

PE 229 Lifeguarding (1.5)

1½ hours lecture

Prerequisite: Ability to swim 500 yards continuously**Transfer acceptability:** CSU; UC

Follows American Red Cross curriculum lifeguard training and professional rescuer CPR. National certifications can be earned upon successful completion of two topic areas. An individual will have basic preparation for aquatic lifeguard job opportunities in California.

PE 230 Lifeguarding and Emergency Response (3)

3 hours lecture

Prerequisite: Ability to swim 500 yards continuously**Transfer acceptability:** CSU; UC

Follows American Red Cross curriculum lifeguard training, professional rescuer CPR and emergency response. National certifications can be earned upon successful completion of all three topic areas. Prepares an individual for aquatic lifeguard job opportunities in California.

PE 231 Water Safety Instruction (3)

3 hours lecture

Transfer acceptability: CSU; UC

American Red Cross Instructor candidate training and water safety instruction. Follows the National Red Cross instructor course, learning levels of basic swim instruction, aquatic activities, and emergency rescue. National certifications can be earned by students 17 years of age or older upon successful completion of topics. Prepares an individual for teaching job opportunities at an aquatic facility.

PE 232 Teaching Swimming (1,1.5)

2 or 3 hours lecture/laboratory

Transfer acceptability: CSU; UC

Techniques for teaching swimming. Practical experience teaching beginning and intermediate swimming classes under supervision of college instructor.

PE 295 Directed Study in Physical Education (1,2,3)

3, 6, or 9 hours laboratory

Prerequisite: Approval of project or research by department chairperson/director**Note:** May be taken 4 times**Transfer acceptability:** CSU

Independent study for students who have demonstrated skills and/or proficiencies 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)**

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: Completion of, 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: Completion of, 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 and 121 combined with 200, 201, 230, 231, 232: 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: 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: 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: MATH 110**Recommended preparation:** MATH 115**Transfer acceptability:** CSU; UC*; CAN PHYS 2; PHYS 120+121= CAN PHYS SEQ A

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

PHYS 121 General Physics (4)

3 hours lecture-3 hours laboratory

Prerequisite: PHYS 120**Transfer acceptability:** CSU; UC*; CAN PHYS 4; PHYS 120+121= CAN PHYS SEQ A

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