# **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

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

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**

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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

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\*

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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)
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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

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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** 

### 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 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.

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