BIOM*3200 Biomedical Physiology

Fall 2018
Section: DE01

Department of Biomedical Sciences
Credit Weight: 1.00

Course Details

Calendar Description

This course focuses on the normal functioning of mammals. The physiology of the nervous, endocrine, reproductive, cardiovascular and digestive systems and homeostasis as reflected in respiratory and renal function is treated in a detailed manner. The integrative nature of various physiological systems is highlighted and cellular and molecular information is incorporated to enhance the understanding of these systems. Aspects of medically significant changes in the mammalian physiological systems are also introduced.

Pre-Requisite(s): BIOC*2580
Co-Requisite(s): None
Restriction(s): HK*3940. This is a Priority Access Course. Enrolment may be restricted to particular programs or specializations or semester levels during certain periods. Please see the department of Biomedical Sciences website for more information.

Method of Delivery: Online

Final Exam

Date: Friday, December 7, 2018
Time: 2:30 to 4:30 PM ET
Location: On campus
Instructional Support

Instructor

Sarah Lepage
Email: lepages@uoguelph.ca

Teaching Assistant(s)

Name: Diana Carvajal
Email: dcarvaja@uoguelph.ca

Name: Lisa Reynen
Email: ireynen@uoguelph.ca

Learning Resources

Required Textbook

Title: Human Physiology
Author(s): Stuart Ira Fox
Publisher: McGraw-Hill

You may purchase the textbook at the Guelph Campus Co-op Bookstore or the University of Guelph Bookstore. Please note that DE textbooks are located in the Distance Education section of the University of Guelph Bookstore.
https://guelphcampus.coop/bookstore
http://www.bookstore.uoguelph.ca/

Course Website

CourseLink (powered by D2L's Brightspace) is the course website and will act as your classroom. It is recommended that you log in to your course website every day to check for announcements, access course materials, and review the weekly schedule and assignment requirements.
https://courselink.uoguelph.ca
Learning Outcomes

Course Learning Outcomes

Welcome to BIOM*3200DE Mammalian Physiology! Mammalian physiology is the study of function in mammals. The cells, organs, and organ systems of the mammalian body must communicate and work together for normal function. This course will focus primarily on the physiology of the body’s organs and organ systems, while at the same time providing an understanding of how the mammalian body is organized.

Physiology is closely linked with anatomy due to the interdependence of structure and function. Thus, it is important as you progress through the units to keep in mind the course focus is physiology, but a certain amount of anatomy is critical for a proper understanding of function. Thus, you will be examined not only on the physiology of structures but also on the anatomy of these structures. Emphasis will be placed on this structural and functional relationship, and physiological adaptations will be highlighted.

Some alterations in form and function in mammals are quite evident. For example, the human pelvis has a unique anatomy, which ultimately allows bipedalism. Other examples include adaptations of the ruminant digestive tract or the alterations to the renal physiology of desert mammals.

The slow-acting endocrine system is the first physiological system examined in the course, followed by the renal and cardiovascular systems. The remaining units in the course examine the form and function of other organ systems including the immune, reproductive, neuro-muscular, respiratory, and digestive systems. Although these biological systems are provided in a logical order, it is important to remember that the organism is a sum of all the organ systems presented.

This course will utilize a comparative approach to highlight normal mammalian physiology.

The main goal of this course is to provide students with a strong working knowledge of basic physiological principles that will provide the framework for further physiology courses provided within the Department of Biomedical Sciences and beyond.

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

1. Describe and understand mammalian physiological principles;
2. Explain how each body system functions, interacts, and integrates with other body systems to achieve homeostasis and normal body function;
3. Describe the anatomical components of each physiological system and relate physiological function to anatomical form throughout all units covered in this course;
4. Identify and describe, using a comparative approach, key physiological adaptations to understand the basis for these adaptations; and
5. Describe and predict how external stimuli, such as medical or physical trauma, lead to alterations in homeostasis and/or changes in the physiological functioning of body systems, and how homeostatic balance is restored.

Teaching and Learning Activities

Course Structure

The concepts of this course are presented in 12 online units. The units are as follows:

- Unit 01: Endocrinology I
- Unit 02: Endocrinology I
- Unit 03: Renal Physiology
- Unit 04: Blood and Immunity
- Unit 05: Cardiovascular I
- Unit 06: Cardiovascular II
- Unit 07: Reproduction
- Unit 08: Homeostasis & Neurophysiology
- Unit 09: Synaptic Transmission & Muscle Physiology
- Unit 10: The Nervous System
- Unit 11: The Respiratory System
- Unit 12: Digestive Physiology

What to Expect for Each Unit

The units will help guide you in pacing yourself through the course materials. You will note that each unit has a section called checklist and one called extra support. The checklist provides a list of key concepts and is a way for you to check your knowledge, and then go back and review concepts you may need more work on. It can be a great study aid as it lists everything you need to know for a particular unit. The extra support section provides links to articles, videos, animations and additional resources. The material in this section is optional and will not be included on any of the quizzes, midterms or the final exam.

Schedule

It is strongly recommended that you follow the course schedule provided below. The schedule outlines what you should be working on each week of the course and lists the important due dates for the assessments. By following the schedule, you will be better prepared to complete the assessments and succeed in this course.
Unit 01: Endocrinology 1

Week 1 – Thursday, September 6 to Sunday, September 16

Required Readings
- Unit 01 Content
- Textbook (15th edition)
  - Chapter 11: Pages 316-353 (Same as Week 2)
  - Chapter 19: Pages 686-689 (Start at Section 19.5 and stop at Effects of Growth Hormone on Body Growth)

Recommended Readings
- Textbook (15th edition)
  - Pages 153-156 (Section 6.5 Cell Signaling)

Activities
- Familiarize yourself with the course website by reviewing the Start Here section of the course.
- Review the Outline and Assessments sections on the course website to learn about course expectations, assessments, and due dates.

Unit 02: Endocrinology II

Week 2 – Monday, September 17 to Sunday, September 23

Required Readings
- Unit 02 Content
- Textbook (15th edition)
  - Chapter 11: Pages 316-353 (Same as Week 1)
  - Chapter 19: Pages 677-686 (Sections 19.3 and 19.4; 14th edition: Pages 677-686)

Recommended Readings
- Textbook (15th edition)
  - Pages 149-153 (Section 6.4 The Membrane Potential; 14th edition: Pages 148-153)

Unit 03: Renal Physiology

Week 3 – Monday, September 24 to Sunday, September 30
Required Readings
- Unit 03 Content
- Textbook (15th edition)
  - Chapter 17: Pages 581-615

Recommended Readings
- Textbook (15th edition)
  - Pages 130-148 (Stop at Bulk Transport)

Assessments
- Quiz 1
  Opens: Monday, September 24 at 12:01 am ET
  Closes: Sunday, September 30 at 11:59 pm ET

Unit 04: Blood and Immunity

Week 4 – Monday, October 1 to Sunday, October 7

Required Readings
- Unit 04 Content
- Textbook (15th edition)
  - Chapter 13: Pages 404-418 (Stop at Section 13.3) and Pages 442-445 (Start at Section 13.8)
  - Chapter 15: Pages 493-519 (Stop at Section 15.5)

Assessments
- Quiz 2
  Opens: Monday, October 1 at 12:01 am ET
  Closes: Sunday, October 7 at 11:59 pm ET

Unit 05: Cardiovascular I

Week 5 – Monday, October 8 to Sunday, October 14

Required Readings
- Unit 05 Content
- Textbook (15th edition)
  - Chapter 12: Pages 391-393 (Section 12.6, Cardiac Muscle only, Stop at Smooth Muscle, included Figure 12.34)
Recommended Readings

- Textbook (15th edition)
  - Pages 172-179 (Stop at sub-section Conduction in an Unmyelinated Axon)

Assessments

- Midterm 1
  - Opens: Wednesday, October 10 at 12:01 am ET
  - Closes: Friday, October 12 at 11:59 pm ET

Unit 06: Cardiovascular II

Week 6 – Monday, October 15 to Sunday, October 21

Required Readings

- Unit 06 Content
- Textbook (15th edition)
  - Chapter 13: Pages 431-436 (Section 13.6)
  - Chapter 14: Pages 450-482 (Stop at Section 14.7)

Assessments

- Quiz 3
  - Opens: Monday, October 15 at 12:01 am ET
  - Closes: Sunday, October 21 at 11:59 pm ET

Unit 07: Reproduction

Week 7 – Monday, October 22 to Sunday, October 28

Required Readings

- Unit 07 Content
- Textbook (15th edition)
  - Chapter 20: Pages 701-748

Assessments

- Quiz 4
  - Opens: Monday, October 22 at 12:01 am ET
  - Closes: Sunday, October 28 at 11:59 pm ET
- Paper Critique
Unit 08: Homeostasis and Neurophysiology

Week 8 – Monday, October 29 to Sunday, November 4 (40th Class Day: Friday, November 2)

Required Readings
- Unit 08 Content
- Textbook (15th edition)
  - Chapter 1: Pages 4-10 (up to Section 1.3)
  - Chapter 6: Pages 148-153 (Start at Bulk Transport, Stop at Section 6.5)
  - Chapter 7: Pages 163-180 (Stop at Section 7.3)

Recommended Readings
- Textbook (15th edition)
  - Pages 50-56 (Stop at Section 3.2) and pages 130-157

Assessments
- Quiz 5
  Opens: Monday, October 29 at 12:01 am ET
  Closes: Sunday, November 4 at 11:59 pm ET

- Paper Critique
  Due: Friday, November 2 by 11:59 pm ET

Unit 09: Synaptic Transmission & Muscle Physiology

Week 9 – Monday, November 5 to Sunday, November 11

Required Readings
- Unit 09 Content
- Textbook (15th edition)
  - Chapter 7: Pages 172-201
  - Chapter 12: Pages 359-397

Recommended Readings
- Textbook (15th edition)
  - Pages 148-156

Assessments
• Quiz 6  
  Opens: Monday, November 5 at 12:01 am ET  
  Closes: Sunday, November 11 at 11:59 pm ET

• Paper Critique  
  Papers available for peer-evaluation: Wednesday, November 7 at 12:01 am ET

### Unit 10: The Nervous System

**Week 10 – Monday, November 12 to Sunday, November 18**

- **Required Readings**
  - Unit 10 Content
  - Textbook (15th edition)
    - Chapter 8: Pages 206-232 (Stop at Section 8.5)
    - Chapter 9: Pages 243-261

- **Assessments**
  - **Midterm 2**
    - Opens: Wednesday, November 14 at 12:01 am ET  
    - Closes: Friday, November 16 at 11:59 pm ET
  - **Paper Critique**  
    - Peer-evaluations
    - Due: Sunday, November 18 at 11:59 pm ET

### Unit 11: The Respiratory System

**Week 11 – Monday, November 19 to Sunday, November 25**

- **Required Readings**
  - Unit 11 Content
  - Textbook (15th edition)
    - Chapter 16: Pages 532-574

- **Assessments**
  - **Quiz 7**
    - Opens: Monday, November 19 at 12:01 am ET
    - Closes: Sunday, November 25 at 11:59 pm ET

### Unit 12: Digestive Physiology

**Week 12 – Monday, November 26 to Friday, November 30**

- **Required Readings**
Assessments

- **Quiz 8**
  Opens: Monday, November 26 at 12:01 am ET
  Closes: Friday, November 30 at 11:59 pm ET

Assessment

The grade determination for this course is indicated in the following table. A brief description of each assessment is provided below. Select **Content** on the navbar to locate **Assessments** in the table of contents panel to review further details of each assessment. Due dates can be found under the Schedule heading of this outline.

### Table 1: Course Assessment

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (8 @ 1.25% each)</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm I</td>
<td>20%</td>
</tr>
<tr>
<td>Paper Critique</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm II</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Assessment Descriptions**

**Quizzes**

The quizzes are designed to help you stay on schedule. You can access the quizzes from the **Quizzes** tool, located in the Tools dropdown list in the navbar. You will have 2 attempts to complete each quiz and 20 minutes to complete each attempt once you started. The highest mark among the two attempts will be recorded. Each quiz will consist of multiple-choice and true/false questions.

**Midterms**
Midterm examinations will consist of multiple choice and short answer questions and will be written online using the Quizzes tool. You will have 1 attempt and 60 minutes to complete each midterm, which will be available from 12:01 am ET Wednesday to 11:59 pm Friday of the scheduled week.

**Paper Critique**

A paper to critique following the recommended guidelines will be assigned to each student and peer-reviewed by 4 other students to which the same paper was assigned. The average of a minimum of 3 peer-reviewed marks—chosen according to Instructors’ criteria—will count towards 10% of the final mark. Please note that the mark will be assigned only if each student will complete its critique and evaluate the other papers assigned to be evaluated.

**Final Exam**

This course requires you to write a traditional sit-down final exam. Final exams are written on campus at the University of Guelph or at alternate locations for students at a distance. The final exam is comprehensive of all the material covered in the course with emphasis on the last 5 units (Units 08-12) and will consist of multiple choice, short answer, and long answer questions. **You must pass the final exam to pass the course.** If the final is not passed, then the mark for the course will be recorded as a 49% (or less depending on performance in the other assessments).

It is assumed that all DE students will be writing their final examination on campus at the University of Guelph. University of Guelph degree and associate diploma students must check WebAdvisor for their examination schedule. Open Learning program students must check the Open Learning Program Final Examination Schedule for their examination schedule.

If you are studying at a distance, you can request to write your final exam at an alternate location. It is recommended that you make arrangements as early as possible in the semester since changes cannot be guaranteed after the deadline. Exam schedules for off-campus exams will be emailed by Week 9 of the course. For more information, please visit Final Exams.

https://webadvisor.uoguelph.ca/

http://opened.uoguelph.ca/student-resources/Open-Learning-Program-Final-Exam-Schedule

http://opened.uoguelph.ca/student-resources/final-exams

---

**Course Technologies and Technical Support**

**CourseLink System Requirements**
You are responsible for ensuring that your computer system meets the necessary system requirements. Use the browser check tool to ensure your browser settings are compatible and up to date. (Results will be displayed in a new browser window).

http://spaces.uoguelph.ca/ed/system-requirements/

https://courselink.uoguelph.ca/d2l/systemCheck

Technical Skills

As part of your online experience, you are expected to use a variety of technology as part of your learning:

- Manage files and folders on your computer (e.g., save, name, copy, backup, rename, delete, and check properties);
- Install software, security, and virus protection;
- Use office applications (e.g., Word, PowerPoint, Excel, or similar) to create documents;
- Be comfortable uploading and downloading saved files;
- Communicate using email (e.g., create, receive, reply, print, send, download, and open attachments);
- Navigate the CourseLink learning environment and use the essential tools, such as Dropbox, Quizzes, Discussions, and Grades (the instructions for this are given in your course);
- Access, navigate, and search the Internet using a web browser (e.g., Firefox, Internet Explorer); and
- Perform online research using various search engines (e.g., Google) and library databases.

Course Technologies

CourseLink

Distance Education courses are offered entirely online using CourseLink (powered by D2L's Brightspace), the University of Guelph's online learning management system (LMS). By using this service, you agree to comply with the University of Guelph's Access and Privacy Guidelines. Please visit the D2L website to review the Brightspace privacy statement and Brightspace Learning Environment web accessibility standards.

http://www.uoguelph.ca/web/privacy/

https://www.d2l.com/legal/privacy/

https://www.d2l.com/accessibility/standards/

Peer Evaluation, Assessment and Review (PEAR)
This course will use the Peer Evaluation, Assessment and Review (PEAR) tool. The PEAR tool is subject to the University of Guelph’s Access and Privacy Guidelines outlined on the University website. An accessibility statement does not exist for this course technology.

http://www.uoguelph.ca/web/privacy/

**Technical Support**

If you need any assistance with the software tools or the CourseLink website, contact CourseLink Support.

**CourseLink Support**
University of Guelph
Day Hall, Room 211
Email: courselink@uoguelph.ca
Tel: 519-824-4120 ext. 56939
Toll-Free (CAN/USA): 1-866-275-1478

**Walk-In Hours (Eastern Time):**
Monday thru Friday: 8:30 am–4:30 pm

**Phone/Email Hours (Eastern Time):**
Monday thru Friday: 8:30 am–8:30 pm
Saturday: 10:00 am–4:00 pm
Sunday: 12:00 pm–6:00 pm

---

**Course Specific Standard Statements**

**Acceptable Use**

The University of Guelph has an Acceptable Use Policy, which you are expected to adhere to.

https://www.uoguelph.ca/ccs/infosec/aup

**Communicating with Your Instructor**

During the course, your instructor will interact with you on various course matters on the course website using the following ways of communication:

- **Announcements:** The instructor will use Announcements on the Course Home page to provide you with course reminders and updates. Please check this section frequently for course updates from your instructor.

- **Ask Your Instructor Discussion:** Use this discussion forum to ask questions of your instructor about content or course-related issues with which you are unfamiliar. If you encounter difficulties, the instructor is here to help you. Please post general course-related questions to the discussion forum so that all students
have an opportunity to review the response. To access this discussion forum, select Discussions from the Tools dropdown menu.

- **Email**: If you have a conflict that prevents you from completing course requirements, or have a question concerning a personal matter, you can send your instructor a private message by email. The instructor will respond to your email within 48 to 72 hours.

- **Skype**: If you have a complex question you would like to discuss with your instructor, you may book a Skype meeting. Skype meetings depend on the availability of you and the instructor, and are booked on a first come first served basis.

### Netiquette Expectations

For distance education courses, the course website is considered the classroom and the same protections, expectations, guidelines, and regulations used in face-to-face settings apply, plus other policies and considerations that come into play specifically because these courses are online.

Inappropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students;
- Using obscene or offensive language online;
- Copying or presenting someone else's work as your own;
- Adapting information from the Internet without using proper citations or references;
- Buying or selling term papers or assignments;
- Posting or selling course materials to course notes websites;
- Having someone else complete your quiz or completing a quiz for/with another student;
- Stating false claims about lost quiz answers or other assignment submissions;
- Threatening or harassing a student or instructor online;
- Discriminating against fellow students, instructors, and/or TAs;
- Using the course website to promote profit-driven products or services;
- Attempting to compromise the security or functionality of the learning management system; and
- Sharing your username and password.

### Time Commitment and Workload
A lot of information is presented in this course. You are responsible for 1.0 credit's worth of information presented over one semester.

It is recommended that you spend an average of 10-12 hours/week (minimum) to learn and review the material, in addition to completing the online assignments. Due to the volume of information presented, the course will focus on human or primate anatomy and physiology (the recommended text book is human-based), and highlight key examples where mammalian organs and organ systems are adapted to specific environmental niches.

**Late Policy**

If you choose to submit your individual assignments to the Dropbox tool late, the full allocated mark will be reduced by 2% per day after the deadline for the submission of the assignment to a limit of four days at which time access to the Dropbox folder will be closed.

Extensions will be considered for medical reasons or other extenuating circumstances. If you require an extension, discuss this with the instructor as soon as possible and well before the due date. Barring exceptional circumstances, extensions will not be granted once the due date has passed. These rules are not designed to be arbitrary, nor are they inflexible. They are designed to keep you organized, to ensure that all students have the same amount of time to work on assignments, and to help to return marked materials to you in the shortest possible time.

**Obtaining Grades and Feedback**

Unofficial assessment marks will be available in the Grades tool of the course website.

Your instructor will have grades posted online within 2 weeks of the submission deadline, if the assignment was submitted on time. Once your assignments are marked you can view your grades on the course website by selecting Grades from the Tools dropdown menu on the navbar. Your course will remain open to you for seven days following the last day of the final exam period.

University of Guelph degree students can access their final grade by logging into WebAdvisor (using your U of G central ID). Open Learning program students should log in to the OpenEd Student Portal to view their final grade (using the same username and password you have been using for your courses).

https://webadvisor.uoguelph.ca/
https://courses.opened.uoguelph.ca/portal/logon.do?method=load

**Rights and Responsibilities When Learning Online**

For distance education (DE) courses, the course website is considered the classroom and the same protections, expectations, guidelines, and regulations used in face-to-face settings apply, plus other policies and considerations that come into play specifically because these courses are online.
For more information on your rights and responsibilities when learning in the online environment, visit Rights and Responsibilities.
http://opened.uoguelph.ca/student-resources/rights-and-responsibilities

University Standard Statements

University of Guelph: Undergraduate Policies

As a student of the University of Guelph, it is important for you to understand your rights and responsibilities and the academic rules and regulations that you must abide by.

If you are a registered University of Guelph Degree Student, consult the Undergraduate Calendar for the rules, regulations, curricula, programs and fees for current and previous academic years.

If you are an Open Learning Program Student, consult the Open Learning Program Calendar for information about University of Guelph administrative policies, procedures and services.

https://www.uoguelph.ca/registrar/calendars/undergraduate/current/
http://opened.uoguelph.ca/student-resources/open-learning-program-calendar

Email Communication

University of Guelph Degree Students

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.

Open Learning Program Students

Check your email account (the account you provided upon registration) regularly for important communications, as this is the primary conduit by which the Open Learning and Educational Support will notify you of events, deadlines, announcements or any other official information.

When You Cannot Meet Course Requirements

When you find yourself unable to meet an in-course requirement due to illness or compassionate reasons, please advise your course instructor in writing, with your name, ID number and email contact.

University of Guelph Degree Students

Consult the Undergraduate Calendar for information on regulations and procedures for Academic Consideration.
Open Learning Program Students

Please refer to the Open Learning Program Calendar for information on regulations and procedures for requesting Academic Consideration.

http://opened.uoguelph.ca/student-resources/open-learning-program-calendar

Drop Date

University of Guelph Degree Students

The last date to drop one-semester courses, without academic penalty, is indicated on the Schedule section of this course outline. Review the Undergraduate Calendar for regulations and procedures for Dropping Courses.

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

Open Learning Program Students

Please refer to the Open Learning Program Calendar.

http://opened.uoguelph.ca/student-resources/open-learning-program-calendar

Copies of Assignments

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

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.

University of Guelph Degree Students

Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Accessibility Services as soon as possible.

For more information, contact Accessibility Services at 519-824-4120 ext. 56208, email Accessibility Services or visit the Accessibility Services website.

accessibility@uoguelph.ca
https://wellness.uoguelph.ca/accessibility/

Open Learning Program Students
If you are an Open Learning program student who requires academic accommodation, please contact the Academic Assistant to the Director. Please ensure that you contact us before the end of the first week of your course (every semester) in order to avoid any delays in support. Documentation from a health professional is required for all academic accommodations. Please note that all information provided will be held in confidence.

If you require textbooks produced in an alternate format (e.g., DAISY, Braille, large print or eText), please contact the Academic Assistant to the Director at least two months prior to the course start date. If contact is not made within the suggested time frame, support may be delayed. It is recommended that you refer to the course outline before beginning your course in order to determine the required readings.

The provision of academic accommodation is a shared responsibility between OpenEd and the student requesting accommodation. It is recognized that academic accommodations are intended to “level the playing field” for students with disabilities.

jessica.martin@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.

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

Copyright Notice

Content within this course is copyright protected. Third party copyrighted materials (such as book chapters and articles) have either been licensed for use in this course, or have been copied under an exception or limitation in Canadian Copyright law.

The fair dealing exemption in Canada's Copyright Act permits students to reproduce short excerpts from copyright-protected materials for purposes such as research, education, private study, criticism and review, with proper attribution. Any other copying,
communicating, or distribution of any content provided in this course, except as permitted by law, may be an infringement of copyright if done without proper license or the consent of the copyright owner. Examples of infringing uses of copyrighted works would include uploading materials to a commercial third party web site, or making paper or electronic reproductions of all, or a substantial part, of works such as textbooks for commercial purposes.

Students who upload to CourseLink copyrighted materials such as book chapters, journal articles, or materials taken from the Internet, must ensure that they comply with Canadian Copyright law or with the terms of the University’s electronic resource licenses.

For more information about students’ rights and obligations with respect to copyrighted works, review [Fair Dealing Guidance for Students](http://www.lib.uoguelph.ca/sites/default/files/fair_dealing_policy_0.pdf).

**Plagiarism Detection Software**

Students should be aware that faculty have the right to use software to aid in the detection of plagiarism or copying and to examine students orally on submitted work. For students found guilty of academic misconduct, serious penalties, up to and including suspension or expulsion from the University can be imposed.

**Recording of Materials**

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