

**PHOT 225 Photographic Portraiture** (3)  
 1½ hours lecture - 4½ hours laboratory  
**Prerequisite:** A minimum grade of 'C' in PHOT 130  
**Transfer acceptability:** CSU  
 Techniques and styles of photographic portraiture. Studio and non studio applications will be explored using black and white and color films or digital capture. Emphasis on lighting equipment and techniques.

**PHOT 296 Special Projects** (1, 2, 3)  
 3, 6, or 9 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in PHOT 105  
**Transfer acceptability:** CSU  
 Requires demonstrated proficiency in photography and the creative ability and initiative to work independently on a particular sustained project which does not fit in the context of regularly scheduled classes. Could include portfolio preparation.

## Physical Education

See Kinesiology

## 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)  
 3 hours lecture  
**Transfer acceptability:** CSU; UC – No credit for students with prior lecture credit in ASTR, CHEM, GEOL or PHYS  
 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)  
 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in PHSC 100, or concurrent enrollment in PHSC 100  
**Transfer acceptability:** CSU; UC – No credit for students with prior lab credit in ASTR, CHEM, GEOL or PHYS  
 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. For teacher training see PHSC 101L.

**PHSC 101 Principles of Physical Science** (3)  
 3 hours lecture  
**Transfer acceptability:** CSU  
 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)  
 3 hours laboratory  
**Prerequisite:** A minimum grade of 'C' in PHSC 101, or concurrent enrollment in PHSC 101  
**Transfer acceptability:** CSU  
 The study of selected topics from the fields of physics and chemistry and their related sciences through lab exercises. A general education course designed particularly for non-science majors; not open to majors in physics, chemistry, or engineering. Especially recommended for teacher training.

## 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 130 Preparation for Principles of Physics** (3)  
 3 hours lecture  
**Prerequisite:** A minimum grade of 'C' in MATH 140, or concurrent enrollment in MATH 140  
**Transfer acceptability:** CSU  
 Provides the applied mathematics and problem solving/presentation skills necessary for success in an introductory physics sequence for physics and engineering majors. Students will learn how to analytically solve physics problems and properly prepare laboratory reports. Reinforcement of math concepts will be emphasized throughout.