BIOLOGY 319 MARINE ECOLOGY Spring Term 2018

Instructors	**Room**	**Office Hours**
Dr. Rana El-Sabaawi	Cunningham 066	1 hour after class
Ms. Lia Chalifour		

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 of deep-sea ecosystems)

Text: ***There is no textbook for this class. Unlike previous years, there is also no lab manual. Lab outlines will be available on coursespaces a few days before the lab. It is your responsibility to download and read the lab outlines before your lab sessions.***

Prerequisites:	Biol 215, 321, 330 or equivalents.	
Course Grading:	Midterm	20% (**FEB 7TH 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. Attendance is required.
Midterm and Exam: The Midterm is scheduled for **WED Feb 7th** (in class). Final exam date and time (TBA).

Academic regulation:

1. **VERY IMPORTANT**: UVic's policy on academic integrity (https://web.uvic.ca/calendar2018-01/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)

Important information:

1. If you have any special needs please speak to me or contact staff at The Center for Accessible Learning (https://www.uvic.ca/services/cal/) so that appropriate accommodations can be made to ensure that you succeed in the course.
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. Read UVic's policty on copyright (https://www.uvic.ca/library/featured/copyright/)

Lecture outline:

Week	Topic	Notes
01-Jan	Introduction - Scientific method, intertidal	
08-Jan	Shore ecosystems: the rocky intertidal	
15-Jan	Shore ecosystems: the rocky intertidal	
22-Jan	Shore ecosystems: the sandy shores	
29-Jan	Coastal ecosystems: kelp ecosystems	
5-Feb	Coastal ecosystems: seagrass meadows	**Midterm on Wed Feb 7th**
12-Feb	**READING BREAK (NO LECTURES)**	
19-Feb	Mangroves	
26-Feb	Coral reefs	
5-Mar	Deep sea ecosystems	
12-Mar	Hydrothermal vents and whale falls	
19-Mar	Polar ecosystems	
26-Mar	Marine biodiversity perspectives	**Good Friday 30 March no lecture**
02-Apr	Wrap up and final review	**Easter Monday on 02 April**

Lab schedule and mark breakdown:

Week	Topic	What is due
08 and 09-Jan	Statistical analysis and dealing with data	
15 and 16 -Jan	The effect of trawling on marine ecosystems	Assignment 1(1%)
22 and 23 Jan	Drawing scientific figures and field trip prep	Preliminary drafts of the figures used in Trawling report
29 and 30 Jan	**FIELD TRIP WEEK and meiofauna collection**	Trawling report (5%)
5 and 6 Feb	Sample analysis 1	Field notes (2%)
12 and 13 Feb	Reading break (No labs)	Reading break (No Labs)
19 and 20 Feb	Sample analysis 2	
26 and 27 Feb	Help lab 1	
05 and 04 Mar	Meiofauna lab 1	**Mudlfat macrofauna report (10%)**
12 and 13 Mar	Meiofauna lab 2	
14 and 15 Mar	Help lab 2	
26 and 27 Mar	ONC lab	**Meiofauna report (10%)** ONC report due in class (2%)
April 02	No labs	

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, field conduct)

Schedule for field trips (Please refer to lab materials posted on coursespaces for more details about the field trips):

We will visit two ecosystems that can qualify as either sandy beaches or mudflats:

- Breakwater/Holland Point Monday January 29th at 7:00 PM
- Pat Bay Mudflats Tuesday Jan 30th at 8:00 PM.
- HOLD WED JAN 31 AND THURSDAY 01 FEB 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 posted on coursespaces over the next week.