BIOL 300
Ecology
Fall 2018-19

CALENDAR DESCRIPTION

An introduction to the major ecological concepts at the scales of individual, population, community and ecosystem. This includes reproductive and life history strategies, population growth and regulation, species interactions, community structure, biogeographic patterns, elemental cycles and energy flow. Laboratory work includes field and lab activities with collection, analysis and interpretation of ecological data.

NOTE: BIOL300 has a **Required** full day field trip on a weekend (estimated cost $50)

LEARNING HOURS 118 (36L;21Lb;12O;16Oc;33P)

PREREQUISITE BIOL 201/3.0, BIOL 202/3.0, and BIOL 206/3.0.
COREQUISITE BIOL 243/3.0 or PSYC 202/3.0 or STAT 269/3.0.

Instructor (Lecture)	Dr. Paul Martin
Instructor Contact	pm45@queensu.ca; Phone: 613-533-6598; BIOSC 4320
Lab Coordinator	Dr. Laura Nagel, Program Associate nagell@queensu.ca; Phone: 613-533-6000 ext. 77437; BIOSC 2321
TA Information	See BIOL 300 OnQ site

Learning Objectives

To complete this course, students will demonstrate their ability 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 collected by students.
5. Apply practical field and laboratory skills to collect data.
6. Analyze and interpret student collected data.

Learning Hours

Teaching method		*Average hours per week*	*Number of weeks*	*Total hours*
In-class hours	Lecture	3	12	36
	Seminar			
	Laboratory	3	9	27
	Tutorial			
	Practicum			
	Group learning			
	Individual instruction			
Other	Online activity			
	Off-campus activity	12 total	Field trips	12
	Private study	4	11	44
Total hours on task				119

Textbooks/Readings

Ecology: The Economy of Nature, Robert Ricklefs, Rick Relyea, Christoph Richter, 7th Canadian Edition.

Grading Scheme

Component	**Weight (%)**	**Date**
Lab Assignments	50%	weekly
Lecture and Reading Quizzes, Discussion	50%	weekly

Grading Method

All components of this course will receive numerical percentage marks. The final grade you

receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale.

Grade	Numerical Course Average (Range)
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

Academic Integrity and Queen's Code of Conduct

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments and conduct conform to the principles of academic integrity. Information is available in the Arts and Science Calendar (see Academic Regulation 1 - http://www.queensu.ca/artsci/academic-calendars/regulations/academic-regulations, on the Arts and Science website (see http://www.queensu.ca/artsci/academics/undergraduate/academic-integrity), on the Biology Department website (http://biology.queensu.ca/academics/undergraduate/prepare-yourself/) ,and from the instructor of this course. Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions that contravene the regulations on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Accommodation Policy, Exam Conflicts, and Other Conflicts

Students who feel they need accommodations for disabilities or extenuating circumstances should consult the University Student Accessibility Services (http://www.queensu.ca/studentwellness/accessibility-services). Students with a conflict between exams, lectures, or other course requirements should consult the Biology Department's website for details about how to proceed (http://biology.queensu.ca/academics/undergraduate/prepare-yourself/). In general, the earlier a course coordinator is apprised of an extenuating circumstance, the more likely an accommodation can be made. Students are encouraged to be proactive in anticipating

difficulties, when it is possible to do so.

BIOL 300 has no exam (mid-term or final).

Make-up quizzes will not be offered, but students who have made **PRIOR** arrangements with the instructor might be permitted to have quizzes pro-rated if they are missed due to illness, family emergencies, or other extenuating circumstances, dependent on approval by the instructor.

Assignments must be submitted by the posted deadlines, barring any prior arrangements approved by the instructor due to extenuating circumstances. Assignment marks will be reduced by 5% for each day late up to 3 days, then 10% per day up to 7 days. Assignments will be assigned a mark of 0 if they are submitted more than 7 days after the posted deadline.

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Accommodation of Disabilities

Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the QSAS website at:
http://www.queensu.ca/studentwellness/accessibility-services/how-register/current-returning-students