CAPILANO UNIVERSITY

COURSE OUTLINE	
TERM: SUMMER 2025	**COURSE NO: BIOL 120**
INSTRUCTOR:	**COURSE TITLE: Environmental Field Studies**
OFFICE: **LOCAL:** **E-MAIL:** @capilanou.ca	**SECTION NO(S):**	**CREDITS: 3.0**
OFFICE HOURS:	
COURSE WEBSITE:	

Capilano University acknowledges with respect the Lil̓wat7úl (Lil'wat), xʷməθkʷəy̓əm (Musqueam), shíshálh (Sechelt), Sḵwx̱wú7mesh (Squamish), and Səl̓ílwətaʔ/Selilwitulh (Tsleil-Waututh) people on whose territories our campuses are located.

COURSE FORMAT
This two-week field course, will involve five hours of field work, five days per week, and a 1.5 hour seminar daily, 6 days per week.

COURSE PREREQUISITES/CO-REQUISITES
None

CALENDAR DESCRIPTION
Students are introduced to the exceptional biodiversity in their environment, through place-based, experiential learning. Students will visit diverse terrestrial and aquatic ecosystems, to gain familiarity with ecological monitoring and natural history. Field projects and seminars will emphasize major environmental topics, including biogeography of the region, principles of ecology, human impacts and conservation, incorporating Indigenous perspectives and Traditional Ecological Knowledge (TEK). Students will have the opportunity to contribute to scientific knowledge with meaningful discoveries of their own when completing a small group project.

COURSE NOTE
BIOL 120 is an approved Science Course.
BIOL 120 is an approved Laboratory Science course.
BIOL 120 is an approved Science and Technology course for Cap Core requirements.

Students must be able to undertake up to 5 hours of physical field work daily, which will include navigating uneven or rocky terrain, long periods of standing, or light to moderate hiking. This course will continue to run in hot, wet or inclement weather, and students will be responsible for providing their own weather appropriate protection (e.g. sunscreen, clothing, footwear).

REQUIRED TEXTS AND/OR RESOURCES
BC Environmental Field Studies Manual. Capilano University. A custom publication produced for this course and featuring content from:

Clark, M. A., Choi, J. and Douglas, M. OpenStax Biology 2nd Ed. OpenStax. 2018

Optional Texts and/or Resources
Cannings, R. and S. Cannings. British Columbia: A Natural History of Its Origins, Ecology, and Diversity with a New Look at Climate Change, 3rd ed. Vancouver: Greystone, 2015. ISBN-10: 9781771640732

Pojar, J. and A. MacKinnon. Plants of Coastal British Columbia. Edmonton: Lone Pine, 1994.

COURSE STUDENT LEARNING OUTCOMES
On successful completion of this course, students will be able to do the following:
- Identify common plants, fungi and animals in the local environment and their significance for ecosystem function.
- Use biotic and abiotic sampling methods to monitor biodiversity in terrestrial and aquatic ecosystems.
- Identify adaptations of organisms to their environment and explain how these result from evolution by natural selection.
- Explain the history of the physical environment in the region and how this affects current variation between and within the region's ecosystems.
- Describe current and historic human interactions with the local environment, their impacts on local biodiversity and conservation tools that can promote sustainability.
- Represent different perspectives on the acquisition of evidence-based knowledge and on how humans should interact with their environment.

Students who complete this Science and Technology course will be able to do the following:
- Apply numerical and computational strategies to solve problems.
- Assess the impacts of human activity on natural systems and articulate ways in which environmental sustainability may be achieved.
- Demonstrate how a problem, concept, or process can be modelled numerically, graphically, or algorithmically.
- Explain how scientific inquiry is based on investigation of evidence and evolves based on new findings.
- Participate in scientific inquiry and communicate the elements of the process, including making careful and systematic observations, developing and testing a hypothesis, analyzing evidence, and interpreting results.

COURSE CONTENT

Week	Topics	Chapters
1	Biogeography: adaptation to a changing world	1
	Biodiversity of our Plant and Fungi Communities	2
	BioBlitz on a rocky shoreline	3
	Salmon Forests: links between land and sea	4
	Bug World: essential ecological roles of invertebrates	5
	Feathers, Fur, Scales and Skin: Monitoring vertebrates in terrestrial habitats	6
2	Student Group Project (SGP) (groups of 3-4)	SGP
	Indigenous Perspectives on the Environment	7
	Human Impacts and Conservation: protecting our biodiversity	8
	Building the future: sustainable human-environment interactions	9
	Student Group Project (groups of 3-4)	SGP
	Student Group Project (groups of 3-4)	SGP

EVALUATION PROFILE

Final grades will be calculated based on the following components:

Field manual questions*	20%
Field topic quizzes*	30%
Field topic reports and reflections*	20%
Student Group Project**	30%
TOTAL	**100%**

* Specific dates and details regarding evaluation components will be provided by the instructor.

** Student group project reports will be due one week after the completion of the field course. A specific hand-in date will be provided by the instructor.

GRADING PROFILE

Letter grades will be assigned according to the following guidelines:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D = 50-59
A = 85-89	B = 73-76	C = 63-66	F = 0-49
A- = 80-84	B- = 70-72	C- = 60-62	

Students should refer to the University Calendar for the effect of the above grades on grade point average.

Incomplete Grades
Grades of Incomplete "I" are assigned only in exceptional circumstances when a student requests extra time to complete their coursework. Such agreements are made only at the request of the student, who is responsible to determine from the instructor the outstanding requirements of the course.

Late Assignments
Assignments are due at the beginning of the class on the due date listed. If you anticipate handing in an assignment late, please consult with your instructor beforehand.

Missed Exams/Quizzes/Labs etc.
Make-up work for missed assignments is given at the discretion of the instructor. Normally, a score of zero will be given for a missed assessment component (exam, test, quiz, lab, etc). In certain exceptional situations, the student will be permitted to write a make-up test, defer the assessment to a later date or replace the score by other marks (see below). The date and timing of any make-up option is at the discretion of the instructor. It may not be possible to reschedule certain assessments. A score of zero may be avoided when the student meets all of the following conditions:

1. Circumstances are beyond the control of the student which resulted in the exam, test, quiz, lab, etc. to be missed. Such circumstances include serious illness or injury or severe personal crises. They do not include forgetting about the test, lack of preparation for the test, or work-related or social obligations.

2. The student has notified the instructor (or the School of STEM office staff, if the instructor is not available) about the missed assessment. Such notification must occur in advance or, at the latest, on the day of the assessment.

3. Evidence of the circumstances may be requested. Proper medical documentation of illness or injury may be required from a doctor.

4. The student has been fully participating in the course up until the circumstances that prevented the completion of the assessment. Fully participating means regularly attending course components and submitting assignments in the course.

Accommodations can be made to honour community needs and traditional practices.

Attendance
Students are expected to attend all lectures, labs and associated activities. If classes are missed, it is the student's responsibility to become aware of all information given in the lectures and laboratories, including times of examinations and assignment deadlines.

English Usage
Students are expected to proofread all written work for any grammatical, spelling and stylistic errors. Instructors may deduct marks for incorrect grammar and spelling in written assignments.

Electronic Devices
Students may use electronic devices during class for note-taking, calculations and in-class research.

Online Communication
Outside of the classroom, instructors will (if necessary) communicate with students using either their official Capilano University email or eLearn; please check both regularly. Official communication between Capilano University and students is delivered to students' Capilano University email addresses only.

UNIVERSITY OPERATIONAL DETAILS

Tools for Success
Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: https://www.capilanou.ca/student-services/

Capilano University Security: download the CapU Mobile Safety App

Policy Statement (S2009-06)
Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Academic Integrity, Academic Probation and other educational issues. These and other policies are available on the University website.

Academic Integrity (S2017-05)
Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy and procedures S2017-05 Academic Integrity for more information:
https://www.capilanou.ca/about-capu/governance/policies/

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

Academic dishonesty is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

Cheating: Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:
- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;

- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,
- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

Fraud: Creation or use of falsified documents.

Misuse or misrepresentation of sources: Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

Plagiarism: Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

Self-Plagiarism: Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

Prohibited Conduct: The following are examples of other conduct specifically prohibited:
- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

Sexual Violence and Misconduct

All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including B.401 Sexual Violence and

Misconduct Policy and B.401.1 Sexual Violence and Misconduct Procedure (found on Policy page https://www.capilanou.ca/about-capu/governance/policies/)

Emergencies: Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.

DEPARTMENT OR PROGRAM OPERATIONAL DETAILS

Professionalism
Students should be able to demonstrate a professional attitude and behaviour: reliability, respect for and cooperation with colleagues, willingness to work calmly and courteously, respect for equipment and systems, and constructive response to criticism. The use of cellphones for non-academic purposes during lecture sessions is prohibited. Students using cell phones inappropriately could be asked to leave the lecture hall by the instructor.

Expectations of Students
For success in this course, students are expected to attend all lectures; come prepared to address topics presented; and complete assigned text book readings. For every one hour of lecture material presented, students should expect to spend at least two hours reviewing material and engaging with the study tools provided.

Generative AI Tools
The use of generative artificial intelligence tools is strictly prohibited in all course assignments unless explicitly stated otherwise by the instructor in this course. This includes ChatGPT and other artificial intelligence tools and programs.