COURSE SYLLABUS



COURSE TITLE: BIOL-105: Introduction to Marine Biology

CLASS SECTION: 001

TERM: W23

COURSE CREDITS: 4

DELIVERY METHOD(S): Lecture & Laboratory/Field

Camosun College campuses are located on the traditional territories of the Lakwaŋan and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's Territorial Acknowledgement.

For COVID-19 information please visit https://legacy.camosun.ca/covid19/index.html

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Annette Dehalt MSc

EMAIL: dehalt@camosun.ca (please use this Camosun email, NOT D2L)

WEBSITE: https://annettedehalt.opened.ca/

OFFICE: F350D OFFICE HOURS: M/Th 11:30am - 12:20pm (drop-in)

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR DESCRIPTION

Introduction to the basic principles of ocean science, with emphasis on marine biodiversity and integration of marine species into coastal and offshore ecological processes. Human impact on marine life will be explored, exemplified by local and global case studies, shore and boat-based field trips required. Additional field costs of approx \$50 for charter boat time should be budgeted.

(N.B. No boat trip scheduled due to concerns over noise pollution for Southern Resident Killer Whales)

PREREQUISITE(S):

One of:

• C in English 12

• C in Camosun Alternative

CO-REQUISITE(S): Not Applicable EXCLUSION(S): Not Applicable

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon completion of this course a student will be able to:

- 1. Explain basic biological and ecological concepts, including evolution, food web structure and population dynamics, as well as the nature of the scientific process.
- 2. Assign defining characteristics to the major categories of marine biodiversity, including taxonomic and ecosystem diversity.
- 3. Explore and evaluate the role of abiotic (geological, chemical, physical) factors in determining the distribution and abundance of marine species.
- 4. Describe the ecological niches of major marine life forms.
- 5. Discuss current environmental issues in the marine environment, and examine the multidisciplinary aspects (scientific, social, political, legal and indigenous) of these problems.
- 6. Develop and employ critical thinking and problem-solving skills regarding scientific inquiries, field situations, and environmental problems.
- 7. Demonstrate practical skills regarding marine sampling methods and materials, tide and current calculations, basic concepts of coastal navigation and marine safety.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

Required: "print-your-own" Course pack: Lecture notes and laboratory guides can be downloaded from the course website: https://annettedehalt.opened.ca/ (pw provided in class) and printed in your preferred format, e.g. 3 or 6 PPT slides/page, double-sided, with room for note taking

Required: A tide-dependent field-trip will need to be scheduled outside of regular class time in the evening (options provided in class)

Recommended: Text **Introduction to Marine Biology**, 4e. Karleskint, Turner, Small, 2020 (e-text available, please see link on course website)

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

WK	DATE RANGE	LAB/FIELD Trip (FT) ACTIVITY (M)	LECTURE TOPIC (T/Th)
1	Jan 9-13	Course Introduction	Ways of Knowing about Marine Life
		Lab and Field Safety	(Ch. 1 excerpts + readings)
			(com a concerpto meaninger)
_	Jan 16-20	FT (BUS), Traditional Foological Knowledge and	Pasies of Foology (Ch. 2)
	Jan 16-20	FT (BUS): Traditional Ecological Knowledge and	Basics of Ecology (Ch. 2)
		Wisdom (TEKW) of the Tsawout First Nation	Marine Habitat (Ch. 3&4 excerpts)
2	Jan 23-27	Microscopos and Tidos	Basics of Biology (Ch. 5 excerpts)
3	Jan 25-27	Microscopes and Tides	basics of Biology (Cit. 5 excerpts)
4	Jan 30-Feb 3	FT (BUS): Marine Bird Identification in	Test 1 (Th)
		Esquimalt Lagoon	Uni-cellular Algae
			(Ch. 6 excerpts)
5	Feb 6-10	Algae Lab	Multi-cellular Algae & Sea Grasses (Ch. 7)
		Seminar topic due	Marine Invertebrates (Ch. 8)
		•	,
6	Feb 13-17	LAB EXAM I	Marine Invertebrates cont. (Ch. 8 & 9)
	. 65 15 17		marine invertebrates conti (cin o a s)
7	(Feb 20-24)	READING	BREAK
,	(1 05 20 24)	KENDING	
8	Feb 27-Mar 3	FT (BUS): Fisheries Management at the	Marine Invertebrates cont. (Ch. 9)
	. 65 27 11161 5	Institute of Ocean Sciences (IOS)	Test 2 (Th)
		institute of ocean sciences (103)	163t 2 (111)
9 Mar 6-10 Marine Animal Lab 1 Marine Fishes (Ch. 10)		Marine Fishes (Ch. 10)	
		Seminar outline due	
10	Mar 13-17	FT (own transport):	Marine Reptiles and Birds (Ch.11)
		Intertidal Exploration at Cattle Point deferred to:	
		evening low tide Th 5:30-7pm <u>OR</u> F 6:30-8pm PDT	Marine Mammals (Ch.12)
		(free lab period for seminar preparation)	
11	Mar 20-24	Marine Animal Lab 2	Marine Ecosystems (Ch. 13-18 excerpts)
			Test 3 (Th)
12	Mar 27-31	Medicine Wheel Seminar	Human Impact (Ch. 20 & excerpts Ch. 19)
		(room TBA)	, , ,
13	Apr 3-7	LAB EXAM II	Human Impact cont. (Ch. 20)
	•		\ \frac{1}{2}
	Apr 10-14	NO LAB	Saving the Oceans
14	AU 10-14		
14	Арг 10-14	(Apr 10 = Easter Monday)	(guided research & discussion)
13	Apr 3-7	LAB EXAM II	, , ,

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
3 tests	30%
2 lab exams	30%
assignments	10%
seminar	5%
final exam	25%
TOTAL	100%

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is required. Deadlines scan be reviewed on the <u>CAL exams page</u>. http://camosun.ca/services/accessible-learning/exams.html

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the <u>Grade Review and Appeals</u> policy for more information.

 $\frac{http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf$

COURSE GUIDELINES & EXPECTATIONS

Academic Conduct: Cheating or plagiarism will not be tolerated in any form, and will result in "0".

<u>Attendance</u>: You are expected to attend all classes, labs and field-trips, and be on time. It is *your* responsibility to acquire all information given during missed class time, incl. notes, hand-outs, assignments, laboratory or field data, changed exam dates etc.

<u>Study Habits</u>: You will probably find this course not very difficult, but surprisingly labor-intensive. Good (and regular!) study habits are required to do well in this course. One hour/day is a good starting point. Joining a study group can help make this time more fun. Some "study hints" (beyond reading, highlighting and making flash cards) for efficient use of study time are posted on the course web site.

Lecture notes and lab exercises will be posted on the web for you to print prior to class. The point form lecture notes should be used as a guideline, not as your sole source of information! You will need to write down additional notes of examples and explanations given during lecture. It is also recommended practice to transcribe these notes into a study-friendly format after each lecture, incorporating additional information from your textbook and other sources. Study these notes before the next lecture or associated lab in order to be well-prepared and make the most out of class time.

Assignments: Lab assignments can only be handed in for labs or field trips actually attended (exceptions may be made for excused absences). You are encouraged to discuss assignments with your lab partners, however, each assignment has to be your individual work – beware of plagiarism. Unless otherwise stated, all assignments are due at the beginning of the next lab. A 10%/day late penalty applies. Late assignments will not be accepted after marked assignments have been returned to the rest of the class – usually one week after the due date. A professional format is expected, i.e. a neat, legible, clean copy, word-processed or in dark pen. If the assignment is more than one page (double-sided), separate sheets of paper must be stapled. "Rough" drafts risk rejection and a subsequent late penalty or reduced marks.

Exams: Exams have to be written when scheduled. There are no make-up exams during the term. If you have to miss an exam due to illness or family emergency, the weighting of the missed exam will be added to the final exam, along with additional questions on course material of that unit. Lecture tests and lab exams are unit exams; the final exam is comprehensive. Please bring a pen to all tests. No programmable devices are allowed in exams. Exam questions will be based on material covered or assigned in class. However, studying additional details in the corresponding textbook sections will help you understand the material more thoroughly. It is not sufficient simply to memorize point-form notes! Please keep up with your readings, and take advantage of office hours if you need extra clarification and help, or simply would like to discuss a topic a little further.

SCHOOL OR DEPARTMENTAL INFORMATION

General Department Safety Policies will be provided in lab. Each student is required to sign and hand in a waiver prior to field trip participation.

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit http://camosun.ca/students/.

Academic Advising	http://camosun.ca/advising
Accessible Learning	http://camosun.ca/accessible-learning
Counselling	http://camosun.ca/counselling
Career Services	http://camosun.ca/coop
Financial Aid and Awards	http://camosun.ca/financialaid
Help Centres (Math/English/Science)	http://camosun.ca/help-centres

Indigenous Student Support	http://camosun.ca/indigenous
International Student Support	http://camosun.ca/international/
Learning Skills	http://camosun.ca/learningskills
Library	http://camosun.ca/services/library/
Office of Student Support	http://camosun.ca/oss
Ombudsperson	http://camosun.ca/ombuds
Registration	http://camosun.ca/registration
Technology Support	http://camosun.ca/its
Writing Centre	http://camosun.ca/writing-centre

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the Centre for Accessible Learning (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started: http://camosun.ca/services/accessible-learning/

Academic Integrity

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit http://camosun.ca/learn/fees/#deadlines.

Grading Policy

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf for further details about grading.

Grade Review and Appeals

Please visit http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures"

(http://camosun.ca/learn/calendar/current/procedures.html) and the Grading Policy at http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf to understand the College's expectations of academic integrity and student behavioural conduct.

Changes to this syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.