**Single Subject Credential - Physical Science**

**DEPARTMENT**

**Department of Physics**
Douglas Singleton, Chair  
McLane Hall, Room 173  
559.278.2371  
FAX: 559.278.7741  
www.fresnostate.edu/physics

MN in Physical Science, Minor  
MS in Physics, M.S.  
BS in Physics, B.S.  
MN in Physics, Minor  
MN in Medical Physics, Minor  
MN in Astronomy, Minor  
BS in Biomedical Physics, B.S.  
CRED in Single Subject Credential - Physical Science

**Courses Offered**

The Department of Physics has an active theoretical physics program that focuses on gravitational physics and field theory. We have ongoing collaborations with several international research groups including the Institute of Applied Physics of the Academy of Sciences of Moldova, Kyrgyz-Russian Slavic University, the Center for Gravitation and Fundamental Metrology (VNIIMS) at the Peoples’ Friendship University of Russia, and the Universidad de Costa Rica. Our students in this area regularly attend national and international conferences to give talks, and they are active in publishing their research work in refereed journals. Several international researchers have visited our department and engaged in collaborative research, colloquia, and seminars.

**REQUIREMENTS**

**Single Subject Teaching Credential in Physics - Requirements**

The college offers baccalaureate degree programs in mathematics and natural sciences that serve as subject matter preparation programs leading to the Single Subject Teaching Credential in Mathematics and Science. In science, a student can select the Single Subject Teaching Credential with an emphasis in Biology, Chemistry, Earth Science, or Physics.

Students can apply to the credential program after completing 90 or more units as undergraduates. Once accepted, they can begin to take credential courses simultaneously as they complete their undergraduate degree. For more information, call Agnes Tuska (Math Education) at 559.278.2992, or David Andrews or Jaime Arvizu (Science Education) at 559.278.5173.

**FACULTY**

Our faculty members are here to teach and to do research. Several faculty members have research projects involving students.

Our classes are small: our upper-division and graduate classes usually have 10-15 students or less. Physics majors get to know each other very well. They develop friendships with peers, faculty, and staff, which extend well beyond graduation.

There are eight research/creative activity areas that are part of our current efforts: (1) Computational Physics, (2) High Energy Physics (HEP), (3) Strongly Correlated Electron Physics, (4) Nanotechnology, (5) Astronomy and Astrophysics, (6) Microbeam X-ray Fluorescence (XRF), (7) Theoretical Physics, (8) Physics Outreach.

For faculty phone numbers and e-mail, see the campus directory.

For more on the faculty, see the faculty pages.  
The faculty pages are updated by the department or program.