



ANSC*4490 Applied Endocrinology

Winter 2023

Section(s): C01

Department of Animal Biosciences

Credit Weight: 0.50

Version 1.00 - January 05, 2023

1 Course Details

1.1 Calendar Description

This course examines the endocrine systems of farm animals and their applications to improve and monitor the production, performance, behavior and health of livestock. Considerable emphasis will be placed upon understanding how knowledge of endocrine regulation can be applied within animal production systems.

Pre-Requisites: ANSC*3080

1.2 Course Description

In this course, we hope to stimulate your excitement about science and the scientific approach; that is, how new information is discovered and how it can be applied to animal production systems. We will also encourage you to be an independent and critical thinker. This learning process is more important than remembering every detail of the material, but you need to know enough detail to be able to potentially manipulate the endocrine systems we are studying. Assessments emphasize the understanding and integration of information rather than memorization of material. The lecture notes will be posted on CourseLink and students are expected to review the notes and to read the appropriate sections of the textbook to prepare for the lecture.

1.3 Timetable

Tuesday 1:00 - 2:20 p.m.; Thursday 1:00 - 2:20 p.m. room ANNU 156

Timetable is subject to change. Please see WebAdvisor for the latest information. Lectures will be recorded and placed on CourseLink one week after the lecture time.

1.4 Final Exam

The final assignment is due on Apr 14 at 4:30 pm.

2 Instructional Support

2.1 Instructional Support Team

Instructor: James Squires
Email: jsquires@uoguelph.ca
Telephone: +1-519-824-4120 x53928
Office: ANNU 146
Office Hours: By appointment

Instructor: Christine Bone
Email: cbone@uoguelph.ca
Office: ANNU 208
Office Hours: By appointment

2.2 Teaching Assistants

Teaching Assistant (GTA): Melissa Parent
Email: mparen02@uoguelph.ca
Office: by appointment

Teaching Assistant (GTA): Lauren Fletcher
Email: lfletc03@uoguelph.ca
Office: by appointment

2.3 Netiquette Expectations

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
- Sharing your user name and password
- Recording lectures without the permission of the instructor

2.4 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.
 - **Questions:** All questions should be directed to the TA first for resolution. If necessary, it will be escalated to the instructor.
 - **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 attempt to respond to your email within 24 hours.
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3 Learning Resources

3.1 Required Resources

Required Texts (Textbook)

N/A

3.2 Recommended Resources

Recommended (Textbook)

Applied Animal Endocrinology 2nd Edition, E.J. Squires, CAB International (also available on reserve at the library and as an ebook on Amazon and Google Play). Note that the 2nd edition contains more detailed information than the 1st edition.

3.3 Additional Resources

Lab Manual (Lab Manual)

N/A

Other Resources (Other)

All course lectures and supplementary materials are available on the CourseLink site.

Field Trips (Other)

N/A

Additional Costs (Other)

N/A

3.4 Course Technology and Technical Support

This course will use a variety of technologies that may include

- CourseLink (main classroom)
- Zoom
- Teams (via Office 365)

To help ensure you have the best learning experience possible, please review the list of system and software requirements.

<https://opened.uoguelph.ca/student-resources/system-and-software-requirements>

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>

CourseLink

This course is being offered 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/>

Technical Support

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

Email: courselink@uoguelph.ca

Tel: 519-824-4120 ext. 56939 Toll-Free (CAN/USA): 1-866-275-1478

Support 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

Teams (via Office 365)

Office 365 Teams is a collaboration service that provides shared conversation spaces to help teams coordinate and communicate information. This course may use Teams for one on one meetings with your Instructor. It is recommended that you use the desktop version of Teams. As a student you are responsible for learning how to use Teams and it's features.

For Teams Support visit the CCS website for more information.

<https://www.uoguelph.ca/ccs/services/office365/teams>

Zoom

This course may use Zoom to record lectures which will be available by request. Check your system requirements to ensure you will be able to participate.

<https://opened.uoguelph.ca/student-resources/system-and-software-requirements>

3.4 Technical Skills

As part of your learning experience, you are expected to use a variety of technologies for assignments, lectures, teamwork, and meetings. In order to be successful in this course you will need to have the following technical skills:

- 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.

3.4 Library Access

As a student, you have access to the University of Guelph's library collection, including both physical and electronic materials. For information on checking out or couriering physical library items, accessing electronic journals and returning items to the library, visit the library's website.

If you are studying off campus and would like to access the library's electronic resources, use the Off Campus Login and login using your Single Sign On credentials or using your last name and library barcode.

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

<https://www.lib.uoguelph.ca/campus-login>

Ares

For this course, you will be required to access course reserve materials through the University of Guelph McLaughlin Library. To access these items, select **Ares** on the navbar in CourseLink. Note that you will need your Central Login ID and password in order to access items on reserve.

For further instructions on accessing reserve resources, visit [How to Get Course Reserve Materials](#).

If at any point during the course you have difficulty accessing reserve materials, please contact the e-Learning Operations and Reserve Services staff at:

Tel: 519-824-4120 ext. 53621

Email: libres2@uoguelph.ca

<https://www.lib.uoguelph.ca/find/course-reserves-ares/how-get-course-reserve-material>

4 Learning Outcomes

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

4.1 Course Learning Outcomes

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

1. Understand and explain the concepts of endocrinology, including the structure and function of hormones and receptors, and the integration of hormone action.
2. Evaluate methods to study how endocrine systems work and how they can be manipulated or used to monitor animal production systems.
3. Integrate information to manipulate selected endocrine systems that can affect

- animal growth and carcass composition
- the production of animal products, and
- animal behaviour, health and response to environment

4. Critically analyse experiments in endocrinology in written form and in class presentations

5 Teaching and Learning Activities

5.1 Lecture

Tue, Jan 10

Topics:

Endocrine Systems

- Introduction and overview of hormones and endocrinology

References:

- Textbook Ch. 1, pp. 1-6

Thu, Jan 12

Topics:

Endocrine Systems

- Synthesis, release and metabolism of hormones

References:

- Textbook Ch. 1, pp. 7-17

Tue, Jan 17

Topics:

Endocrine Systems

- Cell surface receptors (part 1)

References:

- Textbook Ch. 1, pp. 18-29

Thu, Jan 19

Topics:

Endocrine Systems

- Cell surface receptors (part 2)

Tue, Jan 24

Topics: Endocrine Systems

- Intracellular receptors

References: • Textbook Ch. 1, pp. 29-38

Thu, Jan 26

Topics: Endocrine Systems

- Integration of Hormone Action

References: Textbook Ch. 1, pp. 39-44

Tue, Jan 31

Topics: Endocrine Systems

- Midterm review and questions posted

Thu, Feb 2

Topics: Endocrine Methodologies

- Methods for determining how endocrine systems function

References: • Textbook Ch. 2, pp. 47-57

Tue, Feb 7

Topics: Endocrine Methodologies

- Assay methods for measuring hormones (part 1)

- References:**
- Textbook Ch. 2, pp. 57-67

Thu, Feb 9

Topics: Endocrine Methodologies

- Assay methods for measuring hormones (part 2)

- References:**
- Textbook Ch. 2, pp. 57-67

Tue, Feb 14

Topics: Endocrine Methodologies

- Receptor binding assays

- References:**
- Textbook Ch. 2, pp. 67-70

Thu, Feb 16

Topics: Endocrine Methodologies

- Methods for producing hormones

- References:**
- Textbook Ch. 2, pp. 70-77

Tue, Feb 28

Topics: Endocrine Methodologies

- Manipulating endocrine systems

- References:**
- Textbook Ch. 2, pp. 77-86

Thu, Mar 2

Topics: Endocrine Methodologies

- Midterm review and questions posted

Tue, Mar 7

Topics:

Applications of Endocrinology

- Presentation and Final Assignment Instructions and Review

Thu, Mar 9

Topics:

Applications of Endocrinology

- Guest lecture: Endocrine applications in aquaculture (R. Moccia)

Tue, Mar 14

Topics:

Applications of Endocrinology

- **Student Presentations**
- *Topic:* Endocrine manipulation of growth and carcass composition

Thu, Mar 16

Topics:

Applications of Endocrinology

- **Student Presentations**
- *Topic:* Endocrine manipulation of growth and carcass composition

Tue, Mar 21

Topics:

Applications of Endocrinology

- **Student Presentations**
- *Topic:* Endocrine manipulation of growth and carcass composition

Thu, Mar 23

Topics:

Applications of Endocrinology

- **Student Presentations**
- *Topic:* Endocrine manipulation of growth and carcass composition or effects on animal products

Tue, Mar 28

Topics:

Applications of Endocrinology

- **Student Presentations**
- *Topic:* Endocrine effect on animal products

Thu, Mar 30

Topics:

Applications of Endocrinology

- **Student Presentations**
- *Topic:* Endocrine effect on animal products or health, behaviour and response to environment

Tue, Apr 4

Topics:

Applications of Endocrinology

- **Student Presentations**
- *Topic:* Effects on animal behaviour, health, and response to environment

Thu, Apr 6

Topics:

Applications of Endocrinology

- **Student Presentations**
- *Topic:* Effects on animal behaviour, health, and response to environment

5.2 Final Assignment due April 14th at 4:30pm

5.3 Note:

This is a tentative schedule and may be changed at the instructor's discretion.

5.4 Extra

Additional Information for In-class Student Presentations (March 14 to April 6)

Groups of 4-5 students will present on specific applications of endocrinology in Animal Biosciences that are of interest to the group. Background information is available in the textbook to help the groups to get started on their presentations, but the material presented should be current. The presentations will include a discussion of innovative methods used in endocrinology and applications of various endocrine systems. They consist of a 30-minute seminar with 10 additional minutes for discussion. There will be 2 student presentations in one class period. PowerPoint or other computer graphics programs should be used.

Presentations should cover the following points:

- **Introduction:** A summary of the relevant literature in the area that provides a current overview of the subject. Why is this area important?
- **Endocrinological Principles:** A description of the endocrinological principles involved in the problem. This includes an outline of the hormones and receptors involved and their mechanism of action.
- **Innovative Research:** A critical discussion of at least two different key papers (**not** review articles) in peer-reviewed journals that have made a significant impact or described key methodologies in this area of endocrinology. How have these findings helped to advance the level of knowledge or impact this area of endocrinology? How are they innovative? What model systems are used for this work? What were the key findings?
- **Applications:** A discussion of current applications and other potential applications of the system. How is the system modified or otherwise used to advantage? What is the potential impact of this?

An example presentation will be provided on CourseLink that demonstrates the quality of content that is expected from the presentations. A description of the assignment criteria being addressed on each slide will be available in the notes section for each slide. Presenters must email the presentation to the instructor by the day before their set presentation date so that it can be posted on CourseLink. It is highly recommended that each group contact the TAs through email to facilitate a meeting at least one week prior to the presentation date. This TA check in meeting will provide the students with an opportunity to receive feedback and make any necessary changes to their presentations in advance.

Peer Feedback & Additional Bonus Questions

All students are expected to be present at these presentations and should actively contribute

to the discussion by asking questions and adding in new information. Students are also expected to make written critical comments on the presentation through 5 presentation bonus questions. For 5 presentations on different days, you can submit the answer to the following bonus question:

Describe how one of the presentations today was innovative and might lead to significant impacts on animal production systems.

Each answer to this bonus question should be completed on the Oral Presentation Peer Feedback form given out on the day of the presentation.

Evaluation of the Presentation

Format of the presentation (quality of slides, clarity of presentation)	5%
Content of the presentation and question period (amount of research, quality of information, originality, level of understanding of topic, ability to answer questions)	15%
Total for Presentation (Group Mark)	20%

The additional 5% for answers to presentation bonus questions is an individual grade.

Presentation Topics

Topic 1: Endocrine Manipulation of Growth and Carcass Composition

6 to 8 Student presentations from the following topics:

- Porcine stress syndrome and PSE meat
- Effects of somatotropin
- Effects of b-agonists
- Use of Selective Nuclear Receptor Modulators (SERMs and SARMs)
- Dietary chromium and insulin
- Leptin and other adipokines and lipokines
- Thyroid hormones
- Dietary PUFA (linoleic, linolenic, gamma-linolenic acid and conjugated linoleic acid)
- Control of appetite
- Effects of the gut microbiome

Topic 2: Endocrine Effects on Animal Products

4 to 6 Student presentations from the following topics:

Milk Production

- Hormonal effects on mammary growth and initiation of lactation
- Hormonal effects (eg bST) on maintenance of lactation
- Metabolic diseases of lactation (milk fever, ketosis)

Wool Production

- Factors affecting wool production and endocrine defleecing
- The skin as an endocrine tissue

Egg Production

- Regulation of follicular development, egg production and moulting
- Regulation of eggshell formation and calcium homeostasis
- Endocrine effects on sexual development in chickens

Topic 3: Effects on Animal Behaviour, Health and Response to Environment

4 to 6 Student presentations from the following topics:

- Endocrine measures of health and production efficiency
- Endocrine applications in toxicology
- Control of broodiness in poultry
- Applications of pheromones in vertebrates
- Applications of pheromones in Insects
- 'Sniffer Dogs' as bioassay tools
- Endocrine control of cancer

6 Assessments

6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Lecture Participation	5
Take Home Quiz on Endocrine Systems	15
Take Home Quiz on Endocrine Methods	15

Name	Scheme A (%)
Class Presentation	20
Presentation Bonus Questions	5
Final Assignment outline	5
Final Assignment	35
Total	100

6.2 Assessment Details

Lecture Participation (5%)

Date: Tue, Jan 10 - Tue, Feb 28

Learning Outcome: 1, 2

Take Home Quiz on Endocrine Systems (15%)

Date: Tue, Jan 31

Learning Outcome: 1, 2

Students have one week to complete the midterm (due Feb 7)

Take Home Quiz on Endocrine Methods (15%)

Date: Thu, Mar 2

Learning Outcome: 1, 2

Students have one week to complete the midterm (due March 9)

Class Presentation (20%)

Date: Tue, Mar 14 - Thu, Apr 6

Learning Outcome: 3, 4

20% - group mark

Presentation Bonus Questions (5%)

Date: Tue, Mar 14 - Thu, Apr 6

Learning Outcome: 1, 2, 3, 4

Final Assignment Outline (5%)

Date: Thu, Mar 30

Learning Outcome: 3, 4

Final Assignment (35%)

Date: Fri, Apr 14, 4:30 PM, Submit via dropbox

Learning Outcome: 3, 4

6.3 Additional Details regarding Assessments

Assessments

This is a tentative mark breakdown and may be changed at the instructor's discretion.

Final assignment date and time: **Due Apr. 14 at 4:30 p.m.**

Final assignment weighting: 35% + 5% for assignment outline

Group Work

At the beginning of the semester, students are asked to form groups of 5 based on common interest of a topic for the presentations (listed below). In these groups, students will work together for the presentations. You must choose a group by the winter break or after that you will be assigned to a group by the instructors.

Course Quizzes and Assignments

The quizzes in this course are intended to test the knowledge and understanding of the material. Each quiz is worth 15% and is non-cumulative. They are take home format with one week to complete and submitted via Dropbox. Students are encouraged to use all available resources and work together to complete them. **However, students must submit individual work written in their own words.** Plagiarism will not be tolerated.

Assignments are designed for students to apply and understand the material presented in lectures. Students will submit a final assignment outline (5%) detailing their plans for the final assignment (35%), which is designed to build off the material from the group presentations. The details for the final assignment will be released mid-February. All assignments will be submitted via Dropbox.

Lecture Participation

The objective of the 5% participation mark is to provide an anonymous platform for students to submit questions they have regarding the lecture that they would like clarified. Questions can be submitted at the end of each lecture on CourseLink and will assist the instructors in developing review questions and concepts to be covered at the start of the following lecture. Students can alternatively answer a review question that will be provided after each lecture to obtain participation marks.

7 Course Statements

7.1 Grading Policies

Assignments should be submitted via Dropbox by 4:30 p.m. on the due date. Late penalties of 2% per day will be assessed for late submissions.

Our philosophy with grading is that if you work hard and deserve an A, you will not be prevented from receiving that grade. There is no set number of A's that can or have to be assigned. We want all students to work hard and do the best that they can. That being said, we will be grading according to the university policy outlined below.

The assignment of grades at the University of Guelph be based on clearly defined standards, which are to be published in the Undergraduate Calendar for the benefit of faculty and students and that the definitions for each of the numerical grade range (letter grades) be as follows:

- **80 - 100 (A) Excellent.** An outstanding performance in which the student demonstrates a superior grasp of the subject matter, and an ability to go beyond the given material in a critical and constructive manner. The student demonstrates a high degree of creative and/or logical thinking, a superior ability to organize, to analyze, and to integrate ideas, and a thorough familiarity with the appropriate literature and techniques.
- **70 - 79 (B) Good.** A more than adequate performance in which the student demonstrates a thorough grasp of the subject matter, and an ability to organize and examine the material in a critical and constructive manner. The student demonstrates a good understanding of the relevant issues and a familiarity with the appropriate literature and techniques.
- **60 - 69 (C) Acceptable.** An adequate performance in which the student demonstrates a generally adequate grasp of the subject matter and a moderate ability to examine the material in a critical and constructive manner. The student displays an adequate understanding of the relevant issues, and a general familiarity with the appropriate literature and techniques.
- **50 - 59 (D) Minimally Acceptable.** A barely adequate performance in which the student demonstrates a familiarity with the subject matter, but whose attempts to examine the material in a critical and constructive manner are only partially successful. The student displays some understanding of the relevant issues, and some familiarity with the appropriate literature and techniques.
- **0 - 49 (F) Fail.** An inadequate performance.

7.2 Course Policy on Group Work

All group members are expected to contribute equally to the class presentations, but individuals may be responsible for different aspects of the work. All students in the group normally participate in the presentation and answer questions.

7.3 Dropbox Submissions

Assignments should be submitted electronically via the online **Dropbox** tool. When submitting

your assignments using the **Dropbox** tool, do not leave the page until your assignment has successfully uploaded. To verify that your submission was complete, you can view the submission history immediately after the upload to see which files uploaded successfully. The system will also email you a receipt. Save this email receipt as proof of submission.

Be sure to keep a back-up copy of all of your assignments in the event that they are lost in transition. In order to avoid any last-minute computer problems, your instructor strongly recommend you save your assignments to a cloud-based file storage (e.g., OneDrive), or send to your email account, so that should something happen to your computer, the assignment could still be submitted on time or re-submitted.

It is your responsibility to submit your assignments on time as specified on the Schedule. Be sure to check the technical requirements and make sure you have the proper computer, that you have a supported browser, and that you have reliable Internet access. Remember that **technical difficulty is not an excuse not to turn in your assignment on time**. Don't wait until the last minute as you may get behind in your work.

If, for some reason, you have a technical difficulty when submitting your assignment electronically, please contact your instructor or CourseLink Support.

<http://spaces.uoguelph.ca/ed/contact-us/>

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 make a booking at least 14 days in advance, and no later than November 1 (fall), March 1 (winter) or July 1 (summer). Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time.

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, changes in classroom protocols, and academic schedules. Any such

changes will be announced via CourseLink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. 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

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g.. final exam or major assignment).

8.11 Covid-19 Safety Protocols

For information on current safety protocols, follow these links:

- <https://news.uoguelph.ca/return-to-campusess/how-u-of-g-is-preparing-for-your-safe-return/>
- <https://news.uoguelph.ca/return-to-campusess/spaces/#ClassroomSpaces>

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.
