5/Marine Biology Lecture (BIOL 32)

Instructors: Dean V. Lauritzen, Ph.D dean.lauritzen@mail.ccsf.edu & Bibit H. Traut, Ph.D. bibit.traut@mail.ccsf.edu

Office Hours: for times check the CANVAS Calendar Schedule: Wed 5:10-8pm, Location: STEAM 317

Learning Outcomes:

In this course, we will explore the natural history of California marine plants and animals as a tool to introduce biology and its many levels of diversity to non-biology major students. Upon completion of this course, a student will be able to:

- 1. Recognize the major groups of organisms found in marine ecosystems.
- 2. Synthesize knowledge of physical and chemical processes to help describe biological adaptations across a diversity of organisms in the context of these organisms' various marine habitats.
- 3. Evaluate the interactions between organisms and their marine environment through ecological principles.
- 4. Describe the physical characteristics of the world's oceans and their basins and regions.

Required Material:

- Castro and Huber, 2019. 11th ed. <u>Marine Biology</u>. McGraw Hill. ISBN-13: 9780078023064, or new version ISBN10: 1266574700 | ISBN13: 9781266574702
- Canvas account for our tech-enhanced course. All of the course announcements, homework
 assignments, and other important information will be available ONLY through Canvas. There are several
 computer labs with printers and internet access on campus. Check out these <u>computer lab locations</u>
 if they will help you!

Attendance:

Attendance is mandatory for each lecture and exam. Please arrive on time, as lectures start promptly, and complete the assigned reading **before** attending the lecture. A student with three consecutive unexcused absences may be dropped from the class.

Exams:

All testing accommodations will follow pre-approved DSPS guidelines and regulations. No makeup exams will be given. These are closed-note exams. NO electronic devices or dictionaries are permitted. No talking or engaging with other students is allowed during exams. All questions should be directed to the instructor. No bathroom breaks will be permitted. Anyone observed cheating or looking at a peer's exam during that exam will be allowed to complete the exercise but will receive zero points for that entire exam.

Student Poster Project:

Each student will conduct a review of a current issue relating humans to marine biology. This project will require a title, and poster presentation. See CANVAS for a description of the project and the grading rubric.

Grading Criteria:

Your final letter grade will be determined by the following course components (late assignments are not accepted; final grades are based on points accumulated and the following criteria: if the weighted class average is 75% or higher, a straight percentage will be used in determining the **final letter grades** (90-100% = A, 80-89% = B, 70-79% = C, 60-69% = D, < 60% = F). If the weighted class average is less than 75%, the following scale will be used to determine the **final letter grades**: A: > 1 standard deviation above the average; B: > the average, < 1 standard deviation above the average; C: < 1 standard deviation below the average, > 1 standard deviation below the average.

PERCENTAGE BREAKDOWN

Weekly homework (discussions & quizzes) 15% (drop lowest) In-class Exams (3) 50% (drop lowest)

Take Home Final 25% Project Title & Poster 10%

Canvas

In this tech-enhanced class, announcements, assignments and other important information will only be available through CANVAS. To get support with accessing the course, go to:

https://www.ccsf.edu/academics/online-learning/online-course-support-center

Course Outline

The lecture outline below is tentative and may change. Do not rely solely on this outline when studying for exams. Modifications to this outline will be noted in class.

| Date | Topics | Chapters | Instructor |
|------------------|--------------------------------------|-----------|------------------|
| Jan 15 | Introduction, Science, Water | 1, 2 | Lauritzen |
| Jan 22 | Physics, General Biology | 3, 4 | Lauritzen |
| Jan 29 | Lunar New Year-No Class | | |
| Feb 05 | General Biology & Ecology | 4, 10 | Traut |
| Feb 12 | Microorganisms & Primary Producers | 5, 6 | Traut |
| Feb 19 | Exam 1 (5:10-6:40pm) | 1 - 6, 10 | Lauritzen |
| Feb 26 | Invertebrates | 7 | Traut |
| Mar 05 | Fishes | 8 | Lauritzen |
| Mar 12 | Tetrapods (Poster Project Title due) | 9 | Lauritzen |
| Mar 19 | Exam 2 (5:10-6:40pm) | 7 - 9 | Traut |
| Mar 26 | Intertidal, Estuaries | 11, 12 | Traut |
| Apr 02 | Holiday-Spring Break | | |
| Apr 09 | Continental Shelves | 13 | Traut |
| Apr 16 | Coral Reefs | 14 | Traut |
| Apr 23 | Surfaces | 15 | Lauritzen |
| Apr 30 | Deep | 16 | Lauritzen |
| May 07 | Poster Project Presentation | | Lauritzen, Traut |
| May 14 | Exam 3 (5:10-6:40pm) | 11 - 16 | Lauritzen |
| May 20 (Tuesday) | ONLINE Final (5-7pm) | 1 - 16 | |

Student Conduct

You are expected to know and observe all rules of student conduct (refer to the CCSF catalog). Students found cheating will be penalized and may be given a failing grade. Plagiarism will not be tolerated and student work that is plagiarized will not be accepted. In class, we will discuss plagiarism and your responsibility in preparing reports that avoid this unethical behavior. The use of any telephone or electronic devices is not allowed. It is the responsibility of each student to come to class ready to learn and participate. Please let us know promptly if there are constraints to your participation in this course (attendance, trouble with assignments, personal matters) during the semester. Students at City College of San Francisco have the right to an environment in which there is freedom to learn. The College believes that each student has an earnest purpose and that he/she will adhere to acceptable standards of personal conduct. We believe students deserve a safe, civil and respectful environment that will enable them to reach their full potential. To this end, we expect students to assist us in this mission. Promptly report any concerns or observations you have to your instructor or appropriate authorities. We value your assistance and take your concerns seriously. We will treat such matters as confidential to the fullest possible extent. As a college student, it is your responsibility to maintain the highest standards of academic integrity. Representing work generated by artificial intelligence as one's own work is considered to be academically dishonest. This includes (a) ensuring that all work submitted for grades is your own original work, and (b) properly citing any sources that you use.

Academic Environment

Students at City College of San Francisco have the right to a safe, civil, and respectful environment in which there is freedom to learn. Please assist the faculty, staff and your fellow students in maintaining this environment.

Land Acknowledgement

Indigenous communities have lived in and moved through this San Francisco land over hundreds of generations and Indigenous peoples from many nations make their home in this region today. Please join us in recognizing and honoring the ancestors, descendants, elders, and all other members of the Ramaytush, Muwekma and Ohlone peoples.