

**University of Guelph  
College of Biological Science  
Department of Integrative Biology**

**COURSE OUTLINE  
Field Course in Biodiversity (BIOL\*2300)  
Fall 2020**

### **Course Description**

This field course provides an opportunity for students to explore the biological diversity of a selected landscape from the perspectives of Western science and Indigenous culture. The College of Biological Science was approached back in 2018 by Dr. Ian Hogg to collaborate on a field experience that would bring together second year students from the south with Inuit students from Ikaluktutiak or Iqaluktuttiaq (Cambridge Bay). The goal of the experience is to introduce students to an integrative approach to understanding biodiversity that includes culture, history, and knowledge systems. We will explore the surrounding wilderness, appreciate the diversity of life at different scales, and learn about how to understand that diversity from different perspectives.

**Professor:** Dr. Shoshanah Jacobs, Department of Integrative Biology with the collaboration and support of several others including Dr. Ian Hogg and Dr. Thomas McIlwraith.

### **Course Schedule**

Lectures	TBD
Labs	TBD

### **Learning Outcomes**

By the end of this course, students should be able to:

1. Describe and discuss the contributions of Western science and Indigenous knowledge systems to our understanding of biological diversity and its management
2. Sample and describe the distribution and magnitude of biological diversity on a landscape using professional, respectful and sustainable field work practices
3. Analyze field data to address independent questions about the patterns and processes regulating biological diversity and its management
4. Work collaboratively in diverse teams to advance our knowledge of biological diversity and its importance to humans
5. Describe the significance of studying the biodiversity of individuals and populations in the field location
6. Communicate the relevance of ecological field studies with a diverse audience
7. Reflect upon the role of human activity in affecting biological diversity and the contribution of diverse perspectives to responsible stewardship of biological resources

## Course Resources

**Course link:** This course will make use of the University of Guelph's course website on D2L (via Course link).

**Undergraduate Calendar:** is the source of information about the University of Guelph's procedures, policies and regulations, which apply to undergraduate programs. It can be found at:

## Course Structure

The course will include a two- or three-week field component normally occurring in July or August. Emphasis will be placed upon students asking ecological or evolutionary questions, designing experiments to test these questions, and then collecting data from a field location. The course will provide an opportunity to study the biodiversity of a given area including both the flora and fauna and the impact of these changes on the local community and surrounding area. This course will normally involve working with and learning from a local Indigenous community.

Students will normally stay on-site for the duration of the field course with course-specific activities running all day including weekends.

## Methods of Assessment

Assessment	Value (% of final grade)	Date	Learning Outcome (see above)	Course activity
Examination of Indigenous and Western Knowledge Systems Assignment	15	TBA	1, 4, 6	Concept mapping of the types of knowledge and their intersections, uses, functions, origins.  Formative... students present them and then can revise and resubmit.
Individual Natural History Written Assignment	15	TBA	5, 6	Pick 1 knowledge system and present the natural history of a species.
Introduction and application of Field Techniques, Data Collection and Analysis	15	TBA	2, 3	Competence in the field and lab.

Assessment	Value (% of final grade)	Date	Learning Outcome (see above)	Course activity
Field and Lab notebook	30	TBA	1, 3, 4, 5, 6	Keep detailed!!! track of all the locations, weather, methods, samples, photos (macro, landscape, specimen) observations.
Individual Reflective Exercise	20	TBA	7	In the context of environmental change, what pressing research needs to be done and from what perspectives? How can you get involved?
Final Group Project Assignment	20	TBA	1, 2, 3, 4, 5, 6, 7	Field guide contributions. Each student will make a contribution to a living field guide that will grow over the years.

Grades will be assigned according to the standards outlined in the U of G Undergraduate Calendar (p37-38).

### **Description of Assessment**

Specific material will vary depending on the topic, location and community the students will be working with; however, the general components of the course will include

- 1) Description & discussion of Indigenous and Western knowledge systems
- 2) Assessment of the natural history and diversity of the organisms found at the field location
- 3) Design, collect, manage and analyze data for either short- or long-term research studies
- 4) Reflection on personal and professional growth achieved through the experience
- 5) Accurately demonstrate relevant field techniques
- 6) Accurately and effectively communicate ideas, arguments and analyses through written work, oral presentations and other media

## **Course & University Policies**

### **When You Cannot Meet a Course Requirement**

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact, and be prepared to provide supporting documentation. See the Undergraduate Calendar for information on regulations and procedures for Academic Consideration

### **Policy for Re-grading of Midterm Exams and Assignments**

Students who wish to have their midterm exam or assignments re-graded must submit their exam or assignment within 1 week of the return of the midterm exam or assignment. The entire midterm exam or assignment will be re-graded so the mark may go up, down or remain unchanged.

### **Accessibility**

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the [Student Accessibility Services \(SAS\)](#) (formerly the Centre for Students with Disabilities) as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email [sas@uoguelph.ca](mailto:sas@uoguelph.ca).

### **Academic Misconduct**

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The [Academic Misconduct Policy](#) is detailed in the Undergraduate Calendar.

## **E-mail Communication**

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

## **Drop Date**

The last date to drop one-semester courses is the day before the end of the semester.

## **Copies of out-of-class assignments**

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

## **Recording of Materials**

Presentations which are made in relation to course work—including lectures—cannot be recorded in any electronic media without the permission of the presenter, whether the instructor, a classmate or guest lecturer.

## **Grading**

If you are absent from classes during the semester, you will be expected to make up missed lecture and laboratory material on your own. Assignments handed in late will be penalized 5% for every day that it is late.

## **General Campus Resources**

### **If you are concerned about any aspect of your academic program:**

Make an appointment with a [Program Counsellor](#) in your degree program.

### **If you are struggling to succeed academically:**

There are numerous academic resources offered by the [Learning Commons](#) including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills. You can also set up individualized appointments with a learning specialist.

### **If you are struggling with personal or health issues:**

[Counselling services](#) offers individualized appointments to help students work through personal struggles that may be impacting their academic performance.

[Student Health Services](#) is located on campus and is available to provide medical attention. For support related to stress and anxiety, besides Health Services and Counselling Services, [Kathy Somers](#) runs training workshops and one-on-one sessions related to stress management and high performance situations.

### **If you have a documented disability or think you may have a disability:**

Student Accessibility Services (SAS) formerly Centre for Students with Disabilities (CSD) can provide services and support for students with a documented learning or physical disability. They can also provide information about how to be tested for a learning disability. For more information, including how to register with the centre please see visit the [SAS website](#).