cies in Physical Education subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

**Physical Science (PHSC)**

Contact the Physics and Engineering Department for further information.

(760) 744-1150, ext. 2505
Office: NS-355B

### COURSE OFFERINGS

| PHSC 100 | Introduction to Physical Science | 3 hours lecture | Transfer acceptability: CSU; UC – No credit for students with prior lecture credit in ASTR, CHEM, GEOL or PHYS
| --- | --- | --- | --- |
| Prerequisite: | | | The study of selected topics from the fields of astronomy, geology, physics, chemistry, and their related sciences through lectures, films, and demonstrations. A general education course designed particularly for non-science majors. For teacher training see PHSC 101.

PHSC 100L | Introduction to Physical Science Laboratory | 1 hours laboratory | Transfer acceptability: CSU - No credit for students with prior lab credit in ASTR, CHEM, GEOL or PHYS
| --- | --- | --- | --- |
| Prerequisite: | | | The study of selected topics from the fields of astronomy, geology, physics, chemistry, and their related sciences through lab exercises. A general education course designed particularly for non-science majors.

PHSC 101 | Principles of Physical Science | 3 hours lecture | Transfer acceptability: CSU
| --- | --- | --- | --- |
| Prerequisite: | | | The study of selected topics from the fields of physics and chemistry and their related sciences through lectures, films, and demonstrations. A general education course designed particularly for non-science majors. Especially recommended for teacher training.

PHSC 101L | Principles of Physical Science Laboratory | 1 hours laboratory | Transfer acceptability: CSU
| --- | --- | --- | --- |
| Prerequisite: | | | A minimum grade of ‘C’ in PHSC 101, or concurrent enrollment in PHSC 101.

PHYS 102 | Introduction to Physics (Lecture) | 3 hours lecture | Transfer acceptability: CSU; UC*
| --- | --- | --- | --- |
| Prerequisite: | A minimum grade of ‘C’ in MATH 50 or one year of high school Algebra
| Note: | Not open to students with prior credit in PHYS 101, 110, 115, 120, 125, 230, 231, and 232

PHYS 120 | General Physics | 3 hours lecture | Transfer acceptability: CSU, UC*
| --- | --- | --- | --- |
| Prerequisite: | A minimum grade of ‘C’ in PHYS 101, 110, 115, 120, 125, 230, 231, and 232

An introductory survey course in classical and modern physics. Not intended for science majors.

PHYS 121 | General Physics | 4 hours lecture | Transfer acceptability: CSU, UC*
| --- | --- | --- | --- |
| Prerequisite: | A minimum grade of ‘C’ in PHYS 120

A second semester continuation of PHYS 120. The fundamental principles of optics, electricity, magnetism, and modern physics.

PHYS 130 | Preparation for Principles of Physics | 3 hours lecture | Transfer acceptability: CSU
| --- | --- | --- | --- |
| Prerequisite: | A minimum grade of ‘C’ in MATH 110, or concurrent enrollment in MATH 140

Designed for students who need extra preparation for the math and physics concepts covered in PHYS 230. Principles of Physics. Introduces basic classical mechanics, oscillations, and gravitation.

PHYS 197 | Physics Topics | (5.5) hours | Transfer acceptability: CSU, UC - Credit determined by UC upon review of course syllabus
| --- | --- | --- | --- |
| Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.
| Note: | May be taken 3 times

PHYS 200 | Fundamentals of Physics | 4 hours lecture | Transfer acceptability: CSU, UC*
| --- | --- | --- | --- |
| Prerequisite: | A minimum grade of ‘C’ in PHYS 120-201 series not recommended for majors in engineering, computer science or physics.
| Note: | PHYS 230 series recommended for majors in engineering, computer science, or physics.

A calculus-based course in classical mechanics, waves, sound, fluids and thermodynamics, with an emphasis on life science, pre-professional, and architectural fields.

PHYS 201 | Fundamentals of Physics | 4 hours lecture | Transfer acceptability: CSU, UC*
| --- | --- | --- | --- |
| Prerequisite: | A minimum grade of ‘C’ in MATH 140, or concurrent enrollment in MATH 141

Note: PHYS 200-201 series not recommended for majors in engineering, computer science or physics.

A calculus-based course in classical electromagnetism, optics and atomic physics, with an emphasis on life science, pre-professional, and architectural fields.
PHYS 230  Principles of Physics (5)
4 hours lecture-3 hours laboratory
Prerequisite: A minimum grade of 'C' in MATH 141, or concurrent enrollment in MATH 141
Recommended preparation: PHYS 120
Transfer acceptability: CSU; UC*
Classical mechanics, thermodynamics and fluid dynamics. Required for students whose major field is physics, chemistry, or engineering.

PHYS 231  Principles of Physics (5)
4 hours lecture-3 hours laboratory
Prerequisite: A minimum grade of 'C' in PHYS 230; A minimum grade of 'C' in MATH 205, or concurrent enrollment in MATH 205
Recommended preparation: PHYS 121
Transfer acceptability: CSU; UC*
Classical electromagnetism, electromagnetic waves, and optics. Required for students whose major field is physics, chemistry, or engineering.

PHYS 232  Principles of Physics (4)
3 hours lecture-3 hours laboratory
Prerequisite: A minimum grade of 'C' in PHYS 231 and MATH 205
Transfer acceptability: CSU; UC*
Modern Physics. Required for students whose major field is physics, chemistry, or engineering.

PHYS 295  Directed Study in Physics (1,2,3)
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson
Note: May be taken 4 times
Transfer acceptability: CSU
Designed for the student who has demonstrated a proficiency in physics subjects and the initiative to work independently on a particular sustained project which does not fit into the context of regularly scheduled classes.

Physiology
See Zoology

Political Science (POSC)
Contact the Economics, History and Political Sciences Department for further information.
(760) 744-1150, ext. 2412
Office: P-17K

COURSE OFFERINGS

POSC 100  Introduction to Political Science (3)
3 hours lecture
Transfer acceptability: CSU; UC
Introduction to the scope and methods of political science; basic political concepts and policies; comparative government institutions, stressing the United States; an overview of political theories, international politics, and political economy.

POSC 101  Introduction to Politics and American Political Institutions (3)
3 hours lecture
Note: This course plus POSC 102 meets the State requirement in American History and Institutions.
Transfer acceptability: CSU; UC
A study of the development of American political institutions, the basic features of the Constitution, and major court interpretations that affect our lives today. Special attention will be given to evolution of political rights and individual liberties, the electoral process and fundamental concepts of democracy, liberty, diversity, and equality.

POSC 102  Introduction to United States and California Governments (3)
3 hours lecture
Note: This course plus POSC 101 meets the State requirement in American History and Institutions.
Transfer acceptability: CSU; UC
An examination of the US Constitution as it relates to the major institutions of government: the Congress, the Presidency, and the Supreme Court. It also emphasizes social, economic, and foreign policy so that students will have an understanding of the issues they face in the contemporary era. California history and government, another course component, will be compared and contrasted to the national political system.

POSC 110  Introduction to World Politics (3)
3 hours lecture
Transfer acceptability: CSU; UC
Sources and uses of power in the arena of international politics. Causes and consequences of 20th century wars. The balance of power, history, geography, military and economic potential will be examined to show their impact on foreign policies of the United States, Europe, Russia, Japan, China and less-developed states. Uses of military force, economic leverage, diplomacy, law, etc., discussed as approaches to limit war.

POSC 120  California Government (1)
1 hour lecture
Transfer acceptability: CSU
Intended for students who have completed the American History and Institutions requirements for the A.A. Degree or CSU General Education, but have not met the California Constitution requirement. Organization and operation of California state and local government. Stress upon citizen participation in the decision making process.

POSC 125  Contemporary World Problems (3)
3 hours lecture
Transfer acceptability: CSU; UC
Focus is on three issue-areas: war and group conflict; population growth and movement; and change and cultural values. Other current issues may also be examined.

POSC 130  Introduction to Public Administration (3)
3 hours lecture
Transfer acceptability: CSU; UC
A survey of the key issues in public administration, urban planning, public personnel administration, and public safety with an emphasis on governmental structure and the public decision making process as it pertains to the effectiveness of criminal justice policies, zoning, and land use considerations.

POSC 197  Political Science Topics (5-4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 4 times
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Topics in Political Science. See Class Schedule for specific topic offered. Course title will designate subject covered.

POSC 295  Directed Study in Political Science (1,2,3)
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson
Note: May be taken 4 times
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Independent study designed for advanced students who have demonstrated a proficiency in political science subjects and have the initiative to work independently on projects or research that does not fit into the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.