

Sabbatical Leave Proposal Spring 2013
Shannon Newby

1. Statement of Purpose:

The purpose of this sabbatical is to create an educational K-12 outreach program for the Oxnard College Marine Center. The program will be designed to meet California State Educational Standards, with a focus on science standards (<http://www.cde.ca.gov/ci/sc/>), and the Environmental Literacy Standards as specified in the State Education and the Environment Initiative (<http://www.cde.ca.gov/ci/sc/ee/>). The program will be designed to be implemented by Oxnard College students as part of the existing Oxnard College MST 190 (Experiential Education) and MST 195 (Communicating Ocean Sciences) courses. The program will utilize the resources of the Marine Center including, but not limited to, live organisms, the preserved fish collection, and oceanographic equipment. Pre-visit and post-visit activities will be created for use by visiting teachers, as well as an instructional outreach manual to be used by Oxnard College students leading program activities as part of MST 190. This proposal consists of three goals:

- 1. Research Outreach Programs:** Travel to different aquaria and other informal educational sites within California to learn about their educational programs and how they train their volunteers and/or employees.
- 2. Development of Oxnard College Outreach Program:** Develop an educational outreach program for K-12 students at the Oxnard College Marine Center and design an instructional outreach manual for Oxnard College students to use as part of MST 190 and/or MST 195 to prepare them for leading educational activities at the Marine Center.
- 3. Update Oxnard College Courses:** Review the course curricula for MST 195 to improve or maintain transferability to University of California and California State Universities. MST 195 is designed for Oxnard College students to learn how to teach specific lesson plans in a K-12 classroom as a visiting instructor (OC students to K-12) and needs to be updated to continue to be transferrable to Communicating Ocean Sciences course at UCSB. The existing MST 190 course needs to be revised to become the informal education portion of Communicating Ocean Science to prepare Oxnard College students to lead educational activities at the Oxnard College Marine Center (K-12 students to OC facility). Both of these courses should also be looked at to see if they may meet service learning requirements at four-year institutions within California.

2. **Rationale:**

- a. **Professional Development:** This proposal meets the requirements of an on-site research project as specified in Article 8.6.C. (2) in the AFT Contract. I was hired in part to create an informal education program to be centered around the resources of the Oxnard College Marine Center. Unfortunately, due to the change in location as a result of fire in the previous Marine Center building and budget constraints, the previous program was discontinued. The previous program was well received by local educators but lacked pre- and post-visit activities to prepare students before their visit and to reinforce lessons when they return to their classroom. This proposal will also provide an opportunity to improve and expand my knowledge of informal teaching techniques and how to better teach Oxnard College students in these techniques.
- b. **Value to Department or Discipline:** The Coastal Environmental Studies degree lists both MST 190 and MST 195 as core courses in both the AS and AA degrees. However, at present, neither of these courses are offered, reducing the ability of students to complete their degree requirements as the courses which are offered are severely impacted by the number of students who want to get in.
- c. **Value to College and/or District:** The program will provide an outreach educational program for the Oxnard College Marine Center. Before the fire in 2010, there was an educational program for the existing Marine Center; however, this program does not work in the current facility due to differences in the layout of the building. The program will integrate the aquarium exhibit tanks into an educational program and provide an additional draw to the Marine Center bringing positive publicity and goodwill towards Oxnard College and the District. This proposal will provide Oxnard College and the District with a unique educational program, similar to the Moorpark Zoo, to serve both the students of Oxnard College and the local community.
- d. **Value to Students:** Students who participated in the original educational outreach program developed leadership skills, learned to articulate their knowledge to others using hands-on activities, and developed a sense of pride about the College, the Marine Center, and themselves. The experiences and skills gained from their experience as informal educators helped them stand out when they transferred to four-year universities and on job applications. For example, one student involved in the original program went on to become the education coordinator for an aquarium in Hawaii. Offering MST 190 and/or MST 195 in the future will also help students more easily meet the new Coastal

Environmental Studies degree requirements. Participation in these courses may also meet service learning requirements at some four-year universities.

- e. **Value to Community:** The Oxnard College Marine Center frequently receives requests from K-12 classes to provide educational activities for their students. Unfortunately, due to the lack of Oxnard College students trained in leading educational programs, scheduling conflicts with Marine Center staff, and the change in building, these requests are generally denied. Many students within Oxnard, Port Hueneme, and Ventura know little about the marine environment even though they live so close to the ocean. An educational program at the Oxnard College Marine Center will help address the needs for K-12 educators to include science in their curriculum, provide students within the community a chance to be inspired by STEM fields, and potentially motivate local students, and their parents, to attend college so they can learn more about the oceans and their local coastal habitats.

3. **Implementation:**

- a. **Implementation Procedure:** It is expected that a minimum of 30 hours a week will be devoted to the sabbatical project throughout the Spring 2013 semester. Preparation for the sabbatical project may begin before Spring 2013 as certain informal educator workshops are frequently held during the summer months and the information from these workshops would be valuable in the implementation of the sabbatical proposal.

January – February 2013: Visit informal educational facilities which offer on-site educational programs to school groups, such as the Monterey Bay Aquarium, to learn about their educational programs. Initiate discussions with faculty in science or education programs at four-year schools within California which offer the Communicating Ocean Science course and request their course syllabi or outlines to better align MST 195 and revise MST 190 for transfer. Discussions will also include what activities will meet service learning requirements at these institutions. Initial revisions to MST 190 and MST 195 course outlines will be done as needed based on the information collected from other schools.

February – April 2013: Develop new, or modify existing educational program activities to better utilize the resources of the Oxnard College Marine Center. Existing program material used for modification may include the previous Oxnard College Marine Center educational program, activities from other curricula sources such as NOAA, the California Coastal Commission, and the informal educational facilities visited in January and February. Pre- and post-visit

activities will also be developed during these months. Pre-visit activities will include introduction to vocabulary and concepts visiting students will encounter during their visit to the Marine Center. Providing students with an opportunity to prepare before their visit will increase the understanding of the subject to be covered during their experience at the Marine Center. Post-visit activities, such as writing prompts building on program activities, will reinforce the terms and concepts visiting students learned about during their trip to the Oxnard College Marine Center. Continued revisions to MST 190 and MST 195 course outlines will be done as needed.

April – May 2013: Create an instructional outreach manual for students taking MST 190. The manual will provide instructions specific for the educational outreach program at the Oxnard College Marine Center and be used as part of the MST 190 coursework. It will include background information about the topics covered in the educational program, how to prepare the Marine Center for a group of visiting students, and key concepts and terms to cover during each activity. Course outlines for MST 190 and MST 195 will be submitted to the Oxnard College Curriculum Committee.

- b. Projected Results:** The projected results will provide Oxnard College and the District with a hands-on learning program to draw students interested in careers in science and careers in education utilizing the unique Oxnard College Marine Center. This project will also create an informal educational program based at the Oxnard College Marine Center to serve the needs of local K-12 educators thereby increasing the awareness of the opportunities available at Oxnard College within the educational community of Ventura County. The updating of MST 190 and MST 195 course outlines will increase in the number of courses which transfer from Oxnard College to 4-year schools and improve the ability of Oxnard College students to complete the AA and AS Coastal Environmental Studies degrees. Oxnard College students will also gain experience and skills to help them stand out on college and job applications or to meet service learning requirements at transfer schools.

- c. Dissemination Plan: benefit to Colleagues/Students/College**
The outcomes from this sabbatical project will be shared with colleagues through a presentation at the Fall Flex Week Sabbatical Workshop and meetings within the department and discussions with science and education faculty.

The outcomes from this project will be shared with students at Oxnard College through the increased transferability of MST courses included in the Coastal

Environmental Studies degrees and the development of an instructional outreach manual to be used as course material by students in MST R190. The educational program created by this project will provide students with an opportunity to participate in service learning and to have a positive impact on their community by being an example to younger students.

The outcomes from this project will provide Oxnard College with an outreach program based at the Oxnard College Marine Center encouraging local students to pursue STEM fields as future careers. This project could be an important part in the development of the Oxnard College Marine Center into a facility as well known and respected within the community as the Moorpark College Zoo.

- d. Timeline:** The timeline for this proposal is as follows:
January 2013: Begin visits to informal educational facilities which offer on-site educational programs to school groups, such as the Monterey Bay Aquarium, to learn about their educational programs. Search for on-line and public-domain curricula that could be adapted to Oxnard College Marine Center facilities. Begin review of service learning requirements at four-year schools within California and courses similar to MST 190 and MST 195 at Oxnard College.

February 2013: Continue visits and discussions with instructors and staff at informal educational facilities with on-site educational programs and search for on-line and public-domain curricula. Initiate discussions with faculty in science or education programs at four-year schools within California regarding courses similar to MST 190 and MST 195 and service learning requirements. Revise as needed course outlines for MST 190 and MST 195. Begin development of Oxnard College Marine Center educational program selecting grade levels with obvious science and environmental literacy standard fits to Oxnard College Marine Center facility resources. Begin development of pre- and post-visit activities.

March 2013: Continue visits and discussions with instructors and staff at informal educational facilities. Continue development of Oxnard College Marine Center educational program including pre- and post-visit activities. Submit revised or updated MST 190 and MST 195 course outlines for feedback to appropriate faculty within the Science Department and the Oxnard College Curriculum Committee.

April 2013: Continue development of Oxnard College Marine Center educational program including pre- and post-visit activities. Begin development

of the instructional outreach manual to be used by students in MST 190. Revise MST 190 and MST 195 course outlines based on feedback from faculty and Curriculum Committee.

May 2013: Complete development of the Oxnard College Marine Center educational program and the instructional outreach manual. Submit course outlines for MST 190 and MST 195 to Curriculum Committee.

4. Past Contributions to the District:

a. Scholarship: I created an educational program for the previous Oxnard College Marine Center that had several hundred K-12 students participate over the years it was in existence. I also contributed to the science program used on the tall-ship Lynx.

b. Service:

1) Department / Discipline:

Academic Senate Representative, Faculty Evaluation Committees, Tenure Review Committees, Lead Faculty (Marine Biology, Marine Biology Laboratory, General Biology Laboratory), Hiring Committee Member, Revised Course Outlines, Created Marine Biology Laboratory Manual

2) College:

Professional Development Member, Professional Development Co-Chair, Hiring Committee Member, Created STEMinar for previous STEM grant, Participated in multiple workshops with CSUCI faculty to discuss facilitating transfer of students in STEM pathways from OC to CSUCI

3) District:

Participated in discussion of District-wide evaluation of minimum qualifications within discipline.

4) Community:

Participated in “Halloween Under the Sea” at Oxnard College Marine Center, Developed and implemented previous educational program at the Oxnard College Marine Center.

5. Length of Service and Past Sabbaticals Awarded

I have served at Oxnard College since Fall 2005. This would be my first sabbatical awarded.