

Instructors	Room	Office Hours
Dr. Hugh MacIntosh Mr. Garth Covernton	Petch 108	Wednesdays, 1:30-3:30

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.*

<u>Prerequisites:</u>	Biol 215, 321, 330 or equivalents.	
<u>Course Grading:</u>	Midterm	20% (FEB 13TH 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 13th** (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 policy on copyright (<https://www.uvic.ca/library/featured/copyright/>)

Lecture outline:

Week	Topic	Notes
07-Jan	Introduction - Scientific method, intertidal	
14-Jan	Shore ecosystems: the rocky intertidal	
21-Jan	Shore ecosystems: the rocky intertidal	
28-Jan	Shore ecosystems: the sandy shores	
4-Feb	Coastal ecosystems: kelp ecosystems	
11-Feb	Coastal ecosystems: seagrass meadows	Midterm on Wed Feb 13th
18-Feb	READING BREAK (NO LECTURES)	
25-Feb	Mangroves	
4-Mar	Coral reefs	
11-Mar	Deep sea ecosystems	
18-Mar	Hydrothermal vents and whale falls	
25-Mar	Polar ecosystems	
1-Apr	Marine biodiversity perspectives	

Lab schedule and mark breakdown:

Week	Topic	What is due
14 and 15 Jan	Statistical analysis and dealing with data Computer lab HSD A170 (Mon) / CLE A105 (Tue)	
21 and 22 Jan	The effect of trawling on marine ecosystems	Assignment 1(1%)
28 and 29 Jan	Drawing scientific figures and field trip prep FIELD TRIP WEEK and meiofauna collection	Preliminary drafts of the figures used in Trawling report
4 and 5 Feb	Sample analysis 1 Computer lab HSD A170 (Mon + Tue)	Trawling report (5%)
11 and 12 Feb	Sample analysis 2	Field notes (2%)
18 and 19 Feb	READING BREAK (No labs)	
25 and 26 Feb	Help lab 1	
4 and 5 Mar	Meiofauna lab 1	Mudflat macrofauna report (10%)
11 and 12 Mar	Meiofauna lab 2	
18 and 19 Mar	Help lab 2	
25 and 26 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 be visiting a local sandy/mudflat ecosystem:

- **Pat Bay Mudflats Friday February 1st at 7:00 PM.**
- HOLD SATURDAY FEB 2 AND SUNDAY FEB 3 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.