Position title: Assistant or Associate Professor in Physics and Astronomy with a specialization in Physics and/or Astronomy Education Research

Start date: August 2016

Salary: Commensurate with qualifications and experience. The CSU provides generous health, retirement and other benefits.

Position Summary:

The position is in the Department of Physics and Astronomy at San Francisco State University. SF State is a member of the California State University system and serves a diverse student body of 30,000 undergraduate and graduate students. The University seeks to promote appreciation of scholarship, freedom and human diversity through excellence in instruction and intellectual accomplishment.

The Department of Physics & Astronomy offers B.A., B.S., and M.S. degree programs and is committed to excellence in research and teaching. We seek a colleague who will create and foster an active program in Physics and/or Astronomy Education Research, and who is enthusiastic about mentoring students and involving them in ongoing research activities, including graduate students working on M.S. theses. The newly appointed professor will join and collaborate with a growing cadre of STEM education researchers within the College of Science & Engineering, including experts in biology education, chemistry education, and mathematics education. The College also hosts two STEM education centers: the Center for Science & Mathematics Education (CSME) and the Science Education Partnership & Assessment Laboratory (SEPAL).

The position includes a full-time faculty workload per the Collective Bargaining Agreement between the California State University and the California Faculty Association. The workload primarily includes teaching assigned undergraduate and graduate courses in Physics & Astronomy and conducting an active ongoing research program that advances knowledge in the field of Physics and/or Astronomy Education Research. Additional responsibilities include, but are not limited to: productive participation on departmental, college, and university-wide committees; mentoring and advising graduate and undergraduate students; holding regular office hours; curriculum development and improvement, particularly with regard to student learning outcomes; and remaining current in both subject area and teaching methodologies.
**Essential Job Tasks:**

Develop and maintain an active program in Physics and/or Astronomy Education Research, including presenting findings in the appropriate peer-reviewed journals and professional conferences; apply for and secure external grants to support research activities; advise and mentor students and involve students in ongoing research activities, including graduate students working on M.S. theses; teach undergraduate and graduate level classes across the curriculum; contribute to improving the campus and community through serving on department, college, and university committees and task forces.

Other job tasks include: prepare course materials such as syllabi, lecture and discussion materials, readings and assignments, assessments, and learning resources; prepare and deliver effective lectures to undergraduate and graduate students on topics in Physics & Astronomy; initiate, moderate, and facilitate classroom discussions; evaluate and grade students' class work, assignments, papers, etc. in a timely manner; compile, administer, and grade examinations or other learning assessments; maintain student grades and other required records or reporting materials; conduct research in one's field of interest and present findings in peer-reviewed journals, books, or professional conferences; stay current on developments in the discipline by reading new literature, talking with colleagues, and participating in professional conferences; plan, evaluate and revise curricula, course content, course materials, and methods of instruction; hold regularly-scheduled office hours for the purpose of advising and assisting students; actively participate on assigned committees in accordance with department or College needs, and SF State's strategic vision; additional duties as assigned.

**Minimum Education, Experience, Knowledge, Skills, and Personal Abilities:**

A Ph.D. in Physics or Astronomy/Astrophysics and at least one year of postdoctoral experience are required. Candidates should have a record of achievement in the field of Physics and/or Astronomy Education Research, as demonstrated by peer-reviewed publications, and show potential for securing external grants to support future research activities. Preferred candidates will have teaching and/or research experience with a large, diverse student body or in a multicultural setting.

Other important skills include: knowledge of principles and methods for curriculum design, instruction of individuals and groups, and the assessment of learning; planning and organizing skills sufficient to ensure implementation of the assigned curriculum, job duties, and established expectations; oral and written communication skills in the English language at a level that comprehends and conveys information to and from students, colleagues, and others in an effective manner; awareness and engagement with critical concerns in the discipline and capacity to continue to produce original research; interpersonal orientation that encourages productive interactions with students, colleagues, and other campus stakeholders and promotes collegiality in department, college and university contexts.