality, statistics, band theory, radiation and relativity. This course is approved for credit by exam. *Grade only. CSUGE: B1.*

PHY 010 INTRODUCTION TO PHYSICS 4.0 UNITS

Total Lecture: 54 hours, Total Lab: 54 hours

Prerequisite: MAT 903 or High School Algebra I, or equivalent.

Acceptable for credit: University of California, California State University

This is a conceptual course in physics, including the development of fundamental concepts as applied to everyday phenomena, from a limited mathematical perspective, emphasizing verbal logic, critical analysis, and rational thought. The topics included in this course are mechanics, thermodynamics, electricity and magnetism, optics, and modern physics. *Grade only. CSUGE: B1; IGETC: 5A.*

POLITICAL SCIENCE (POL)

POL 001 AMERICAN GOVERNMENT 3.0 UNITS

Total Lecture: 54 hours

Acceptable for credit: University of California, California State University

This course is an introduction to the structure and functions of the governments at the Federal and California levels. Topics covered include Civil Rights and Liberties, Institutional development, and non-governmental actors in politics. This course helps satisfy the U.S. History, Constitution, and state and local government requirements for transfer to the UC/CSU systems, as well as for the Associate of Arts degree. *Pass/No Pass Option. C-ID # POLS 110, POLS 120. CSUGE: D8; IGETC: 4H.*

POL 001H AMERICAN GOVERNMENT – HONORS 3.0 UNITS*Total Lecture: 54 hours*

Acceptable for credit: University of California, California State University
 Honors American Government involves interdisciplinary, writing-intensive, collaborative, and experiential instruction. The course covers the structure and functions of the American national government, as well as those of state and local governments. Emphasis is placed on the development of a deep understanding of historical and societal influences on the modern American political institutions. Students cannot get credit for both POL 001 and POL 001H. Enrollment in the Honors Transfer Project is required. *Pass/No Pass Option. C-ID # POLS 110. CSUGE: D8; IGETC: 4H.*

POL 002 COMPARATIVE GOVERNMENT 3.0 UNITS*Total Lecture: 54 hours*

Acceptable for credit: University of California, California State University
 This course explores the government and politics of some of the major nations in the world as well as developing nations. Political structures, functions, processes and policies are compared with each other and with the U.S. government. Particular consideration is given to contemporary world problems with an emphasis on developing comparative analytical skills and abilities. *Pass/No Pass Option. C-ID # POLS 130. CSUGE: D8; IGETC: 4H.*

POL 003 INTRODUCTION TO POLITICAL THEORY 3.0 UNITS*Total Lecture: 54 hours*

Acceptable for credit: University of California, California State University
 The course familiarizes students with central debates in political theory and provides an overview of the works of some of theories of politics, from the classical to the modern. It is organized around the examination of several key political concepts, such as liberty, equality, justice, authority, rights, citizenship, and revolution. *Pass/No Pass Option. C-ID # POLS 120. CSUGE: C2, D2; IGETC: 3B, 4G.*

POL 004 INTERNATIONAL RELATIONS 3.0 UNITS*Total Lecture: 54 hours*

Acceptable for credit: University of California, California State University
 This course introduces the beginning student to world politics. The class is designed to provide students with both a framework and the analytical skills for better understanding the causes and effects of world events and the broader dynamics of the relations among nations. Emphasis is placed on theories of international relations, state and non-state players, the historical struggle for power between countries, international organizations, international economics, and the foreign policy process both in the United States and abroad. *Pass/No Pass Option. C-ID # POLS 140. CSUGE: D8; IGETC: 4H.*

POL 005 POLITICAL SCIENCE RESEARCH METHODOLOGY 3.0 UNITS*Total Lecture: 54 hours*

Advisory: POL 001 or a college level course in any political or social science field.

Acceptable for credit: University of California, California State University
 The purpose of the course is to give Political Science majors the necessary tools to understand and critique the methodology and research designs of the scholars in the fields contributing to the discipline. While there is some discussion of statistics, the emphasis is on the Why of research rather than merely the How. The basics of Measurement -- validity, reliability, instrumentation, and the collection and interpretation of data -- are introduced. Students explore the strengths and weaknesses of the various forms of analyses of the Qualitative and Quantitative methods of research. The ethical issues of political research and the importance of IRB review are discussed. *Pass/No Pass Option. C-ID # POLS 160. CSUGE: D8; IGETC: 4H.*

POL 006 POLITICS OF RACE, CLASS AND GENDER 3.0 UNITS*Total Lecture: 54 hours*

Acceptable for credit: University of California, California State University
 This course is an introduction to the role race, economic class, and gender have and currently play in global politics. The class surveys the political history, goals, strategies, perspectives, barriers and successes of women, the poor, and selected minorities within the context of politics around the world, as well as the effects of their intersectionality. Various ethnic, religious, socio-economic and gender groups are considered. This course is approved for credit by exam. *Pass/No Pass Option. CSUGE: D8; IGETC: 4H.*

POL 007 INTERNATIONAL FILMS 3.0 UNITS*Total Lecture: 54 hours*

Acceptable for credit: University of California, California State University
 This course provides a critical look at the world and its problems through some of the finest international films. Films from Asia, Africa, Europe, and the Americas are viewed and analyzed to explore such topics as nationalism, sovereignty, war and peace, ethnic conflict, economics and immigration. This course is cross-listed as Humanities 007 (HUM 007). *Pass/No Pass Option. CSUGE: C2, D7; IGETC: 3B.*

POL 020 CONTROVERSIAL LEGAL ISSUES 3.0 UNITS*Total Lecture: 54 hours**Advisory: POL 001*

Acceptable for credit: University of California, California State University
 This course develops critical thinking skills as applied to contemporary legal and political issues that stem from controversies over civil rights and liberties. Topics such as drug decriminalization, offensive speech, affirmative action, discrimination against gender and sexual orientation, school prayer, the right to die, and pornography are explored. Students engage in debates on the issues, applying skills that allow them to distinguish between fact and judgment. Completion of Political Science 001 is recommended. *Pass/No Pass Option. CSUGE: A3, D8; IGETC: 4H.*

PSYCHOLOGY (PSY)**PSY 001 GENERAL PSYCHOLOGY 3.0 UNITS***Total Lecture: 54 hours*

Acceptable for credit: University of California, California State University
 This course introduces major concepts, problems and methods that psychologists use to investigate and understand the human mind. Major topics of study include the history and origins of psychology, introductory statistical concepts, motivation, emotion, biological determinants of behavior, environmental factors in behavior, psychological tests and measurements, and learning and personality theory. This course is approved for credit by exam. *Pass/No Pass Option. C-ID # PSY 110. CSUGE: D9; IGETC: 4I.*

PSY 001H GENERAL PSYCHOLOGY - HONORS 3.0 UNITS*Total Lecture: 54 hours*

Acceptable for credit: University of California, California State University
 This honors course provides students with a basic understanding of major concepts, problems and methods that psychologists use to investigate and understand the human mind. Major topics of study include the history and origins of psychology, introductory statistical concepts, motivation, emotion, biological determinants of behavior, environmental factors in behavior, psychological tests and measurements, and learning and personality theory. The honors component involves an in-depth analysis of specific topics, using current information from research journals. Students cannot get credit for both PSY 001 and PSY 001H. Enrollment in the Honors Transfer Project is required. This course is approved for credit by exam. *Pass/No Pass Option. C-ID # PSY 110. CSUGE: D9; IGETC: 4I.*