

## **BIOLOGY 319 MARINE ECOLOGY**

Spring Term 2021

### **Instructors**

Dr. Rana El-Sabaawi (Lectures) ([rana@uvic.ca](mailto:rana@uvic.ca))

Dr. Hugh Macintosh (Labs) ([fmactino@uvic.ca](mailto:fmactino@uvic.ca))

Mr. Garth Covernton (Labs) ([gcov@uvic.ca](mailto:gcov@uvic.ca))

### **Learning objectives:**

1. To develop an understanding of the science of ecology as it applies to marine ecosystems.
2. To develop an understanding of community ecology in a diverse array of marine ecosystems ranging from the tropics to the polar regions
3. To explore major patterns of biodiversity (causes and effects) in the ocean.
4. To develop applied skills for studying marine ecology (intertidal field sampling, image analysis, statistical skills, etc.)

**Text:** *There is no textbook for this class. Lab outlines will be available on Brightspace a few days before the lab.*

Lecture schedule: M, T, F 12:30 PST – 1:20 PST

### **Course delivery**

All course and lab materials will be posted on Brightspace.

Lectures will be delivered synchronously via Zoom. Recordings of the lecture will be uploaded to Brightspace.

### **Course Evaluation:**

Friday Quizzes 25% (Starting Friday Jan 22<sup>nd</sup>, best 9 out of 10 quizzes)

Lab 40%

Final exam 35%

### **A note on academic integrity and cheating:**

The quizzes and final exam will all be open book. However, working with each other or collaborating during the exam is considered cheating, and is absolutely forbidden. The quizzes and exams will be randomized across the class, and will vary slightly among students. Currently UVic is evaluating the use of proctoring software, which might be used for the midterm and final pending the evaluation. More information on this will become available as the term progresses.

## **Communications and questions:**

I am happy to set up appointments for individual zoom meetings as needed. Please email me to set up an appointment ([rana@uvic.ca](mailto:rana@uvic.ca))

## **Academic regulation:**

1. **VERY IMPORTANT:** UVic's policy on academic integrity (<https://tinyurl.com/ycjeyumu>)
2. Know your responsibilities as outlined in the calendar (<https://tinyurl.com/y3o8q586>)
3. The Center for Accessible Learning is here to help (<https://www.uvic.ca/services/cal/>)
4. If you miss the midterm due to a medical reason (with valid documentation) then your final exam grade will be used in place of your midterm mark in the final grade assignment.
5. Grades are assigned on a percentage scale in accordance with UVic policy as outlined in the calendar (<https://tinyurl.com/y7qydfyy>)
6. Please read UVic's policy on copyright (<https://www.uvic.ca/library/featured/copyright/>)
7. Important UVic dates including dates for adding and dropping course, holidays, etc. (<https://www.uvic.ca/calendar/dates/>)
8. Please read UVic's policy on plagiarism (<https://www.uvic.ca/library/research/citation/plagiarism/index.php>)

## **Topic outline:**

In this course we will survey the following marine ecosystems, and discuss the physical and biological features. Our focus will be on community interactions, food webs, and human impacts:

- Shore ecosystems (rocky and sandy beaches)
- Kelp forests
- Eelgrass Meadows
- Mangrove forests
- Coral reefs
- The Deep-sea and its communities (abyssal planes, hydrothermal vents, whale falls, seamounts, etc.)
- Polar ecosystems