# **Physics (PHYS)**

Contact the Physics and Engineering Department for further information. (760) 744-1150, ext. 2505

Office: NS-355B

#### **COURSE OFFERINGS**

\*UC credit limitations --

- No credit for PHYS 101 or 102 if taken after 120, 200, or 230
- PHYS 120, 121 or 200, 201 or 230, 231, 232 combined: maximum credit, one series
- PHYS 200 and 230 combined: maximum credit, one course
- PHYS 201 and 231 combined: maximum credit, one course

#### PHYS 101 Introduction to Physics

(4)

3 hours lecture - 3 hours laboratory

**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 100, 110, 115, 120, 125, 230, 231, and 232

Transfer acceptability: CSU; UC\*

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

### PHYS 102 Introduction to Physics (Lecture)

(3)

3 hours lecture

**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

Transfer acceptability: CSU; UC\*

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

# PHYS 120 General Physics

(4)

3 hours lecture - 3 hours laboratory

**Prerequisite:** A minimum grade of 'C' in MATH 110

Recommended preparation: MATH 115

Transfer acceptability: CSU; UC\*

C-ID PHYS 105; C-ID PHYS 100S for PHYS 120 and 121 combined

The fundamental principles of classical mechanics, wave motion, sound, thermodynamics, and fluids.

# PHYS 121 General Physics

(4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of 'C' in PHYS 120

Transfer acceptability: CSU; UC\*

C-ID PHYS 110; C-ID PHYS 100S for PHYS 120 and 121 combined

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

### PHYS 197 Physics Topics

(.5-

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.

**Transfer acceptability:** CSU; UC - Credit determined by UC upon review of course syllabus

Topics in Physics. See Class Schedule for specific topic offered. Course title will designate subject covered.

### PHYS 200 Fundamentals of Physics

(5)

4 hours lecture - 3 hours laboratory

**Prerequisite:** A minimum grade of 'C' in MATH 140, or concurrent enrollment in MATH 140

**Note:** PHYS 200-201 series not recommended for majors in engineering, computer science or physics; PHYS 230 series recommended for majors in engineering, computer science, or physics.

## Transfer acceptability: CSU; UC\*

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

(5)

4 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of 'C' in PHYS 200

**Recommended preparation:** MATH 141, or concurrent enrollment in MATH 141 **Note:** PHYS 200-201 series not recommended for majors in engineering, computer science or physics; PHYS 230 series recommended for majors in engineering, computer science, or physics.

## Transfer acceptability: CSU; UC\*

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

 $\begin{tabular}{ll} \textbf{Prerequisite:} A minimum grade of $`C'$ in MATH 141, or concurrent enrollment in MATH 141 \end{tabular}$ 

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. This is the second semester of a three-semester sequence.

#### PHYS 232 Principles of Physics

(4)

3 hours lecture - 3 hours laboratory

Prerequisite: A minimum grade of 'C' in PHYS 231 or PHYS 201, and MATH 205 Transfer acceptability: CSU; UC\*

Modern Physics. Required for students whose major field is physics, chemistry, or engineering. This is the third semester of a three-semester sequence.

### PHYS 295 Directed Study in Physics

(1, 2, 3)

3, 6, or 9 hours laboratory

Prerequisite: Approval of project or research by department chairperson 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: MD-375

### **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

American Political Institutions

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)

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 (I)

I 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 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 and/or laboratory may be scheduled by the department. Refer to Class Schedule.

**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

**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.

# Psychology (PSYC)

Contact the Behavioral Sciences Department for further information. (760) 744-1150, ext. 2329

Office: MD-241

For transfer information, consult a Palomar College Counselor.

## Associate in Arts Degrees -

AA Degree requirements are listed in Section 6 (green pages).

- · Alcohol and Other Drug Studies
- Psychological and Social Services

### Associate in Arts for Transfer -

AA-T, IGETC, and CSUGE requirements are listed in Section 6 (green pages).

Psychology

### **Certificates of Achievement -**

Certificate of Achievement requirements are listed in Section 6 (green pages).

- Alcohol and Other Drug Studies
- Psychological and Social Services

### **PROGRAMS OF STUDY**

# Alcohol and Other Drug Studies

Provides the student with the academic training and hands on experience for entry-level employment in delivery of alcohol and other drug treatment services in agency settings and serves as a preparation for California state examinations as a certified addictions treatment counselor by CAADE and as a certified alcoholism and drug abuse counselor by CAADAC.

# A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
PSYC 100	Introduction to Psychology	3
PSYC/SOC/	·	
AODS 150	Introduction to Alcohol and Other Drug Studies	3
PSYC/SOC/		
AODS 155	The Physiology and Pharmacology of Psychoactive Dru	igs 3
PSYC/SOC/		
AODS 160	Prevention, Intervention, and Education	3
PSYC 225	Psychology of Abnormal Behavior	3
PSYC/SOC/		
AODS 250	Group Leadership and Process	3
PSYC/SOC/		
AODS 255	Case Management, Law and Ethics	3
PSYC/SOC/		
AODS 260	Chemical Dependency Family Counseling	3
PSYC/SOC/		
AODS 299	Directed Field Experience II	6
Group One (Select 3 units)		
SOC 100	Introduction to Sociology	3
SOC 110	Social Problems	3
Group Two (Select 4-5 units)		
PSYC/SOC/	•	
AODS 140	Introduction to Psychological and Social Services	4
PSYC/SOC/		
AODS 298	Directed Field Experience I	5
<b>TOTAL UNITS</b>	:	37 - 38

Alcohol and Other Drug Studies is also listed in Alcohol and Other Drug Studies.

# **Psychological and Social Services**

Provides the student with the academic training and hands on experience for entry-level employment in human services and serves as preparation for upper division course work.