COURSE SYLLABUS

COURSE TITLE: BIOL-105: Introduction to Marine Biology CLASS SECTION: 001AB TERM: W24 COURSE CREDITS: 3 DELIVERY METHOD(S): Lecture & Laboratory/Field Trips



Camosun College campuses are located on the traditional territories of the Lək^wəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here. Learn more about Camosun's

Territorial Acknowledgement.

INSTRUCTOR DETAILS

NAME: Dr. Scott Parks

EMAIL: parkss@camosun.ca

OFFICE: Lansdowne Campus F250A

HOURS: Thursdays: 10:50am-12:50pm or by appointment

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.

<u>Note</u>: due to noise pollution for endangered Southern Resident killer whales, boat tours are no longer offered as part of this course.

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 D2L page and printed in your preferred format, e.g. 3 or 6 PPT slides/page, double-sided, with room for note taking

Highly Recommended/Required: Text Introduction to Marine Biology, 4e. Karleskint, Turner, Small, 2020 (e-text available, please see link on D2L)

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor. (*NOTE: D2L online quizzes will open on the Thursday of each week at 1pm and be available for completion until the following Wednesday at 1pm*)

| WEEK or DATE RANGE | LECTURE TOPICS | LAB & FIELD TRIP (FT) ACTIVITIES |
|---|--|--|
| 1 (Jan 8-12) | Course Introduction: Marine Life & Habitat (Ch. 1, 3 &4 excerpts) | NO LABS FIRST WEEK |
| 2 (Jan 15-19) | Marine Habitat continued (Ch. 3&4) Basics of Ecology (Ch. 2) <i>Online Quiz 1</i> | Lab Introduction & Field Safety, Microscopes and Tides Lab Student Seminar Introduction |
| 3 (Jan 22-26) | Basics of Ecology continued (Ch. 2) Basics of Biology (Ch. 5 excerpts) <i>Online Quiz 2</i> | FT (BUS): Institute of Ocean Sciences (IOS) -Vessel Visit (Tully) |
| 4 (Jan 29 – Feb 2) | Basics of Biology cot'd. (Ch. 5 excerpts) Primary Producers- Unicellular Algae (Ch. 6 excerpts) <i>Online Quiz 3</i> | FT (BUS): Traditional Ecological Knowledge and Wisdom (TEKW) of the Tsawout First Nation |
| 5 (Feb 5-9) | Primary Producers cot'd- Unicellular and Multi-cellular Algae (Ch. 6&7) <i>Online Quiz 4</i> | Algae Lab |
| 6 (Feb 12-16) | Marine Invertebrates I (Ch. 8) | Lab Exam 1 |
| 7 (Feb 19-23) | College Closed (Family day/Reading Week) | NO LABS |
| 8 (Feb 26 – Mar 1) | Review Class & <i>Midterm Exam</i> | FT (BUS): Centre for the Salish Sea <i>Seminar outline due</i> |
| 9 (Mar 4-8) | Marine Invertebrates II (Ch. 9) Online Quiz 5 | Marine Animal Lab 1 (Inverts) |
| 10 (Mar 11-15) | Marine Fishes (Ch. 10) (Preparation class for seminars) <i>Online Quiz 6</i> | Marine Animal Lab 2 (Verts) |
| 11 (Mar 18-22) | Marine Reptiles and Birds (Ch.11) Online Quiz 7 | Student Seminars |
| 12 (Mar 25-29) College Closed Mar 29 | Marine Mammals (Ch.12) Online Quiz 8 | FT (BUS): Marine Bird Identification in Esquimalt Lagoon |
| 13 (Apr 1-5) College Closed Apr 1 | Marine Ecosystems (Ch. 13-18 excerpts) <i>Online Quiz 9</i> | Marine Animal Species ID – D2L (online) Review Lab & Self- Guided Intertidal Assignment |
| 14 (Apr 8-13) | Oceans in Jeopardy cont. (Ch. 19&20) | Lab Exam 2 |
| Final Exam Period (Apr 15-23) | Date & Location TBA | |

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 can be reviewed on the <u>CAL exams page</u>. <u>http://camosun.ca/services/accessible-learning/exams.html</u>

| DESCRIPTION | WEIGHTING |
|--|-----------|
| Oral Presentations (Group Seminars in Lab) | 5% |
| Lab/Field Trip Completions & Assignments | 10% |
| D2L Quizzes (x9) | 15% |
| Lab Exam 1 | 15% |
| Midterm Exam | 15% |
| Lab Exam 2 | 15% |
| Final Exam | 25% |
| TOTAL | 100% |

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. <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</u>

COURSE GUIDELINES & EXPECTATIONS

Notice of D2L Online Quiz Expectations

Online quizzes for the weekly material will require completion on D2L as detailed in the course outline schedule of assessments above. These brief D2L quizzes will assist in ensuring that you are staying up to date with the content being covered and collectively they will comprise 15% of your final grade. You may attempt these quizzes twice during the period that they remain open (approx. 1 week, see outline above); your final mark will be an average of those two attempts. If you are satisfied with the mark you receive on the first attempt and do not make a second attempt, the first attempt will be your final mark for the quiz.

There will be a 2-hour time limit assigned to complete these online quizzes, within the period that they are open. These quizzes are designed to be completed within 30 minutes, so you will have plenty of time to complete them. Once the time-period has been completed, you will be informed which questions are incorrect, however, the correct answer will not be revealed – which will redirect you to look back through your resources to gain a better understanding of the concept. Reminders for the deadline to complete these quizzes will also be posted on D2L. *It is your responsibility to ensure that these D2L quizzes are completed on time considering they remain open for multiple days as extensions will not be granted.*

Once the deadline has closed, students will no longer have the opportunity to gain marks for completing these questions. A copy version will be posted after the deadline closes to allow for additional practice and will not impact your original mark.

GUIDELINES FOR LAB ATTENDANCE IN BIOLOGY AT CAMOSUN

In order to pass the course, students are required to meet the minimum lab attendance, participation and completion requirements.

- Laboratory activities involve practical applications of your knowledge and manual skills development. Development of these skills is a requirement to meet the Course Learning Outcomes.
- Meeting Course Learning Outcomes is a requirement for gaining credit in the course, as well as ensuring articulation, pre-requisite and transferability standards are met.
- Laboratory activities are in-person activities; attendance and participation are required. Online alternatives are not available.
- Laboratory attendance will be monitored by a sign-in/sign-out binder in the lab. It is your responsibility to record your attendance using this binder.
- Attendance from the sign-in/sign-out binder will be transferred to your D2L gradebook by your instructor. If you notice any discrepancies, please contact your instructor ASAP.
- If you arrive late to the lab, you may miss the opportunity to sign-in, and/or participate in graded assessments such as pre-lab quizzes.
- Lab manuals for each week will be provided on D2L, it is the student responsibility to print these off *in advance* of the lab for completion during the lab period.

Missed Labs Guidelines:

- Students who will miss a laboratory session have an obligation to seek out concessions directly from their instructor in a timely manner, BEFORE the lab period occurs.
- If notification is provided AFTER the lab has occurred, concessions may not be available.
- If you miss up to three (3) laboratory sessions, you are still eligible to meet the Learning Outcomes for the course.
- Concessions offered for the first three (3) missed laboratory sessions will depend on the reason for laboratory absence and is up to instructor discretion. Concessions may include writing up the laboratory report with provided data, omitting the lab, or other concessions.
- If you miss a total of four (4) or more labs for any reason (including, but not limited to: life circumstances, legitimate illness or family/pet emergency, planned vacations, milestone family events, work commitments, childcare or eldercare commitments, competitive athletic events), you will be unable to meet with learning outcomes for the class and will receive a failing grade (F) in the entire course, regardless of marks received on graded lab and lecture components. Exceptions will only be considered through an academic concession granted by the instructor or Dean/Associate Dean.
- This guideline applies to in-person laboratory activities only; for missed Lab Exams, please see the section in this outline on Exams.
- Please note that if you are suffering from a serious medical illness that prevents you from participating in this course, Camosun College has a Compassionate Medical Withdrawal Policy (https://camosun.ca/services/forms#medical)

IMPORTANT EXAM INFORMATION:

<u>All examinations must be written at the scheduled time</u>, unless there is a documented medical or other emergency that prevents you from doing so. In this case, you must notify the Instructor directly (not someone in Nursing) BEFORE the examination day and submit supporting information to corroborate your emergency. A

note simply stating that you were unable to write an examination due to a non-emergency related situation will not suffice (personal, confidential information is not required). Minor ailments are not considered valid excuses. <u>Contacting your instructor after an assessment has already taken place will result in receiving a zero for</u> <u>that assessment</u>. In addition, please draw your attention specifically to Camosun's examination policy which states that examinations must be written at the scheduled time except in case of an emergency. Examinations will NOT be deferred for vacations or pre-booked flights or other non-emergency situations. Examinations cannot be written before the scheduled dates or times or by switching to other section times as these rooms are all at capacity for exam writing purposes.

<u>PLEASE NOTE</u>: These assessments have been planned and spread out across the course, the term, and the material in order to provide you with the best chance for success in the course, as well as retention of the information. For this reason, please do your best to write all assessments as outlined here on the dates they are scheduled.

Attend classes regularly and pay attention to class discussions. Repeated absences from class and reliance on notes obtained from peers will compromise success in the course. A variety of concepts will not be adequately understood by only viewing the PowerPoint notes packages provided on D2L and thus will require the understanding generated through classroom discussion and explanations in addition to supporting readings and video explanations when required.

According to current college policy, students may not use recording devices in the classroom without prior written permission from the Instructor. When the use of a recording device is sanctioned by the College's Center for Assisted Learning to accommodate a student's learning, the Instructor must be provided with an Instructor notification letter that specifies the use of a recording device and a recording agreement needs to be completed and signed by the student (contact the Instructor for this). Recordings made in the classroom under this accommodation are strictly for the student's personal use only, and distribution of recorded material in any form or on any forum is prohibited. All recorded materials must be permanently deleted/destroyed at the latest on the day following the final exam in the course.

Based largely on the college's privacy guidelines, recordings of lectures will not be provided for asynchronous, individual study.

You are encouraged to consult the course Instructor if you require assistance. While the Instructor is willing and able to assist with understanding course content and directing you to appropriate resources, they cannot do the work for you. The responsibility lies with the student to source out and utilize resources that best suit their study needs. Do not wait until just before or after an examination to do this.

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 <u>http://camosun.ca/students/</u>.

| 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 <u>Centre for Accessible</u> <u>Learning</u> (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 <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf</u> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.pdf</u> 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 <u>http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf</u> 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 <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</u> for further details about grading.

Grade Review and Appeals

Please visit <u>http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</u> 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"

(<u>http://camosun.ca/learn/calendar/current/procedures.html</u>) and the Grading Policy at http://camosun.ca/learn/calendar/current/procedures.html) and the Grading Policy at 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-servicesand-support/e-2.9.pdf and camosun.ca/sexual-violence. To contact the Office of Student Support: <u>oss@camosun.ca</u> 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.