

PHYS R131—Physics for Scientists and Engineers 1**5 units**

*Prerequisites: MATH R120.
4 hours lecture, 3 hours lab weekly*

This course is an introduction to the statics and dynamics of rigid bodies and ideal fluids. Central topics include Newton's laws; conservation of energy, linear momentum, and angular momentum; equilibrium of rigid bodies; and oscillatory motion. Although the course emphasizes conceptual understanding, students also learn to apply mathematical techniques such as vector algebra, differential and integral calculus, Taylor series, and linear differential equations to the solution of problems. The laboratory provides students with opportunities to learn and apply the scientific method through investigations of the phenomena discussed in lecture. The course is appropriate for students majoring in the physical sciences, engineering, mathematics, computer science, and related fields. Field trips may be required.

Transfer credit: UC, CSU

PHYS R132—Physics for Scientists and Engineers 2**5 units**

*Prerequisites: PHYS R131 and MATH R121.
4 hours lecture, 3 hours lab weekly*

A continuation of PHYS R131, this course is an introduction to electricity and magnetism, with emphasis on understanding field theory and the behavior of simple electrical circuits. Central topics include gravitational, electric and magnetic fields; the laws of Coulomb, Gauss, Ohm, Kirchhoff, Ampere, Biot-Savart, and Faraday; simple circuit analysis; and the Maxwell equations. Although the course emphasizes conceptual understanding, students also learn to apply mathematical techniques such as vector algebra, vector differentiation and integration, binomial approximations, and linear differential equations to the solution of problems. The laboratory provides students with opportunities to learn and apply the scientific method through investigations of the phenomena discussed in lecture. The course is appropriate for students majoring in the physical sciences, engineering, mathematics, computer science, and related fields. Field trips may be required.

Transfer credit: UC, CSU

PHYS R133—Physics for Scientists and Engineers 3**5 units**

*Prerequisites: PHYS R132 and MATH R122.
4 hours lecture, 3 hours lab weekly*

A continuation of PHYS R132, this course is an introduction to wave motion (with emphasis placed on the study of sound and electromagnetic wave phenomena), geometrical and wave optics, thermodynamics, and selected elementary topics on special relativity and quantum mechanics. Central topics include mechanical and electromagnetic waves; heat, entropy, and the thermodynamic laws; geometric optics; interference and diffraction; relativistic kinematics and dynamics; and elementary quantum theory with atomic structure. Although the course emphasizes conceptual understanding, students also learn to apply mathematical techniques such as vector calculus, Fourier analysis, numerical approximations, and multi-variable integration to the solution of problems. The laboratory provides students with opportunities to learn and apply the scientific method through investigations of the phenomena discussed in lecture. The course is appropriate for students majoring in the physical sciences, engineering, mathematics, computer science, and related fields. Field trips may be required.

Transfer credit: UC, CSU

PHYSIOLOGY

See courses in Biological Sciences

POLITICAL SCIENCE

Political Science courses offer research into and analysis of the institutions and politics of government. Topics include the interpretation and use of constitutions, the politics of the legislative process, elections and campaigns, the impact of money and lobbying on public policy decisions, the role of political parties, interactions between national, state and local government, the role of executive leadership including the United States President, the impact of bureaucracies on public and personal life, the judicial process and the criminal justice system, comparative government, international relations and a wide range of issues that affect the lives of citizens. Development of skills in research, critical thinking, persuasive argument in debate, and analytical writing are primary goals of instruction in political science. All courses provide a stimulating foundation for the life of an educated citizen. Four political courses offer partial fulfillment of the American Institutions requirement. The requirements for a political science major and the great variety of career options served by a major are listed below.

For more information, contact:

*Gloria Guevara, Lead Faculty, gguevara@vcccd.edu
(805) 986-5800, ext. 1917*

Career Opportunities

Armed Services	Attorney/Legal Assistant
Judicial Officer/Judge	High School Teacher
College Instructor	Political Consultant
Police Services	Political Scientist/Researcher
Elected Public Official	Community Activist
Journalism/Book Author	Intelligence Agencies/CIA/FBI
Foreign Service/U.S. State Department	
Custom Officer/Import-Export Agent	
Public Relations/Travel Consultant	
International Civil Service/Public Institutions	
Non-Profit Organization Management	
Public Administration/Civil Service	
Human Services/Social Welfare	
Human Services/Criminal Justice System	
Human Services/Child Protective & Domestic Relations	
Human Services/Juvenile Services	

Faculty

Full-Time	Part-Time
Carolyn Dorrance	Timothy Flynn
Gloria Guevara	Philip Grant
	Steve McHargue

◆ Political Science**Associate in Arts Degree**

Required Courses:	Units
POLS R100 Introduction to Politics	3
POLS R101 Government of the United States: Institutions/Politics	3
POLS R102 Government of the United States: Institutions/Laws	3
POLS R104 International Relations	3
POLS R108 Comparative Politics	3
	15

Required Additional Courses:		Units
Select six units from the following:		
ANTH R102	Cultural Anthropology	3
ECON R100	Modern American Economy	3
OR		
ECON R101	Principles of Macroeconomics	3
GEOG R102	World Regional Geography	3
HIST R100A	History of World Civilizations I	3
HIST R100B	History of World Civilizations II	3
HIST R107	History of Mexicans in the United States	3
OR		
HIST R116	History of the Americas II	3
HIST R110	History of the Middle East	3
HIST R114	Modern Asia	3
HIST R119	Modern Africa	3
HIST R121	US Multicultural/Migration	3
IDS R101A	History of Ideas and Evolution of Culture I	3
IDS R102	Science, Technology, and Human Values	3
PHIL R111	Thinking Critically and Analytic Writing	3
PHIL/SOC R114	Social Philosophy	3
Any POLS course not used to satisfy the core requirement		
PSY R103	Beginning Statistics for Behavioral Science	3
SOC R103	Race and Ethnic Relations	3
		6
Total Required Units		21

Program Student Learning Outcomes

Upon successful completion of the Political Science program students will be able to:

- Students will demonstrate knowledge of constitutions, governmental institutions and the political processes used by citizens and groups to influence public policy.
- Students will compare significant political systems on a global scale using scholarly models and analyze the impact of history, culture and economics on the values and politics of political systems.
- Students will apply critical thinking including quantitative and qualitative reasoning to research and analysis of politics and political systems.
- Students will be able to identify major theories and conceptual paradigms used to explain political decisions and interactions including those used to describe international relations.
- Students will demonstrate knowledge of contemporary political issues, explain the historical, social, economic and cultural causes of political controversy and describe the responsibilities of citizenship.

Political Science Courses

POLS R010—Introduction to United States Government **3 units**

3 hours lecture weekly

An introduction to the institutions and political processes of government in the United States. Federalism and the institutions of Congress, the Presidency and the Supreme Court are studied from the perspective of constitutional democracy and the theory of checks and balances. The roles of political parties, interest groups, public opinion and the media are discussed in a way that broadens understanding of political process and citizen participation. Special attention is given to improving student study skills including vocabulary building, research, analytical writing and articulation of political ideas. Field trips may be required. (2)

POLS R100—Introduction to Politics **3 units**

3 hours lecture weekly

Course introduces students to the ideas and institutions of politics at the local, state and Federal levels. Concepts of law, justice, democracy, social welfare and liberty will be discussed in relation to contemporary institutions of government. Includes study of California Government. Fulfills state requirements in American Institutions. Field trips may be required. (2)

Transfer credit: UC, CSU

POLS R101—Government of the United States I: Institutions and Politics **3 units**

3 hours lecture weekly

This course provides a study of the Constitutional principles, institutions and politics of American Government with special attention to the dynamics of representative government evident in voting, campaigns, political party politics, legislative process, presidential leadership and the public policy process. The California Constitution and government will be examined. This course partially fulfills graduation and Title V requirements for the study of American Institutions. Field trips may be required.

Transfer credit: UC, CSU

POLS R102—Government of the United States: Institutions and Laws **3 units**

3 hours lecture weekly

This course offers an introduction to the study of principles, institutions and procedures characteristic of government in the United States, national, state and local. Special attention is given in this course to the judicial process and judicial interpretations of constitutional principles regarding federal state relations, legislative authority, presidential authority, civil liberties and civil rights. This course includes study of the California Constitution and analysis of the criminal justice system. Issues of police authority, juvenile crime, due process in court proceedings and punishment policies are debated. Partially fulfills a state requirement in American Institutions. Field trips may be required.

Transfer credit: UC, CSU

POLS R104—International Relations **3 units**

3 hours lecture weekly

This course explores the international relations between governments and the foreign policies that influence those relations. The role of international institutions such as the United Nations and the World Bank, the activities of non-governmental organizations and the goals and methods of protest movements are described. Topics to be discussed include the impact of globalization, international trade, transnational corporations, mass communication technology, global migration, massive arms distributions and the sources of armed conflict. Field trips may be required. (2)

Transfer credit: UC, CSU

POLS R105—Current Issues in Domestic and Foreign Politics **3 units**

3 hours lecture weekly

This course blends elements of political theory with the world of political problems and action at individual, state, national and international levels. Each semester the issues selected for examination will be revised. Field trips may be required. (2)

Transfer credit: UC, CSU

POLS R106—Political Aspects of Economic Problems **3 units**

3 hours lecture weekly

Course surveys areas where the impact of economics upon political life is considerable, so that students may better understand the political world. (2)

Transfer credit: UC, CSU

POLS R107—Politics and Administration of State 3 units and Local Government

3 hours lecture weekly

Course presents the main principles, concepts, theories, and processes of governmental institutions of the states, counties, cities, and special districts. The social, economic and political dynamics within the institutional context will be studied. Also, Federal institutions will be analyzed to understand the main characteristics, principles, structures, and processes of the American system of government and their impact on the other levels of government. The impact of federal taxation and expenditure policies on state and local government will be studied with specific examples. Fulfills state requirements in American Institutions. (2)

Transfer credit: CSU

POLS R108—Comparative Politics 3 units

3 hours lecture weekly

Course examines political life and institutions of a number of foreign countries to identify both similarities and differences in people's attempts to grapple with government problems throughout the world. (2)

Transfer credit: UC, CSU

POLS R189—Topics in Political Science ½-3 units

Lecture and/or lab hours as required by unit formula

Courses considering specific and current topics in Political Science which are not covered in the general Political Science offerings. Course may be taken four times. (2)

Transfer credit: CSU

POLS R199—Directed Studies in Political Science 1-3 units

Lecture and/or lab hours as required by unit formula

Designed for selected students interested in furthering their knowledge of political science on an independent study basis; assigned problems will involve library, lab, and field work. Course may be taken two times. (2)

Transfer credit: CSU

PSYCHOLOGY

The Department of Psychology at Oxnard College studies mental processes and human behavior. It offers courses exploring different aspects of people's behavior and thinking. Students interested in the major and general education will find several courses addressing their specific interests, as well as those with Workforce and Continuing Education needs.

The major is designed to prepare the student for higher level studies at California State University as well as The University of California. Possible jobs for which studies in Psychology prepare the student include advertising, human resources, criminal justice, vocational counseling, Social work, community organizations psychologist, public relations and others.

For more information, contact:

*Linda Chaparro, Lead Faculty, lchaparro@vcccd.edu
(805) 986-5800, ext. 1919*

Career Opportunities

Advertising Manager	Efficiency Engineer
Job Analyst	Personnel Manager
Police Officer	Psychologist
Vocational Counselor	Public Relations
Social/Welfare Work	Statistician
Pathologist/Audiologist	Probation/Parole Officer
Community Organization Director	

Faculty

Full-Time	Part-Time
Marie Butler	Jennifer Kalfsbeek
Linda Chaparro	Karen Lehner
	George Rodriguez
	Oliver Williams

◆ Psychology

Associate in Arts in Psychology for Transfer

The Associate in Arts in Psychology for Transfer (Psychology AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. See page 60 for additional information.

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.
3. Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major as detailed in the Course and Program Descriptions section of the catalog. All courses in the major must be completed with a grade of C or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).
4. Certified completion of the California State University General Education-Breadth pattern (CSU GE Breadth) (see page 68 for more information); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern (see page 69 for more information).
5. Complete requirements in residency. For students in the Ventura County Community College District, a minimum of 12 units must be completed in residency at the college granting the degree.

Students transferring to a CSU campus that does accept the Psychology AA-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high-unit" major at a particular campus). This degree may not be the best option for students intending to transfer to a particular CSU campus or to university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

The following CSU campuses have designated at least one major as "similar" to the Psychology AA-T. Some campuses may also require or recommend specific course selections from choices within the AA-T. Please see a counselor for a comprehensive list of these designated majors and areas of emphasis/options within the Psychology major.

California State University, Bakersfield
California State University, Channel Islands
California State University, Chico
California State University, Dominguez Hills
California State University, East Bay
California State University, Fullerton
Humboldt State University
California State University, Long Beach
California State University, Los Angeles
California State University, Monterey Bay
California State University, Northridge
California State Polytechnic University, Pomona
Sacramento State University
California State University, San Bernardino
San Francisco State University
San José State University
Sonoma State University
California State University, Stanislaus

Required Core Courses (9 units):		Units
PSY R101	General Psychology	3
PSY R103	Beginning Statistics for Behavioral Science	3
PSY R104	Intro to Experimental Psychology	3