

BIOLOGY 319 MARINE ECOLOGY

Spring Term 2020

Instructors	Room	Office Hours
Dr. Rana El-Sabaawi Mr. Garth Covernton	Cunningham 066	By appointment

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 poles.
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 coursespaces a few days before the lab (Usually on Friday). It is your responsibility to download and read the lab outlines before your lab sessions.*

<u>Course Grading:</u>	Midterm	20% (FEB 25TH IN CLASS)
	Final Exam	40%
	Laboratory	40%

All assignments must be completed to receive credit for this course.

Lectures: T, W, F at 12:30 PM in CUN146

Laboratories: Mondays and Tuesdays 2:30-5:30 in Petch 109 or in the computer lab. Attendance is required.

Midterm and Exam: The Midterm is scheduled for **TUESDAY FEB 25TH** (in class). Final exam date and time (TBA).

Academic regulation:

1. **VERY IMPORTANT:** UVic's policy on academic integrity (<https://web.uvic.ca/calendar2019-09/undergrad/info/regulations/academic-integrity.html>)
2. Know your responsibilities as outlined in the calendar (<https://www.uvic.ca/registrar/students/policies/student-responsibilities/index.php>)
3. **Important information:**
 1. The Center for Accessible Learning is here to help (<https://www.uvic.ca/services/cal/>)
 2. 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.
 4. Grades are assigned on a percentage scale in accordance with UVic policy as outlined in the calendar (<https://web.uvic.ca/calendar2018-01/undergrad/info/regulations/grading.html>)
 5. Please read UVic's policy on copyright (<https://www.uvic.ca/library/featured/copyright/>)
 6. Important UVic dates including dates for adding and dropping course, holidays, etc. (<https://web.uvic.ca/calendar2019-05/general/dates.html>)

7. Please read UVic's policy on plagiarism
(<https://www.uvic.ca/library/research/citation/plagiarism/index.php>)

Lecture outline:

WEEK	Month	Date	Topic
1	JAN	6	introduction, scientific method, intertidal
2	JAN	13	Rocky intertidal
3	JAN	20	Rocky intertidal
4	JAN	27	Sandy shores
5	FEB	3	Seagrass meadows
6	FEB	10	Salt marshes
	FEB	17	READING BREAK
7	FEB	24	Mangrove forests (MID TERM 25TH FEB)
8	MAR	2	Kelp forests
9	MAR	9	Deep sea
10	MAR	16	Deep sea
11	MAR	23	Polar ecosystems
12	MAR	30	Biodiversity patterns and reviews

Lab schedule:

WEEK	Date	location		Notes
1	Jan 6 and Jan 7		No lab	
2	Jan 13 and Jan 14	Computer lab (CLE A108)	Statistical analysis	
3	Jan 20 and Jan 21	TBA	Trawling lab	Pat Bay field trip on Jan 21 st , assignment 1 due in lab
4	Jan 27 and 28	Petch 109	Sediments 1	Field notes due in lab, preliminary trawling figures due in lab
5	Feb 03 and 04	Petch 109	Sediments 2	
6	Feb 10 and 11	TBA	Data analysis	Trawling lab report due
	Feb 17 and 18	NO LAB (READING BREAK)		
7	Feb 24 and 25	TBA	Meiofauna 1	
8	Mar 2 and 3	TBA	Meiofauna 2	Macrofauna report due
9	Mar 9 and 10	TBA	Data analysis	
10	Mar 16 and 17	TBA	TBA	
11	Mar 23 and 24	TBA	Deep sea diversity	Meiofauna report due, deep sea data report due end of lab
12	Mar 30 and 31		NO LAB	

Lab mark break down (40%):

Three data reports (Trawling (5%), Mudflat macrofauna report (10%), Meiofauna report (10%))

Field notes report (2%)

Lab 1 assignment (1%)

ONC assignment (2%)

Data quality (10%) (This includes quality of generated data, lab conduct, etc.)

Field trip:

- Pat Bay Mudflats Tuesday Jan 21th at 7:00 PM.
- HOLD WED JAN 22 AND THURSDAY JAN 23 AS BAD WEATHER ALTERNATE DATES

Important: You are responsible for arranging for your own transport to the field site. If you are able to drive and have a car please consider car-pooling with students who do not have access to transport. More information about the field trips will be posted on coursespaces over the next week.