

## Course Information

### General Course Information

Course: BIOL300

Course title: Ecology

Pre-requisites: BIOL103. Recommended: BIOL206, BIOL212, and a second-year statistics course

Semester and year: Fall 2025

Number of credits: 3.00

Learning hours: 118 (36 Lecture, 21 Laboratory, 12 Online Activity, 16 Off-Campus Activity, 33 Private Study)

Modality: on campus

Classroom accessibility: Both the lecture and laboratory rooms are wheelchair accessible but do not have an automatic door operators. Lecture room uses LED Video Wall Display, room audio, auditorium style seating with tablet writing surfaces. The room does not have power outlets at seats and no windows. Lab room does not have video or room audio displays, other than a chalk board. The room includes bench desks with moveable chairs, electrical outlets at each seating space, and a window. To locate single user accessible and gender neutral washrooms on campus, please visit the [Campus Map](#).

### Course Description

Ecology is the study of the relationships between living things and their environment. In BIOL300, we emphasize the interpretation of ecological patterns in terms of mechanisms and consequences of evolution by natural selection. We will explore diverse topics including trade-offs and constraints, organismal ecology, population dynamics, interactions, community structure, energy and elemental flow through ecosystems, and global diversity patterns. During labs activities, you will gain hands-on experience in field sampling and species identification, as well as data analysis and interpretation.

### Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Explain the basic concepts underlying life history, population, community, and ecosystem ecology, and provide a critique of their strengths, shortcomings, and significance.
2. Integrate across ecological scales to understand and assess current environmental issues.
3. Identify and assess the linkages between evolution and ecology at all ecological scales.
4. Apply life-history, population, community, and ecosystem concepts to generate hypotheses and understand patterns in ecological data.
5. Apply practical field skills to collect data on wild plants and animals
6. Analyze and interpret a variety of types of ecological data.

## **Important University Dates**

Please visit the [Faculty of Arts and Sciences Sessional Dates website](#) for all academic deadlines.

## **Course Expectations**

BIOL300 students are responsible for knowing and adhering to the rules, regulations, and requirements of this course, including due dates, and the details of required assignments and activities. We have designed BIOL300 so that all activities (except the field trip) have options for in-person and online learning. Although the majority of students benefit most from participating in-person, we recognize the need for flexibility, especially with ongoing public health concerns. Everyone who is not feeling well, or who feels unsafe with in-person learning, should take advantage of the asynchronous or online options. Asynchronous options cover the same material and have the same requirements as in-person options. You can use either approach, or a combination of both approaches throughout the term.

You should expect to invest on average 10 to 12 hours per week in this course. This includes the time you spend in lecture or lab, studying course material, and completing quizzes and lab reports. We encourage you to develop a study schedule and stick to it: you will be more likely to complete the course successfully if you stay organized and up to date. All quizzes, remote lecture modules, and lab activities (except the field trip) are autonomous but have specific due dates. This approach is designed to give students some flexibility in choosing when to complete work but also makes sure that no one falls behind. Keeping up to date with readings, lecture modules/participation, and lab assignments is your responsibility. The “Timeline” in the course homepage onQ banner is your first resource for due dates and detailed course schedule.

## **Inclusion**

### **Land Acknowledgement**

Queen’s University is situated on the territory of the Haudenosaunee and Anishinaabek. We are grateful to be able to live, learn, and play on these lands.

### **Equity, Diversity, and Inclusivity Statement**

BIOL300 is committed to counteracting discrimination and developing a climate of educational equity that recognizes and respects the equal dignity and worth of all who seek to participate in the life, work, and mission of Queen’s University. Such a climate is created and maintained by developing a commitment to and understanding of educational equity, supported by policies, programs, curricula, practices, and traditions that facilitate individuals, and equity-seeking groups, free, safe, and full participation. Our commitment to providing options for both in-person and online self-paced learning, built-in flexible deadlines for quizzes and assignments, and grading approaches used with the Practice Lab Reports, are three specific examples of practices that we employ which are known to be particularly beneficial to equity-seeking groups. We will continue adjusting our course practices and policies each year with an aim to improving the climate of educational equity in BIOL300.

## **Building a Classroom Community**

University is a place to share, question, and challenge ideas. Each student brings a different set of lived experiences. You can help to create a safer, more respectful classroom community for learners by following these guidelines:

- Make a personal commitment to learn about, understand, and support your peers.
- Assume the best of others and expect the best of them.
- Recognize and value the experiences, abilities, and knowledge of each person.
- Acknowledge the impact of oppression on other people's lives and make sure your words and tone are respectful and inclusive.
- Encourage others to develop and share their ideas.
- Pay close attention to what your peers say/write before you respond. Think through and re-read what you have written before you post online or send comments to others.
- Be open to having your ideas challenged and challenge others with the intent of facilitating growth.
- Look for opportunities to agree with one another, building on and intentionally referencing peers' thoughts and ideas; disagree with ideas without making personal attacks, demeaning, or embarrassing others.

## **Fostering Accessibility**

All of us have a shared responsibility for reducing barriers to learning and fostering accessibility and promoting meaningful inclusion of those with disabilities. The [Accessibility Hub](#) at Queen's University's Human Rights & Equity Office offer a host of [tutorials](#) that provide us all with practical tips for:

- creating accessible documents, e.g., to submit to your teaching team or share with peers in peer feedback activities/in a presentation,
- emails, e.g., while communicating with group members or your teaching team, and
- meeting practices (e.g., in tutorials/labs/seminars or virtual meetings).

## **Name/Pronoun**

If, for whatever reason, you wish to change how your name appears in onQ and/or on class lists, please follow these steps. You may also use this process to add your pronouns to the appearance of your name.

1. Log into SOLUS.
2. Click on Personal Information tab.
3. Click on the Names tab
4. Click on the Add New Name tab
5. Choose Preferred from the Name Type drop down menu
6. Enter the name you would like to appear in onQ and/or on class lists.
7. Click Save.

Please allow 24 to 48 hours for your name to be registered within the system. If you have further questions or concerns, please contact ITS at Queen's University.

## Course Materials & Technologies

### Required Course Textbooks

Course Textbooks	Edition(s)	Publisher	For Purchase	Cost	At Queen's Library?
Relyea, 2021, <i>Ecology, The Economy of Nature</i>	9th	W.H. Freeman, Macmillan Learning	in university bookstore, eBook through publisher	\$70.00	Yes

### Other Required Materials

This course includes a mandatory in-person field trip to [Queen's University Biological Station](#). Three day-long trips run over two weekends in mid-September (see course Timeline for specific dates). You only need to attend one of the three days. There are a limited number of spots on each date: sign-up sheets will be available the first day of class. The trip costs \$56.75 (\$55 + handling fee) per participant, which includes transportation, site access, and lunch. Students are required to wear appropriate clothing and shoes which are safe for working in the field. You will also need to bring a paper field notebook and pencil for taking notes while outdoors. If you have accessibility concerns regarding this trip, please reach out to us in advance. Any student who is unable to attend due to Accommodations or approved Consideration will be eligible for an alternative activity which will take place on campus later in the term.

### Copyright of Course Material

Course materials created by the course instructor(s), including all slides, presentations, handouts, tests, exams, and other similar course materials, are the intellectual property of the instructor(s). It is a departure from academic integrity to distribute, publicly post, sell or otherwise disseminate an instructor's course materials or to provide an instructor's course materials to anyone else for distribution, posting, sale or other means of dissemination, without the instructor's express consent. A student who engages in such conduct may be subject to penalty for a departure from academic integrity and may also face adverse legal consequences for infringement of intellectual property rights.

### Communication

#### Questions about the Course and Contacting the Teaching Team

We will post important course announcements to the Announcements Section in the onQ course homepage. We encourage you to check the Announcements section regularly for updates. We encourage you to post general course questions to the appropriate Course Questions discussion forum in onQ. The teaching team will monitor discussion forums and answer questions. Most questions are answered within 24 hours (Monday – Friday). For questions that you would prefer to remain private, please contact the course inbox ([biol300@queensu.ca](mailto:biol300@queensu.ca)) and we will direct your question to the appropriate person who can help.

## Queen's Email

The university communicates with students via Queen's email. Please check your email regularly to ensure you do not miss important information related to your course. You should be using your Queens account to access the onQ site or email the teaching team.

## Course Feedback

At various points during the course, you may be asked to take part in a variety of feedback activities, such as surveys and questionnaires. This feedback enables the teaching team to improve the course. All surveys are anonymous and are directly related to activities, assessments, and other course material.

## Assessments

### Weighting, Description, and Alignment with Course Learning Outcomes (CLOs)

Assessment	Description	Alignment with CLOs	Weighting	Due date
<b>Lecture Content (50% of final mark). See details in Module 1</b>				
Reading Quizzes	Based on textbook readings (20 in total)	1-4	15%	Regularly. Wide windows of availability
Active Participation in modules	Written responses to questions posed during lectures/online modules		5%	Regularly
Online/Content Quizzes	Based primarily on lecture content (8 in total)		30%	Regularly. 3-day window of availability
<b>Laboratory Content (50% of final mark). See details in Lab Introduction page</b>				
Field trip	Preparation, on site quizzes based on preparation, participation in trip activities	3-5	10%	Sep 13, 14, or 20, (21 <sup>st</sup> held as a rain day)
Initial Lab Report	Testing ecological hypotheses using data. Developing and reporting data figure, statistics, and Results text.	4,6	10%	Sep 26, 11 pm
Practice Lab Reports			10%	Regularly
Final Lab Report			20%	Dec 2, 11 pm
Total			100%	

### **Assessment Flexibility**

All Reading quizzes and lecture quizzes include wide windows of availability and can be completed at the time and place of the student's choosing. Although students generally benefit the most from attending and participating in lectures synchronously, asynchronous options for participation are also available. Similarly, while most students benefit from attending synchronous Lab Help Sessions (both in-person and online options are available), all lab reports can be completed asynchronously. At least 4 of the 5 Practice Lab Reports must achieve the status "Meets minimum expectations" to qualify for full credit on this gradebook item. Practice Labs include opportunities for revisions after receiving feedback from the TAs.

BIOL300 does not have a final exam. Instead, we use regular Reading and Content Quizzes which are scheduled periodically throughout the semester. This approach helps students keep up to date with the material and avoids high-stakes testing.

### **Assignment Submission Policy**

All quizzes and assignment due dates (except the field trip) have a 72-hour grace period. This means that your assessment is due on the date and time specified in the Timeline, but we will accept all submissions within 72 hours of the deadline without penalty. Short term Academic Consideration is therefore built into all due dates and will not be extended past this 3-day grace period. Quizzes and assignment submission folders will close 72 hours after the deadline and any assessments not submitted by that time will not be accepted. Do not wait until the last minute to submit your assessment in case you run into technical problems! Students who wish to apply Academic Accommodations or Academic Consideration requests longer than 3 days to specific assessments should reach out to the course inbox ([biol300@queensu.ca](mailto:biol300@queensu.ca)) **before the due date** and we will arrange suitable accommodations. We will not accept request submitted during the grace period.

### **Policy Review of Graded Work**

Work in this course is marked very carefully by the Teaching Assistants. We do not typically remark assignments unless there are clear mathematical errors. If you have a concern about your grade, please make sure that your concern is legitimate by checking over the feedback provided by TAs and reading over all correspondence on the class website (announcements, instructions, etc.). If you are confident that you have a valid concern, submit a copy of the original work to the Regrade Request folder in onQ including a detailed explanation of why you believe it has been incorrectly marked. Please be clear about what sections are the problem and link these to your explanation statement. **THIS MUST BE SUBMITTED WITHIN 10 DAYS OF THE POSTING OF YOUR GRADE FOR THE ASSIGNMENT.** Your entire submission will be re-marked - this means that your total mark may go up or down. We will consider and respond to all regrade requests within two weeks of receiving your request; if you have not heard from us within that time frame, please email the course inbox.

## Policies

### Class Attendance

Your presence and participation in class contributes to the knowledge and skills that you will develop throughout this course. We expect that you attend class regularly, participate in class conversations and learning activities. These types of activities provide active engagement, promote a deeper understanding of the course content, and contribute to your success in this course. Recognizing the need for flexibility, all components of the course (except the field trip) include asynchronous online options for participation.

### Academic Support

All undergraduate students face new learning and writing challenges as they progress through university: essays and reports become more complex; effectively incorporating research into writing becomes more important; the types of assignments become more diverse; managing your time and developing the skills you need to read and think critically gets more challenging. I encourage students to contact Student Academic Success Services (SASS). SASS offers many different ways to receive support:

- Free online or in-person [appointments](#) to get personalized support on writing and academic skills from expert staff and trained peers.
- [Workshops](#) and [drop-in programs](#). SASS' [Events Calendar lists events coming soon](#).
- [Online resources](#) that provide strategies for academic skills and writing development at university.
- If English is not your first language, SASS has specific resources for [English as Additional Language students](#), including weekly programs and EAL academic skills appointments. You can meet on an ongoing basis with an EAL consultant to work on your academic writing, speaking, listening, and reading skills.

### Accommodations for Disabilities

Queen's University is committed to working with students with disabilities to remove barriers to their academic goals. Queen's Student Accessibility Services (QSAS), students with disabilities, instructors, and faculty staff work together to provide and implement academic accommodations designed to allow students with disabilities equitable access to all course material (including in-class as well as exams). If you are a student currently experiencing barriers to your academics due to disability related reasons, and you would like to understand whether academic accommodations could support the removal of those barriers, please visit the [QSAS website](#) to learn more about academic accommodations or start the registration process with QSAS by clicking **Access Ventus** button at [Ventus | Accessibility Services | Queen's \(queensu.ca\)](#)

VENTUS is an online portal that connects students, instructors, Queen's Student Accessibility Services, the Exam's Office and other support services in the process to request, assess, and implement academic accommodations.

To learn more go to: <https://www.queensu.ca/ventus-support/students/visual-guide-ventus-students>

### **Academic Consideration for Students in Extenuating Circumstances**

Academic Consideration is a process for the University community to provide a compassionate response to assist students experiencing unforeseen, short-term extenuating circumstances that may impact or impede a student's ability to complete their academics. This may include but is not limited to any extenuating circumstance (illness, bereavement, traumatic event, injury, family emergency, etc.) which is short-lived, begins within the term, and will not last longer than 12 weeks - see [Academic Consideration](#) webpage for details (<https://www.queensu.ca/artsci/undergraduate/student-services/academic-consideration>)

Each Faculty has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating circumstances. For more information, undergraduate students in the Faculty of Arts and Sciences should consult the Faculty's webpage on [Academic Consideration in Extenuating Circumstances](#) and submit a request via the [Academic Consideration Request Portal](#). Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

Note: All in-person activities (except the field trip) in this course have remote options - if you are not feeling well, please do not attend in-person activities. Take advantage of the remote options and keep your community safe. You do not need to submit for Academic Consideration in order to use a remote option.

If you need to request academic consideration for this course, you will be required to provide the following name and email address to ensure it reaches our team accordingly:

**Instructor/Course Coordinator Name: Dr. Paul Martin**

**Instructor/Course Coordinator email address: [biol300@queensu.ca](mailto:biol300@queensu.ca)**

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their instructor and/or course coordinator as soon as possible once academic consideration has been granted. Any delay in contact may limit the options available for academic consideration. While we encourage instructors to accommodate, each instructor has discretion in deciding whether or how to apply the Academic Consideration. For more information on the Academic Consideration process, what is and is not an extenuating circumstance, and to submit an Academic Consideration request, please see the Faculty of Arts

and Science's [Academic Consideration website](#). ASO courses include links to information on **Academic Consideration** on your **Course Homepage** in onQ.

For more information, please see the [Senate Policy on Academic Consideration for Students in Extenuating Circumstances](#).

### **Queen's Policy Statement on Academic Integrity**

Queen's University is dedicated to creating a scholarly community free to explore a range of ideas, to build and advance knowledge and to share the ideas and knowledge that emerge from a range of intellectual pursuits. Each core value of academic integrity, as defined in the [Senate Academic Integrity Policy](#), gives rise to and supports the next.

Honesty appears in presenting one's own academic work, whether in the context of an examination, written assignment, laboratory or seminar presentation. It is in researching one's own work for course assignments, acknowledging dependence on the ideas or words of another and in distinguishing one's own ideas and thoughts from other sources. It is also present in faithfully reporting laboratory results even when they do not conform to an original hypothesis. Further, honesty is present in truthfully communicating in written and/or oral exchanges with instructors, peers and other individuals (e.g. teaching assistants, proctors, university staff and/or university administrators).

Trust exists in an environment in which one's own ideas can be expressed without fear of ridicule or fear that someone else will take credit for them.

Fairness appears in the proper and full acknowledgement of the contributions of collaborators in group projects and in the full participation of partners in collaborative projects.

Respect, in a general sense, is part of an intellectual community that recognizes the participatory nature of the learning process and honours and respects a wide range of opinions and ideas. However, "respect" appears in a very particular sense when students attend class, pay attention, contribute to discussion and submit papers on time; instructors "show respect by taking students' ideas seriously, by recognizing them as individuals, helping them develop their ideas, providing full and honest feedback on their work, and valuing their perspectives and their goals" ("[The Fundamental Values of Academic Integrity](#)", 3rd Edition, p. 8).

Ultimately, responsibility is both personal and collective and engages students, administrators, faculty and staff in creating and maintaining a learning environment supported by and supporting academic integrity.

Courage differs from the preceding values by being more a quality or capacity of character – "the capacity to act in accordance with one's values despite fear" ("[The Fundamental Values of Academic Integrity](#)", 3rd edition, p. 10). Courage is displayed by students who make choices and

integrity decisions that are followed by action, even in the face of peer pressure to cheat, copy another's material, provide their own work to others to facilitate cheating, or otherwise represent themselves dishonestly. Students also display courage by acknowledging prior wrongdoing and taking proactive measures to rectify any associated negative impact.

All of these values are not merely abstract but are expressed in and reinforced by the University's policies and practices.

### **Use of Generative Artificial Intelligence (AI) Tools**

Unless otherwise and explicitly specified we expect you to submit original work, completed wholly by you (or collaboratively with group members when group work is permitted). Using generative AI tools such as (but not limited to) ChatGPT in your submitted work is not permitted. This includes use in quizzes, lecture participation, writing code, and tutorial reports. This type of use constitutes a departure from academic integrity.

Queen's [Student Academic Success Services](#) (SASS) offers a self-directed, online academic integrity module which we encourage all students to take which will help with:

- Understanding the nature of the academic integrity departure
- Understanding the expectations of and role of sources in scholarly writing
- Integrating sources into your writing (paraphrasing, quoting, summarizing)
- Understanding when and how to cite your sources
- Managing your time effectively to avoid the need for shortcuts
- Taking effective notes to ensure accuracy of source material and correct attribution

### **Turnitin Statement**

This course makes use of Turnitin, a third-party application that helps maintain standards of excellence in academic integrity. Normally, students will be required to submit their course assignments through onQ to Turnitin. In doing so, students' work will be included as source documents in the Turnitin reference database, where they will be used solely for the purpose of detecting plagiarized text in this course. Data from submissions is also collected and analyzed by Turnitin for detecting Artificial Intelligence ([AI-generated text](#)). These results are not reported to your instructor at this time but could be in the future.

Turnitin is a suite of tools that provide instructors with information about the authenticity of submitted work and facilitates the process of grading. The similarity report generated after an assignment file is submitted produces a similarity score for each assignment. A similarity score is the percentage of writing that is similar to content found on the internet or the Turnitin extensive database of content. Turnitin does not determine if an instance of plagiarism has occurred. Instead, it gives instructors the information they need to determine the authenticity of work as a part of a larger process.

Please read Turnitin's [Privacy Policy](#), [Acceptable Use Policy](#) and [End-User License Agreement](#), which govern users' relationship with Turnitin. Also, please note that Turnitin uses cookies and other tracking technologies; however, in its service contract with Queen's Turnitin has agreed that neither Turnitin nor its third-party partners will use data collected through cookies or other tracking technologies for marketing or advertising purposes.

For further information about how you can exercise control over cookies, see [Turnitin's Privacy Policy](#).

Turnitin may provide other services that are not connected to the purpose for which Queen's University has engaged Turnitin. Your independent use of Turnitin's other services is subject solely to Turnitin's Terms of Service and Privacy Policy, and Queen's University has no liability for any independent interaction you choose to have with Turnitin.

*Portions of this document have been adapted, with permission, from the University of Toronto Centre for Teaching Support and Innovation tip sheet "[Turnitin: An Electronic Resource to Deter Plagiarism](#)".*

**Copy rights use statement:** <https://www.queensu.ca/secretariat/policies/administration-and-operations/copyright-compliance-and-administration-policy>