

Earth Sciences Peer-Mentoring Project Proposal for FALL 2006

Submitted by:

Katryn Wiese on behalf of the Department of Earth Sciences, Ocean Campus, Mailbox: S50
415.452.5061; kwiese@ccsf.edu

Title of project: Earth Sciences Mentoring

Summary: Earth Sciences students who plan to continue their education in the Earth Sciences or a related field assist current and future Earth Sciences students with their successful course completion by leading study and review sessions prior to exams, assisting students in groups or one-on-one with course content and materials (like rock and mineral identification), and assisting students in laboratory classes to use equipment and complete labs on time.

Previous Semester mentoring activities:

Lab Aides: Assist students during labs with equipment and material use, logical thinking and reasoning, study skills, time management, etc.

- Oceanography Lab (Katryn Wiese instructor) *Basic Math, Mapping, Compasses, Navigation, Sand Analysis, Seawater Chemistry, Meteorological Observations and Instruments, Plate Tectonic Analysis, Marine Biology identification and description (via hand samples and microscopes)*
- Geology Lab (Katryn Wiese instructor). *Basic Math, Mapping, Compass use, 3-D visual modeling of Earth's crustal features, Rock and Mineral identification and characterization, Radiometric and Relative Dating, Geologic Histories.*
- Paleontology Lab (Joyce Lucas-Clark instructor) *Fossil identification (visual and textual descriptions and recognition – via hand samples and microscopes).*
- Physical Geography Lab (Darrel Hess instructor) *Field Mapping, Pressure and Wind, Humidity and Adiabatic Processes, Weather Maps and Satellite Images, Topo Maps and Stereo Aerial Photos.*

Field Assistants: Assist students and instructors during optional field trips – equipment use, group discussions, and group safety.

Study Sessions: Assist students in exam preparation primarily by facilitating student discussion of review questions – getting students to meet each other, see each other as a resource, and get feedback from each other in a reviewed, managed, encouraging environment.

- Physical Geography (Darrel Hess)
- Oceanography (Katryn Wiese and James Kuwabara)
- Geology (Joyce Lucas-Clark and Katryn Wiese).

Project Impact and Outcomes: Our students desire extracurricular help and activities to increase their understanding of the course material including study groups with their fellow students, study tips, encouragement and advice from previous students, and discussion of career options in the Earth Sciences. Lab classes have been in desperate need of additional on-site aides for equipment use, encouragement, and discussion groups.

By having mentors lead study sessions or assist in labs, we have seen dramatic improvements in passing rates and in attitudes toward our department and what we're willing to do to help our students. We expect a lot from our students, but we know they can do it. Our mentoring program helps them to see that they can as well. Consequently, we have seen our enrollment numbers increase across the board in all our classes, and we are able to offer more sections to our students. We also see a transformation in the mentors – watching them reach higher in their career options and future study choices and grow into confident, capable, encouraging educators and students. More and more mentees are wanting to become mentors and continue in the field.

As a department we are convinced that the mentoring program has been the single-most effective student resource we have implemented to date!

PROPOSED changes for Fall 2006 mentoring activities: None. We are where we want to be!

Budget:

Proposed for Fall 2006:

Class	Number offered	Hours per event	Total hours
Geology Lab	11	3	33
Oceanography Lab	11	3	33
Oceanography Lab	11	3	33
Paleontology Lab	11	3	33
Optional Field trips	3	3	9
Geology Study Session	3	4	12
Oceanography Study Session	4	3	12
		TOTAL	165

Faculty Sponsor (10 hours/semester x \$35/hr = \$350.00)

Student Lab Aides (165 hrs x \$8.50/hr = \$1402.50)

TOTAL REQUESTED: \$1752.50

NOTE: Any money unused in Spring 2006 stems from having one mentor work as a volunteer and the loss and lack of replacement of mentors from previous semesters. ALSO note that in the Fall, we are replacing our Geography lab with an Oceanography lab.