



University
of Regina



Faculty of
Science

BIOL275 – ECOLOGY

Territorial acknowledgement: The University of Regina is situated on the territories of the nêhiyawak, Anihšînāpēk, Dakota, Lakota, and Nakoda, and the homeland of the Métis/Michif Nation. The Regina campus is on Treaty 4 lands, and Saskatoon classes are on Treaty 6 lands.

Course Instructors: Dr. Kerri Finlay
kerri.finlay@uregina.ca
Office: RIC527.1
Office phone: (306) 585-4236

Lab Instructor: Faraz Khan
farazkhan@uregina.ca

Lectures: The class will be delivered in-person M, W, F: 9:30-10:20 am in CL128.

Office hours: Dr. Finlay does not have formally scheduled office hours. Please email kerri.finlay@uregina.ca to set up an appointment.

Course description: This course serves as a general introduction to the field of ecology. Major topics include adaptations to the physical environment, life history, population growth, species interactions, community structure, energy, nutrients, landscape processes, and global change. We will emphasize throughout how ecological processes at different scales determine the emergent characteristics of units ranging from individuals to ecosystems.

Learning outcomes:

1. Define and explain fundamental ecological concepts, including populations, communities, ecosystems, and biosphere-level interactions.
2. Describe and evaluate how energy flows and nutrients cycle through ecosystems.
3. Analyze the structure and dynamics of populations, including factors affecting population growth, regulation, and life history strategies.
4. Compare and contrast interspecific interactions such as competition, predation, mutualism, and parasitism.
5. Evaluate the influence of abiotic and biotic factors on species distributions and biodiversity patterns.
6. Apply ecological theory to real-world environmental issues, including climate change, habitat loss, invasive species, and conservation efforts.
7. Reflect on the interconnections between ecological principles and human systems, particularly the ecological basis for sustainability and ecosystem services.

Prerequisites: BIOL100, BIOL101, CHEM104.

Textbook: Ricklefs, R. 2021. The Economy of Nature, 9th ed. Macmillan Learning. Recommended, but not mandatory. Available from the University of Regina bookstore. Older editions are also acceptable

Grading

Mid-term Exam #1 (Oct 1)	15%
Mid-term Exam #2 (Oct 29)	15%
Final exam (Dec 10)	40%
Lab	30%
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	100%

The passing grade for this course is 50% (averaged over all components). If any component of the course is not completed, a grade of NP will be assigned. Note that any grades posted on URCourses are not final - these are unofficial grades that are subject to review and approval by the Department Head and Dean of Science.

The course grade of all students is calculated using the same graded components and a common rubric, and therefore grades of individual students cannot be arbitrarily changed by the instructor.

Exam modality

The midterm and final exams will all take place in-person. The midterm exams will take place during the regularly scheduled lecture time and location.

Lecture schedule: all dates and topics are subject to change, as necessitated by illness, closures, or other unforeseen circumstances.

Week of	Topic, textbook chapter	Items of note
September 1	Introduction to Ecology, Adaptations (Ch. 1 & 6)	Term starts September 2 nd
September 8	Adaptations to water, nutrients, light, energy, heat (Ch. 7 & 8)	September 15 th – add/drop date
September 15	Variation in the Environment, Biomes (Ch. 2 & 4)	Labs start this week.
September 22	Evolution and Adaptation, Life histories and Fitness (Ch. 9 & 10)	
September 29	Evolution of Sex, family (Ch. 10 & 11)	Midterm Exam #1 Oct 1
October 6	Population dynamics, Species interactions (Ch. 12 - 14)	
October 13	Consumer/Resource interactions (Ch. 15, 16)	No Class Oct 13 (Thanksgiving)
October 20	Competition, Mutualism (Ch. 17, 18)	
October 27	Community Structure, Succession (Ch. 19 & 20)	Midterm Exam #2 Oct 29
November 3	Energy, Elements in Ecosystems (Ch. 21& 22)	
November 10	<i>Midterm Break</i>	<i>No classes this week</i>
November 24	Nutrient Regeneration (Ch. 22)	
December 1	Landscape Ecology, Conservation (Ch. 23-24)	Last day of classes for the semester: Dec. 5 th
December 7	Final Exam	Final Exam: Dec 10 th

Missed exam policy:

- 1) Missed mid-term exams will be made up at an agreed-upon date and time. Students who miss the mid-term exam must provide a valid excuse with documentation.
- 2) “Deferred” final exams can only be granted by the Associate Dean, Undergraduate (for Faculty of Science students), or by the Deans and/or Associate Deans of other Faculties or Federated Colleges. Deferred final exams cannot be granted by the course instructor.

Attendance policy: Attendance at lectures and labs is expected. Note that if a student engages in disruptive behaviour such as watching videos during lecture, speaking throughout class, etc. that disrupts the learning of others, they can be asked to leave the class.

Academic integrity: Academic integrity requires students be honest. Assignments and exams are to help students learn; grades show how fully this goal is attained. Thus, all work and grades should result from a student's own understanding and effort.

Acts of academic misconduct violate academic integrity and are considered serious offences by the University. Examples include, but are not limited to, cheating on tests or exams, plagiarizing, copying from others, falsifying lab results, etc. Instances of academic misconduct will be reported to the Associate Dean Academic for investigation. Full details are provided in the [Undergraduate academic calendar](#). Students are encouraged to understand your obligations as a student, as well as your rights.

In this course, you are not permitted to use generative artificial intelligence (AI) programs in your assignments or exams. Any work suspected of using generative AI will be reported for investigation of academic misconduct.

Grade Appeals: Students have 20 business days from the day they receive a grade to initiate an appeal - please see the Academic Calendar for procedure details
<https://www.uregina.ca/registrar/assets/docs/pdf/calendar/2025-2026.pdf>

Accommodations: The Centre for Student Accessibility upholds the University's commitment to a diverse and inclusive learning environment by providing services and supports for students based on disability, religion, family status, and gender identity. Students who require these services are encouraged to contact the Centre for Student Accessibility to discuss the possibility of academic accommodations and other supports as early as possible. For further information, please email accessibility@uregina.ca.



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Biology 275 Laboratory Ecology

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Location: LB 425

Laboratory Instructor: Faraz Khan (He/him)

Contact: farazkhan@uregina.ca

Teaching Assistants: April Dejong & Olivia Garret

Laboratory Technician: Erin Ennis

Lab Days/Times:

Monday 2:30 pm (094)

Tuesday 8:30 am (095); 2:30 pm (096)

Wednesday 2:30 pm (097)

Thursday 8:30 am (098); 2:30 pm (099)

Office Hours:

In lieu of office hours, please contact Faraz by email (listed above, with any questions), or stay after labs. Please bring any general questions regarding lab material up during lab times.

Course Description: This is an introductory course that covers plant, animal, and microbial ecology. Field work will be required. *** Prerequisite: BIOL 100 and 101, CHEM 104 *** * Note: CHEM 104 can be taken concurrently *

Required Materials:

- All lab handouts and learning materials will be available on URCourses.
- You are required to bring your own safety glasses and lab coat to each lab.
- To complete the lab handouts, assignments, and associated documents, you will need a computer or laptop, reliable internet connection, Excel (recommended) or Google Sheets, Word (recommended) or Google docs.

Communication:

- Outstanding content questions should be emailed to Faraz (listed above).
- Questions about lab scheduling or other administrative or personal matters regarding the lab should be sent to Faraz via email.
- Please **do not use the internal UR Courses email or direct messaging forum**. Send emails directly from your university Outlook account.
- Please include “BIOL 275 Lab” in the subject line of all emails.

Attendance: Attendance is mandatory. If you are unable to make it to a lab, please see the instructor as soon as possible before the lab to see if an accommodation for this absence is possible. Proper documentation is required. Travel plans or holidays are not a valid excuse for missing your lab session. No accommodations will be given if you do not contact the lab instructor before the start of your lab session. For each lab session missed without documentation, you will receive a zero for all activities associated with that lab.

Lab Schedule:

- There are multiple lab sections for Biology 275. Make sure that you attend the lab in which you are registered.
- **Please see the schedule for details as to when labs occur. Some labs will happen consecutively, don't miss them!** See the schedule below for details.
- Labs begin at 8:30 AM or 2:30 PM. The actual lab work begins at that time, so students should arrive a few minutes before the official start time.

*Please note that some of the labs will require you to be working outside and others require you to collect data over the course of a couple of weeks, as such the specific dates may change based on weather and availability of materials.

Week	Topic	Assignments
First Day of Classes – September 2, 2025		
September 2-5	No Labs	
September 8-12	No Labs	
September 15-19	Lab 1: Biodiversity	

September 22-26	Lab 2: Competition and Predation	Lab 1 Assignment due at the start of your lab time. Lab 2 data due by the end of your lab section
September 29 - October 3	No Labs	Lab 2 assignment due at the start of your lab section time
October 6-10	No Labs	
October 13-17	No Labs- Thanksgiving	
October 20-24	Lab 3a: Population Growth	
October 27 - 31	Lab 3b: Data Collection & Elder Protocol Session	Lab 3b data due by the end of your lab section
November 3-7	Lab 3c: Data Collection	Lab 3c data due by the end of your lab section
November 10-14	Reading Week	
November 17-21	Lab 4: Food Chains	Lab 3 assignment due at the start of your lab section time Lab 4 data due by the end of your lab section
November 24-28	No Labs	Lab 4 assignment due by the end of your lab section time
December 1-5	Lab 5: Group Project Presentations	Group evaluations due at the end of your lab time All outstanding assignments due Dec. 5 @ 11:59 pm
Last Day of Classes – December 5, 2025		

Grading:

The lab is worth 30% of your total class grade. You must pass the lab to pass the course.

Assessment	Breakdown	Total
Pre-Lab Quizzes	1% x 4	4%
Post-Lab Assignments	4% x 4	16%
Group Project	10% x 1	10%

Pre-Lab Quizzes

All pre-lab quizzes can be found on UR Courses. Quizzes will open Monday at 12:00 am the week before the lab and will be due the following Sunday night at 11:59 pm (with the exception of labs 2b, 2c, and 5). All of the information for these quizzes can be found on UR Courses.

Post-Lab Assignments

Post-lab assignments will be based on data collected in-lab. Assignments are due on UR Courses at the start of your lab time the week after you have completed the lab.

Group Project

Students will be assigned to groups of 3 or 4 and given a problem to investigate. The results of the investigation will be collated as a presentation in-person in lab time during the last week of lab.

There will be no final exam for this lab.

Policy for Assignments & Quizzes:

- All lab assignments and associated documents must be completed and submitted by the last day of classes (December 6th) at 11:59 pm to earn a grade in the lab.
- All lab assignments are to be submitted through UR Courses submission portals.
- Assignments will be considered late beginning a minute after the time it is due.
- Late assignments will earn a zero, and not receive any feedback. To earn a grade in the lab, all, completed assignments must be submitted to the correct Turnitin folder by the last day of classes.
- No-penalty extensions on assignments or lab components are not granted unless there is an extreme circumstance for which a written request (to the appropriate instructor) for an extension is accompanied by sufficient written documentation. The extension requests and supporting documents must be provided within 24 hours of the due date.
- No extensions for quizzes will be granted.

- If you are re-taking BIOL 275, you may not submit assignments, in whole or in part, that you have previously submitted (all submitted work must be original for this attempt at the course). Resubmission of previous work is not allowed for any U or R courses.
- Generally, assignments will be marked within two weeks, and you may discuss them with Faraz or your teaching assistant (TA) during the following lab.
- If you disagree with the grade on an assignment, you may request a re-assessment (send the request to Faraz). Although you will NOT be penalized for requesting a reassessment, the entire assignment will be re-evaluated, therefore, your mark may go up, stay the same, or go down. The assignment will be re-graded within one week. This policy does not apply to simple addition errors, which should be immediately brought to the attention of Faraz or the TA. All re-evaluation requests must be made within 24-72 hours of the time the assignment is handed back or posted.
- In fairness to everyone in the class, the values of the evaluation components will not be adjusted and there are no extra assignments or quizzes to make up grades for an individual student.

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In this course, our primary focus is to cultivate an equitable, inclusive, and accessible learning community that emphasizes individual critical thinking and problem-solving skills. To ensure a fair and consistent learning experience for all students, the use of advanced AI tools such as ChatGPT or Dall-E 2 is strictly prohibited for all submitted academic (written/coding/creative/etc.) work, assignments, and assessments in this course. Each student is expected to complete all tasks without substantive assistance from others, including AI tools.

Accommodations: The Centre for Student Accessibility upholds the University's commitment to a diverse and inclusive learning environment by providing services and support for students based on disability, religion, family status, and gender identity. Students who require these services are encouraged to contact the Centre for Student Accessibility to discuss the possibility of academic accommodations and other supports as early as possible. For further information, please email accessibility@uregina.ca.

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