



COURSE OUTLINE

1. **Course:** ECOL 417, Aquatic Communities and Ecosystems - Fall 2020

Lecture 01: MWF 11:00 - 11:50 - Online

Instructor	Email	Phone	Office	Hours
Dr Ariane Cantin	acantin@ucalgary.ca	TBA	TBA	On Zoom Wednesday 12:00-1:00PM or by appointment

Online Delivery Details:

Some aspects of this course are being offered in real-time via scheduled meeting times. For those aspects you are required to be online at the same time.

Students are required to attend **SYNCHRONOUS** (online on zoom in real-time) portion of the course weekly:

- Lecture - Wednesday 11-11:50AM

- Lab - Scheduled lab section time

The synchronous sessions' material (readings, ppt slides, etc) will be shared on D2L. Synchronous sessions will mostly be group discussions and they will not be recorded.

Students are required to do **ASYNCHRONOUS** (online on their own time) portions of the course for both the lecture and the lab component each week. These will be videos and readings available on D2L.

I will be working hard to **answer your emails within 24 hours** (except on weekends and holidays)

Zoom link for office hours and synchronous portions of the course will be shared on D2L

General questions on Lecture/Lab materials should be asked on the D2L Discussion Board

ITP Metrics will be used to form teams and do peer assessments during the term

For any synchronous assessment, time will be adjusted for SAS students if needed and accommodations for students will be done on a case-by-case basis.

Course Site:

D2L: ECOL 417 L01-(Fall 2020)-Aquatic Communities and Ecosystem

Note: Students must use their U of C account for all course correspondence.

Course Outcomes:

- Explain the key abiotic drivers of biological patterns and processes in aquatic systems
- Explain the key biotic interactions that affect patterns and processes in aquatic systems
- Use graphical representations (i.e., figures) to explain key patterns and processes in aquatic systems
- Generate and evaluate alternative hypotheses regarding patterns and processes in aquatic systems
- Design a sampling protocol for physical, chemical and biological variables in a pond or lake
- Develop a unique study, including hypotheses and predictions
- Discuss how aquatic ecology is a synthetic discipline encompassing physical, chemical and biological characteristics
- Evaluate a study in comparison/contrast to aquatic ecology primary literature
- Communicate effectively both in writing and orally

2. **Requisites:**

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

Prerequisite(s):

Biology 313; and Biology 315 or Environmental Science 401.

3. Grading:

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar. In this course, overall grades will be determined following the information outlined below.

You will earn grades based on the requirements you choose to complete. To earn a given letter grade, you must complete **all** the requirements listed for that letter grade. Tentative due dates provided in the schedule on last page.

Assessment	D	C	B	A
Lecture: Module Quizzes (3)*	min average 55%	min average 65%	min average 75%	min average 85%
Lecture (6) & Lab (8) Team Assignments**	✓	✓	✓	✓
Lab Summaries (8)	5/8	6/8	7/8	7/8
Learning Surveys (2 - Pre/Post Course)	✓	✓	✓	✓
Final Lab Project (proposal, draft, reflection, peer evaluation)	X	X	min average 70%	min average 80%
Global Water Issues & Science Communication Assignments (3)	X	X	1/3	2/3
Team Contract and Peer Feedback Surveys (2)	✓	✓	✓	✓
Peer Score	min 0.6	min 0.7	min 0.8	min 0.9

*Quizzes done on D2L Wednesdays 11:00-11:50AM - October 7th, November 4th, and December 9th. Quizzes are designed to take 30 minutes to complete but you will be given 50 minutes to account for any issues.

**Team assignments done during class/lab time are designed to take less than the session time (50 min for lectures, 170 minutes for labs) but will be handed on D2L before 10PM on the day of the activity to account for any issues.

Assignment of Letter Grades Details (+/- designations, F grade, and free passes):

- **Students who exceed ALL assignment expectations for a given grade will earn the "+" letter designation.** For example, a student aiming to complete the B letter grade requirements completes 8/8 Lab Summaries to an acceptable standard (rather than 7/8) and 2/3 Global Water Issues Assignments (rather than 1/3) and meets all the other requirements for the letter B (average quizz grade >75% and final project >70%), will earn a B+.
- **To earn an A+ students must exceed ALL assignment expectations for the A grade description** (8/8 Lab Summaries and 3/3 Global Water Assignments) and meet all the other requirements for the letter A.
- **Students who do not successfully complete one (and only one) of the assignment specifications (Lab Summaries and the Global Water Issues Assignments) required for a letter grade will earn the "-" letter designation.** This excludes the final project, all components of which must be completed for the A and B letter grades, or the % scores for the quizzes and final project grades.
- **A grade of F will result if students do not successfully meet all of the requirements for a D grade .**
- **Students will be given a total of four ‘free passes’ that can be used to re-submit any written assignment (Lab Summaries or Global Water Issues Assignments) to get the work to an “acceptable” standard.** The free pass and re-submitted assignment must be submitted within one week (7 days) of the graded assignment being returned or mark being posted. There is only one re-submission per free pass, only one free pass can be used per assignment, and the free pass must be completed and attached to the re-submitted assignment. Re-submitted material must be accompanied by the original graded assignment and a brief statement (approximately one paragraph) describing how the student has revised their assignment in response to that feedback. **Free passes can also be used to hand-in an assignment up to 1 week AFTER the due date, without penalty (excluding the final project, and all components of the final project).** Free passes are not transferable.

4. Missed Components Of Term Work:

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

Students will be assigned a team at the beginning of the semester. Each team will write and sign a contract detailing how they plan to communicate and organize themselves. If a student is unable to attend a synchronous component they should contact their team, TA, and instructor right away (if possible, before the synchronous session) to discuss how they can make up for the missed component. **A student can only miss a maximum of two synchronous team activities** (two is a total for lecture and lab combined) as the group work builds each week and their absence directly impacts the progression of other members of the team. **Should a student miss more than two activities:**

a. they need to reach out immediately to the instructor. The student will then be removed from the group and be required to complete assignments on their own should they wish to progress in the course.

b. the student will receive a maximum grade of B in the course.

5. Scheduled Out-of-Class Activities:

There are no scheduled out of class activities for this course.

6. Course Materials:

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Stable internet connection.

For more information please refer to the UofC [ELearning](#) online website.

7. Examination Policy:

Quizzes are done on D2L and are individual and open book. All quizzes are designed to take 30 minutes but students will be given the full 50 minutes of the lecture session to complete to account for any technical issues. Students are allowed access to their lecture notes during the quizzes, but are not allowed to consult shared documents (Google docs etc) or chat servers (Discord, WhatsApp etc), they are specifically prohibited from working or contacting any other individuals while they complete their quizzes. Violation of these rules is considered academic misconduct with penalties as described in the University Calendar section K.

Quizzes done on D2L on the following Wednesdays 11:00-11:50AM : October 7th, November 4th, and December 9th.

Team assignments done during synchronous class/lab time are designed to take less than the session time (50 min for lectures, 170 minutes for labs) but will be handed on D2L before 10PM on the day of the activity to account for any issues.

It is the student's responsibility to ensure they have appropriate computer and internet access to do their online quizzes and team activities (lecture and lab related). Students should be present online at the scheduled time to start quizzes and synchronous activities. If a student encounters any technical difficulties starting or during a quiz or assignment, they **MUST** document the issue by taking a photo, screenshot or video, and they must also contact the instructor immediately. Students claiming to experience such difficulties who do not contact their instructor within 15 minutes of the start of the quizz or team activity will be marked as absent and receive a grade of zero (0) or incomplete.

Students should also read the Calendar, [Section G](#), on Examinations.

8. **Approved Mandatory And Optional Course Supplemental Fees:**

There are no mandatory or optional course supplemental fees for this course.

9. **Writing Across The Curriculum Statement:**

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section [E.2](#) of the University Calendar.

10. **Human & Living Organism Studies Statements:**

See also [Section E.5](#) of the University Calendar.

STUDIES IN THE BIOLOGICAL SCIENCES INVOLVE THE USE OF LIVING AND DEAD ORGANISMS. Students taking laboratory and field-based courses in these disciplines can expect involvement with and experimentation on such materials. Students perform dissections on dead or preserved organisms in some courses. In particular courses, students experiment on living organisms, their tissues, cells, or molecules. Sometimes field work requires students to collect a variety of living materials by many methods, including humane trapping.

All work on humans and other animals conforms to the Helsinki Declaration and to the regulations of the Canadian Council on Animal Care. The Department strives for the highest ethical standards consistent with stewardship of the environment for organisms whose use is not governed by statutory authority. Individuals contemplating taking courses or majoring in one of the fields of study offered by the Department of Biological Sciences should ensure that they have fully considered these issues before enrolling. Students are advised to discuss any concern they might have with the Undergraduate Program Director of the Department.

Students are expected to be familiar with [Section SC.4.1](#) of the University Calendar.

11. **Reappraisal Of Grades:**

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

- a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **ten business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections [I.1](#) and [I.2](#) of the University Calendar
- b. **Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

12. **Other Important Information For Students:**

- a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).
- b. **SU Wellness Center:** For more information, see www.ucalgary.ca/wellnesscentre or call [403-210-9355](tel:403-210-9355).
- c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email (svsa@ucalgary.ca) or phone at [403-220-2208](tel:403-220-2208). The complete University of Calgary policy on sexual violence can be viewed at (<https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>)
- d. **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct may include: submitting or presenting work as if

it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a report. **These are only examples.**

- e. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head, Undergraduate of the Department of Biological Sciences, Heather Addy by email addy@ucalgary.ca or phone 403 220-6979. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See [Section E.4](#) of the University Calendar.

- f. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](#) website.

- g. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](tel:403-220-3911) Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: [403-220-3913](tel:403-220-3913) Email: sciencerep@su.ucalgary.ca. [Student Ombudsman](#), Email: ombuds@ucalgary.ca.

- h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

- i. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or [non-academic misconduct](#), in addition to any other remedies available at law.

TENTATIVE COURSE SCHEDULE

Module	Week of	Weds. Lecture activity	Lab activity	Assignment/Project Due
	Sept 7	Introduction	No labs	ITP Metrics Survey done before first class
1: Physical Properties of Aquatic Systems	14	Team activity #1	Lab Team Activity #1	Lab Summary #1 / Pre-Course Survey
	21	Team activity #2	Lab Team Activity #2	Lab Summary #2
	28	Review Module 1	Lab Team Activity #3	Lab Summary #3 / Global Water Issues #1
	Oct 5	Quiz #1	Project Update	No assignment/project due
2: Chemical Properties of Aquatic Systems	12	Team activity #3	Lab Team Activity #4	Lab Summary #4
	19	Team activity #4	Proposal Draft Peer Review	Draft Proposal / Global Water Issues #2
	26	Review Module 2	Lab Team Activity #5	Lab Summary #5 / Project Proposal / Peer Survey
	Nov 2	Quiz #2	Lab Team Activity #6	Lab Summary #6
	9	READING WEEK - No lecture / No labs		
3: Biological Properties of Biological	16	Team activity #5	Lab Team Activity #7	Lab Summary #7
	23	Team activity #6	Lab Team Activity #8	Lab Summary #8 / Global Water Issues #3
	30	Review Module 3	Project Draft Peer Review	Data Entry Sheets / Project Draft

Systems	Dec 7	Quiz #3	No labs	Project due Dec 9 / Post-Course & Peer Surveys
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*Lecture activities are synchronous on Wednesdays 11:00-11:50 MST

**Lab activities are synchronous on scheduled lab section time

***Assignments and project components are due at the beginning of lab time unless otherwise specified

Electronically Approved - Sep 03 2020 15:55

Department Approval

Electronically Approved - Sep 03 2020 19:09

Associate Dean's Approval