Sacramento State
Department of Physics and Astronomy

Bachelor of Arts in Physics:
Teacher Preparation Concentration

What is this program about?

The shortage of qualified teachers at the elementary and secondary levels is a nationwide problem, and the need for well-qualified science and physics teachers is especially great. While this is troubling news, it may be very good news for you: physics and science high-school teachers are in high demand.

With the goal of increasing the number of our majors pursuing a career in the teaching of science and physics in middle and high schools, the Department of Physics and Astronomy at Sacramento State has developed the Teacher Preparation Concentration (TPC) as part of our Bachelor of Arts degree in Physics. The new program should be officially listed on the Fall 2009 catalog. Students enrolled in the concentration will:

- Be eligible to apply for the Physics Teacher Preparation Scholarship. Please see our website for more information on this and other scholarships offered in our department.
- Have the opportunity of working as a teaching assistant at a high-school or university astronomy/physics class under the supervision of an experienced teacher mentor.
- Be prepared to take the three exams that are required by the state of California for a teaching credential in science with emphasis on Physics; and will be eligible to enter a teacher credential program.

Curriculum:

Lower Division

- BIO 1 Biodiversity, Evolution and Ecology
- ASTR 4 Introduction to Astronomy
- GEO 10 Physical Geology
- GEO 10L Physical Geology Lab
- PHYS 30 Science and Pseudoscience
- MATH 30, 31, 32, Calculus I, II, & III
- MATH 45 Differential Equations
- CHEM 1A, 1B General Chemistry I & II
- PHYS 11A, 11B, 11C General Physics I, II, & III

Upper Division

- PHYS 105 Mathematical Methods
- PHYS 106 Intro to Modern Physics
- PHYS 110 Classical Mechanics
- PHYS 115 Electronics and Instrumentation
- PHYS 124 Thermodynamics
- PHYS 135 Electricity and Magnetism
- PHYS 175 Advanced Physics Laboratory
- PHYS 191 Senior Project
- Physics Elective 6 unit minimum

Including specially designed teaching classes!