

1. Statement of Purpose

This sabbatical will allow me the time to learn how to deliver online instruction, research best practices in online science education, and develop a distance education course in life science for Oxnard College.

2. Rationale

A. Professional Development

Since I have never taught online before, the first phase of this project will be to learn how to deliver education online. The second phase-1(a)-3(s)-3(e)-8(-1(a)-3(s)-3(s)-3(3(e)-8-3(s)3(r)-7(n)-1(h)--1(a)-3(s)s34D3)-1(r)-7(oa-3 needs of these night students as well as students currently unable to attend at traditional times because of work, childcare, or disability.

Student Sub - population	Fall 2010 BIOL enrollment	Fall 2010 Total enrollment	% BIOL
-----------------------------	------------------------------	-------------------------------	--------

- d. OC Instructional Technology staff – Bolla Rushing- King
 - e. OC Distance Ed Committee – Teresa Bonham
 - f. OC Curriculum Committee Member and the only experienced instructor of science online – Chris Mainzer
2. Course selection will be in collaboration with our departmental faculty.

3 – 9. These steps will be completed in collaboration with experts on campus (Rushing -King, Bonham) and in my discipline at other institutions

10. I will rely heavily on curriculum committee support for writing the course outline.

11. I plan to relay the best practices that I learn during the project to my science colleagues. In addition, I plan to share with them the pros and cons of the project, its challenges and its rewards.

B. Projected Results

1. Increase diversity of OC distance education offerings
At this time, only one science course has been developed for distance education in physical science. No life science courses are offered online. This project will add a second science course and a second experienced faculty member to OC's distance education.
2. The resulting course will provide improved access to science education for students with limited campus access such as those with work, transportation, and child care limitations. Since the proposed course will not include a lab, the students will have to come to campus for the laboratory section; but this project will effectively cut their required on-campus time by half to fulfill this science requirement
3. In the case of ESRM R100, we could double or triple the enrollment which makes it a strong candidate for this project.

Biology R101, an introduction to cellular biology, experiences high enrollment, but is severely impacted by the recent cut in section numbers. The effectiveness of the proposed online course to increase enrollment is dependent on management decisions regarding number of approved sections, etc.

Biology R102 would be a new course. This option is considered to increase the diversity of our course offerings, to match those offered at other institutions, and to provide an introductory organismal biology

course for students preparing for the majors Biology (120/122) or for Anatomy and Physiology.

4. This course represents an opportunity to develop modular, self-paced learning activities to be housed at OC's new STEM center (and ultimately may be moved to the new LRC during the STEM center renovation). Students enrolled in the online course may need more hands-on, visual learning activities beyond the online work. Learning modules, linked by chapter and topic to the online course, could include work with models that were purchased with STEM grant funds. At another institution I supervised a self-paced, modular laboratory where students studied Human Biology (BIOL R102) as a general education, non-laboratory life science requirement. The addition of a self-paced, modular study component to online education would provide the flexibility of student-directed scheduling in an academic environment where tutors and faculty are present to assist students resulting in the best of two worlds (online and on-campus).

C. Reporting Methods

1. Hard copy of syllabus, course outline, topic outline, weekly schedule, and assignments.
2. Verbal report to Science Department Faculty
3. Written report to curriculum committee

D. Timeline Estimate

Jan: Explore distance education pedagogy

Jan: Select a General Education science course in my discipline

Feb: Research other online courses

Feb: Review and select a textbook

Feb/Mar : Develop online questions/activities for textbook chapters

Feb/Mar: Develop online activities for course topics not in textbook

Mar: Find online reading assignments on current topics

Apr/May: Sequence topics/activities for a 18-week course

Apr/May : Write a grading rubric for online course

Fall 2012: Develop course outline and syllabus for online course

Fall 2012: Report to Science Department faculty

Fall 2013: Offer the course

Negotiator: No cost lease for the Marine Education Center with Lyn Krieger and Lydia Ledesma-Reece at the Channel Islands Harbor; 2003

C. Community

Current Chairman of the Board of Directors (and Co-founder, 1994) for the Channel Islands Marine Resource Institute providing research and education in environmental restoration for Ventura County

Native oyster restoration project co-manager – collaboration among Nature Conservancy, U. S. Navy, and Channel Islands Harbor 2009 – present

Native plant restoration coordinator at Ormond Beach coastal dunes and wetlands – collaboration with California Coastal Conservancy, California Native Plant Society, and U.S. Fish and Wildlife Service

5. Scholarly Achievements

A. Publications:

T. MCCORMICK, L. M. BUCKLEY. 2010. LARVAL COMPETENCY AND SURVIV

Growth of herbivores in mariculture relative to macroalgal diet

Wound treatment for broodstock abalone

Flavor and growth of purple sea urchin relative to macroalgal diet

Abalone behavior in Y -mazes relative to type of algal extract

Recruitment of benthic invertebrates relative to location in Channel