

Astronomy 300 - Fall 2008

Teaching in the Community

Astronomy, Physics, and Math

If you're interested in starting to do astronomy outreach, the student Local Group Outreach Coordinator (http://badgrads.berkeley.edu/doku.php?id=student_jobs#local_group_outreach) should know what opportunities are currently available. Some of the teaching opportunities that may be available are listed below.

The Berkeley Astronomy Graduate Student Public Lectures Series

<http://astro.berkeley.edu/badgradslectures>

It was started in June 2008 with graduate students and postdocs from the U. C. Berkeley Astronomy Department giving public lectures for local amateur astronomy clubs. If you are interested in joining a mailing list to be notified of upcoming lectures please email Karin Sandstrom (karin@astro.berkeley.edu). The BADGrads Public Lecture series connects astronomy graduate students with local amateur astronomy clubs through a series of public lectures. These lectures give graduate students a chance to share the results of their research with the public and gain valuable presentation experience. These lectures provide astronomy clubs with enthusiastic speakers who are doing cutting edge research at U. C. Berkeley. Lectures happen typically once a month in conjunction with a local astronomy organization. The lecture is about an hour in length, with plenty of time for questions and discussion.

Bay Area Project ASTRO

<http://www.astrosociety.org/baprojectastro.html>

Run through the Astronomy Society of the Pacific and matches astronomers with Bay Area teachers in 4th-9th grades in yearlong partnerships. You will visit the classroom a few times during the school year acting as an "Astronomer in the Classroom". This is a great way to build a relationship with a class or community group. 2007-2008 participants are Julia Kregenow (julia@astro.berkeley.edu), Ruth Murray-Clay (rmurray@astro.berkeley.edu), and Jeff Silverman (JSilverman@astro.berkeley.edu).

SSL Center for Science Education

<http://cse.ssl.berkeley.edu/>

Has lots of educational programs available.

The Compass Project

<http://compass.physics.berkeley.edu/index.php>

It is a new initiative at UC Berkeley, and is a program that supports diversity in the physical sciences by bringing together undergraduate and graduate students through exceptional teaching and learning experiences. For the undergraduates, the main focus of Compass is an intensive two-week summer program for incoming freshmen (with an emphasis on women and minorities), as well as continued mentorship and support throughout their college careers. For the graduate students, Compass provides a platform for discussing issues related to physics education, and a unique opportunity to advance their teaching skills.

Expanding Your Horizons

<http://expandingyourhorizons.org>

A nationwide program that conducts one-day conferences to educate middle-school girls about careers in science and technology. Mills College <http://eyh.mills.edu> runs a local conference each March.

Upward Bound

<http://students.berkeley.edu/apa/APA%20Home/ubms/default.htm>

Helps local low-income high school seniors prepare for college careers in math and science.

Multicultural Engineering Program

<http://www.coe.berkeley.edu/cues/mep/>

Seeks to increase participation and retention of women and underrepresented minorities in the sciences and engineering. Berkeley grad student volunteers have helped with their “boot camp”, an intense summer session where incoming freshmen get early exposure to their first year coursework.

Patten University’s Prison University Project at San Quentin

http://prisonuniversityproject.org/about_us.html

Helps inmates earn degrees. Volunteers teach and tutor math, astronomy, and physics. (Donations and volunteers are needed because, by law, federal funds may not be used for education of the incarcerated). The last BADGrad to do this was Julia Kregenow (julia@astro.berkeley.edu).

Adjunct Positions at a JC/CC/Univ.

Many junior colleges, community colleges, and universities in the Bay Area will hire one semester adjunct faculty, usually to do their Astro 10 equivalent. Recently, Laney College <http://www.laney.peralta.edu/homex.asp?Q=Homepage> in Oakland needed a replacement teacher. The requirement often appears to be a Masters in Astronomy (i.e. post-prelim grad students).

Academic Talent Development Program

<http://www-atdp.berkeley.edu/>

Runs a summer school project where you can teach gifted students Astronomy at the Astro 10 level and they receive school credit for it. The students are very fun and energetic. The syllabus should be posted sometime in December.

Tutoring

Tutoring local middle and high school students in math and physics is also a great way to make money on the side. The Berkeley Parents Network (<http://parents.berkeley.edu/recommend/tutors/>) has some information on finding students who need tutoring although some of the listings appear to be quite outdated. The Berkeley High Math Department also has a list of tutors. E-mail a math teach (<http://bhs.berkeleyschools.org/math/>) to put your name on the list. A reasonable rate to charge students is \$35/hour. Mo Ganesh (mganesh@astro.berkeley.edu) has been doing this for awhile.

Adult Literacy

Berkeley Reads

<http://berkeleypubliclibrary.org/system/literacy.html>

A free program at the Berkeley Public Library where volunteers work for 1-2 hours a week one-on-one with an adult literacy student.