

Application for Sabbatical, Academic Year 2021-22

Please type and submit as an attachment

Full name as it appears on your work records Shannon Gay Newby

Number of years of continuous full time service at VCCCD: 15 years (Fall 2005)

Number of years of continuous full time service at OC: 15 years (Fall 2005)

Have you ever had a sabbatical at VCCCD? Yes (type yes or no)

How many years ago was your last sabbatical? 7 years (Spring 2013)

(Please continue to the next page to write your proposal; you may make each section as long as you wish, but please see the examples on page 1 of this packet)

Use as much space as needed.

Project Description:

The purpose of this sabbatical is to revise the Oxnard College Marine Biology Laboratory Manual (see attached file) and to create instructor / laboratory technician manuals. I wrote the current laboratory manual in 2010 and made minor revisions in 2011, and 2015 but it is due for a major update to better reflect some changes to the lab activities, provide additional resources for each lab, and to correct grammatical errors that were never corrected. This will provide the students participating in the course a laboratory manual that more accurately reflects the activities covered in the course and has current resources they can look at for additional information about a topic which the current manual does not.

Currently, I set up the lab materials each week as the Marine Center Technician is 40% and must collect and maintain the organisms used in the laboratory classes which easily consumes their allotted time. The lab manual as currently written does contain a list of materials used for each lab but as some activities have changed, the equipment lists are not always accurate. Originally I was teaching the afternoon and evening labs but since becoming Department CoChair, the afternoon lab has been taught by other faculty, usually adjunct with limited available time, while I continue to teach the evening class. Since I wrote the manual, I know what is needed so it is usually more efficient for me to set the next week's lab up for other instructors after my evening laboratory class is completed. This system has worked well for several years but now portions of the Oxnard College Marine Biology Laboratory Manual are used by other faculty within the District who come to the Oxnard College Marine Center to conduct the lab as several of them use live organisms and I am not always available to prepare a lab that may require different materials or take place on a day I have other commitments to the College.

Also, during Fall Semester 2019 I was on sick leave due to a head injury but still needed to come in to set up the labs because at the time there was no dedicated Technician for the Marine Center and the substitute instructors were unfamiliar with the lab manual and did not have the time to set up the lab ahead of time. While setting up the lab equipment I also provided information about what to expect from each laboratory for the instructors. This experience demonstrated the need for an Instructor / Technician Manual providing a streamlined list of the equipment needed for each lab activity and expected outcomes to allow the set up to not be dependent on a single person.

The revisions and Instructor / Technician manual will also make it easier for faculty at other Colleges both within and outside the District to use the manual or parts of the manual that fit their course requirements. There are also some things in the current manual that are specific to the way I teach and grade the course that were fine when I was the only one using the manual and teaching the course at Oxnard College but are not necessarily appropriate for a manual used by multiple instructors.

Your background as it relates to the project and to your role at Oxnard College:

I have a B.S. in Zoology from the University of Washington and a Ph.D. in Oceanography from Rutgers, the State School of New Jersey. My upper level electives at University of Washington focused mainly on marine organisms and my dissertation examined how differences in current impacted predator-prey interactions. This background in the marine sciences provided the knowledge needed to write the original Marine Biology Laboratory Manual as part of a Federal Grant that allowed for some release time to faculty.

In the time since I wrote the original manual, I have matured as an instructor and have a better idea of components that were left out of the original manual that would be useful to an instructor or technician unfamiliar with the material or expected outcomes. I also have feedback from students about where the wording of questions or instructions is unclear.

In my previous sabbatical during Spring 2013, I planned to create an educational K-12 outreach program for the Oxnard College Marine Center. Over the course of that sabbatical it became clear that the type of program we wanted would not be possible with the current footprint of the Marine Center. However, I did collect many active learning activities that I applied to my lecture classes in both marine and general biology and presented at the Association for the Sciences of Limnology and Oceanography Ocean Sciences Meeting in Honolulu in February 2014 as well as numerous workshops on active learning. Laboratory classes are active learning by their very nature but some of the activities and language I collected during that first sabbatical could be included in the revised manual or as suggested extension activities in the Instructor / Technician manual.

I am currently one of two Department CoChairs for the Sciences and serve as an Academic Senator, on the Program Review Committee, Curriculum Committee, Guided Pathways team, and participated in the Fall 2020 Planning Retreat reviewing the College Mission, Vision, and Values. I am also an active member of the Oxnard College Citizen Emergency Response Team (CERT). In the past I have served on the Distance Education Committee, Campus Use, Development, and Safety committee, Student Success Committee, and many hiring committees. I also am on the District-Wide Equivalency team for Biology.

Project Objectives:

The objectives of this project are to update the current Oxnard College Marine Biology Laboratory Manual and to create a companion manual for Instructors and Laboratory Technicians providing succinct information about the material needed, expected outcomes, common student mistakes, and to provide a sample final practicum. The Laboratory Manual would then be used in Oxnard College Marine Biology Laboratory classes and would be provided to marine biology faculty within the District upon request along with the companion manual.

Project Methodology:

To complete this project I will go through each lab of the current manual to make minor edits or major changes where needed. I will add an “Additional Resources” section at the end of each lab consisting of web addresses, references to scientific literature, and relevant books related to the lab topic. I will also add in a pre-lab quiz for students to complete before arriving at class.

As I edit each set of lab instructions within the manual, I will create the corresponding piece in the Instructor / Technician manual consisting of a materials list, expected outcomes, and possible mistakes. By developing the companion manual while revising the related laboratory chapter it should streamline the process and reduce the likelihood of mistakes.

Product of the sabbatical (a paper, a film, an exhibit, etc):

The product of this sabbatical will be an updated manual for use in Oxnard College marine biology laboratory classes and a companion Instructor / Technician manual so that the preparation for the laboratory activities and what to expect will no longer be dependent on a single individual.

How do you plan to share your sabbatical results at Oxnard College? Do you have plans for sharing your results more broadly?

The revised student manual will be published through the Campus Copy Center and purchased for use by students in the Oxnard College Marine Biology Laboratory class through the Campus Bookstore. The course Instructors and Laboratory Technicians will receive copies of both manuals. Faculty from Ventura and Moorpark Colleges are welcome to pdf files of both manuals should they request it from me or to see if the Copy Center will provide desk copies.

Work plan and schedule (Show the committee the steps in your plan and approximately when you will complete each one, including the product or method of sharing your work).

The laboratory manual currently contains fourteen laboratories and several appendices. An additional lab is handed out to students on the first day of class separate from the manual as many have not purchased it by the first day the class meets. Each month I plan to revise three laboratories and one of the introductory sections and write the corresponding sections for the Instructor / Technician manual. For the first three months I will also revise an appendix in full along with checking appropriate sections in the exam study guide and glossary. In May I will do

final revisions on the study guide and glossary as well as providing a sample lab practicum in the Instructor / Technician manual.

The College Bookstore will be notified of changes to the lab manual as will the Campus Copy Center so the current manual is not printed for the Fall 2022 Semester.

January 2022: Introduction, Lab 00 Tools for Marine Biology (a separate handout), Lab 01 Scientific Method, Lab 02 Abiotic Factors, Appendix 3 Graphing, Appendix 1 Final Exam Study Guide where appropriate, and Appendix 2 Glossary where appropriate

February 2022: Directions to the Oxnard College Marine Center, Lab 03 Taxonomy and Classification, Lab 04 Plankton, Lab 05 Marine Algae, Appendix 4 Using a Microscope, Appendix 1 Final Exam Study Guide where appropriate, and Appendix 2 Glossary where appropriate

March 2022: Safety Rules, Lab 06 Porifera and Cnidaria, Lab 07 Mollusca, Lab 08 Arthropoda, Appendix 5 Rounding Rules, Appendix 1 Final Exam Study Guide, and Appendix 2 Glossary where appropriate

April 2022: Honor Code, Lab 09 Echinodermata, Lab 10 Chordata I non-bony fish, Lab 11 Chordata II bony fish, Appendix 1 Final Exam Study Guide where appropriate, and Appendix 2 Glossary where appropriate

May 2022: Grading Policies, Lab 12 Chordata III marine mammals, Lab 13 Sand Crab Survey, Lab 14 Biodiversity in the Fouling Community, Appendix 1 complete Final Exam Study Guide, Appendix 2 complete Glossary, and Sample Lab Practicum.

June 2022: Completed manuals submitted to Campus Copy Center for printing and distribution to the College Bookstore. Fellow faculty teaching the course and Laboratory Technicians will be provided copies of both manuals and instructors teaching marine biology at Ventura and Moorpark will be notified by email of the revised student manual and the new companion manual which will be made available to them upon request.

August 2022: Students begin class using revised manual.

Value of Project (here, given an overall statement of how this project will benefit you, personally and professionally, as well as how it will benefit others).

This proposal meets the requirements of an on-site research project as specified in Article 8.6.C. (2) in the AFT Contract. It will provide me with the time to improve upon an existing product and to create a new one that will facilitate the ability of other faculty to use the manual for their classes. It will also provide me with an opportunity to explore additional resources related to the laboratory topics.

The Department and Discipline will benefit from this project in that instructors of the marine biology laboratory class will have a guide to assist them in the preparation for the lab and the expectations for the students as they work on each laboratory activity. It also allows the laboratory to be less dependent on a single instructor.

The College and District will gain a more quality product for their marine biology laboratory sections. The Instructor / Technician manual will allow for the smoother insertion of substitute instructors should it be necessary allowing for increased consistency of instruction.

Students will gain a laboratory manual with fewer grammatical errors that will also provide them with a list of additional resources to allow them to explore more deeply a topic that interests them. Updates to instructional information and direction will hopefully decrease frustration students may have felt in the past and encourage them to feel more positive about the sciences.

The community will gain a population of students with a stronger understanding of the process of science and of the marine resources within the ocean. Enjoying a science class can make the difference in what career a student selects or what understanding they take away about how they treat the planet and the other organisms that share it with us.