



IBIO*6010 Special Topics in Physiology

01

Winter 2021

Section(s): 01

Department of Integrative Biology

Credit Weight: 0.50

Version 2.00 - January 19, 2021

1 Course Details

1.1 Calendar Description

This is a course in which several faculty lecture and/or lead discussion groups in tutorials about advances in their broad areas, or related areas, of physiology. Topics may include metabolic adaptation to extreme environments, behavioural and molecular endocrinology, and exercise and muscle physiology, and will depend on who is co-ordinating the course for that particular offering. The course includes lectures and seminars in which the students actively participate.

1.2 Course Description

General course description

This course will be taught in a face-to-face format, unless covid restrictions require us to change to an online format.

Students will develop oral and written communication skills in multiple formats. Students will explore issues related to their own subdiscipline in physiology. Graduate students in ecology or evolution disciplines are welcome and will be able to explore ethical issues within their own

research topic.

1.3 Timetable

Timetable is subject to change. Please see WebAdvisor for the latest information.

Lecture: Time to be determined (2h/week)

Wednesday 9:30 - 11:20 AM, SSC 2315

1.4 Final Exam

There is no exam for this course.

2 Instructional Support

2.1 Instructional Support Team

Instructor:	Patricia Wright
Email:	patwrigh@uoguelph.ca
Office:	Virtual
Office Hours:	Individual online appointments may be arranged.

3 Learning Resources

3.1 Required Resources

Required Readings (Readings)

D.B.Resnick (2015)

What is ethics in research & why is it important?

<https://www.niehs.nih.gov/research/resources/bioethics/whatis/>

4 Learning Outcomes

Course Goals:

This course is designed to stimulate critical thinking about ethical issues in research, to reflect on your own biases and methodologies, to learn new skills that promote academic integrity and to create accessible materials for other graduate students on core aspects of research ethics.

4.1 Course Learning Outcomes

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

1. 1. Define and discuss research integrity.
 2. Critically evaluate "Research Code of Conduct" statements.
 3. Investigate and analyze best research practices for your own field and lab work.
 4. Demonstrate synthesis of course content by creating educational material on research integrity.
 5. Reflect on the importance of research integrity education.
2. Skills: 1. Develop internet research skills to access "Research Code of Conduct" documents. 2. Investigate and utilize data repository sites. 3. Enhance written and oral communication skills.

5 Teaching and Learning Activities

Lecture

Topics:

Week One: Introduction to Research Integrity

Week Two: Data Collection - How to Avoid Bias

Week Three: Data Analyses - Best Practices

Week Four: Data Repositories - Best Sites to Use

Week Five: Communication - Oral and Written, Mock Debate

Week Six: Debate

Week Seven: Journal Submission - Who Gets First Author?

Week Eight: Peer Review - How Does Bias Creep In?

Week Nine: Fraud? What are the Consequences?

Week Ten: Case Studies

Week Eleven: Present Podcast/Video/Blog

Week Twelve: How Would you Handle an Ethical Issue in Research?

6 Assessments

6.1 Marking Schemes & Distributions

Methods of assessment

Assignment	Topic	Due Date	% of Grade
1	Best Practices	Jan. 27	25
2	Debate (Mock)	Feb. 10	5
3	Debate	Feb. 24	25
4	Draft Podcast/Video/Blog	Mar. 24	10
5	Podcast/Video/Blog	Mar. 31	20
6	Reflection	Apr. 7	15

6.2 Assessment Details

Best Practices: A written document (<1000 words) on best practices for a field or lab technique that you are using. Students will identify possible sources of bias or inaccuracies

and provide solutions to eliminate errors.

Mock Debate: in class debate (no preparation required)

Debate: An oral debate on a current ethical controversy will involve all students (preparation required).

Podcast/Video/Blog: Students will work individually to create an educational podcast, video, or blog to educate other graduate students in CBS.

Reflection: A short written document (<400 words) on steps you would take if faced with an ethical problem in your research career.

7 Department of Integrative Biology Statements

7.1 Academic Advisors

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

- Make an appointment with a program counsellor in your degree program. [B.Sc. Academic Advising](#) or [Program Counsellors](#)

7.2 Academic Support

If you are struggling to succeed academically:

- Learning Commons: 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. <http://www.learningcommons.uoguelph.ca/>
- Science Commons: Located in the library, the Science Commons provides support for physics, mathematic/statistics, and chemistry. Details on their hours of operations can be found at: <http://www.lib.uoguelph.ca/get-assistance/studying/chemistry-physics-help> and <http://www.lib.uoguelph.ca/get-assistance/studying/math-stats-help>

7.3 Wellness

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. <https://www.uoguelph.ca/counselling/>
- Student Health Services is located on campus and is available to provide medical attention. <https://www.uoguelph.ca/studenthealthservices/clinic>
- 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. <http://www.selfregulationskills.ca/>

7.4 Personal information

Personal information is collected under the authority of the University of Guelph Act (1964), and in accordance with Ontario's Freedom of Information and Protection of Privacy Act (FIPPA) <http://www.e-laws.gov.on.ca/index.html>. This information is used by University officials in order to carry out their authorized academic and administrative responsibilities and also to establish a relationship for alumni and development purposes.

For more information regarding the Collection, Use and Disclosure of Personal Information policies please see the Undergraduate Calendar. (<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/intro/index.shtml>)

8 University Statements

8.1 Email Communication

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

8.2 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. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals
<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Graduate Calendar - Grounds for Academic Consideration
<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions
<https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml>

8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

Graduate Calendar - Registration Changes

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml>

Associate Diploma Calendar - Dropping Courses

<https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml>

8.4 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.

8.5 Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website

<https://www.uoguelph.ca/sas>

For Ridgetown students, information can be found on the Ridgetown SAS website

<https://www.ridgetownc.com/services/accessibilityservices.cfm>

8.6 Academic Integrity

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 encourages academic integrity. 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.

Undergraduate Calendar - Academic Misconduct

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Graduate Calendar - Academic Misconduct

<https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml>

8.7 Recording of Materials

Presentations that are made in relation to course work - including lectures - cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

8.8 Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars

<https://www.uoguelph.ca/academics/calendars>

8.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website (<https://news.uoguelph.ca/2019-novel-coronavirus-information/>) and circulated by email.

8.10 Illness

The University will not normally require verification of illness (doctor's notes) for fall 2020 or

winter 2021 semester courses. However, requests for Academic Consideration may still require medical documentation as appropriate.
