



# **ANSC\*6490 Advanced Dairy Management**

Winter 2023

Section(s): C01

Department of Animal Biosciences

Credit Weight: 0.50

Version 1.00 - January 16, 2023

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## **1 Course Details**

### **1.1 Calendar Description**

A comprehensive systems science and integrative capstone course that encompasses the "closing of the loop" education of dairy production systems. Students will be exposed to real-time issues relating to dairy production from, environment, economics, nutrition, housing, health, welfare, society and agrology. This course will allow the student to practice their training from the courses they have been exposed to as undergraduates into many case study evaluations on farms provincially, nationally and internationally.

**Restrictions:** Instructor consent required.

### **1.2 Course Description**

Over the past decade there has been considerable advancements in dairy research and technologies that have impacted current management strategies. In this class we will evaluate the latest concepts in nutrition, physiology, reproduction and health management in dairy cattle production. The course is designed to promote independent research and hypothesis generation of the most up to date topics in dairy production science. Laboratories will emphasize practical applications of research via field trips and discussions.

### **1.3 Timetable**

Tuesday and Thursday - Lectures/Discussions are from 11:30am-1:00pm (ANNU room 102)

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

### **1.4 Final Exam**

No final examination.

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## 2 Instructional Support

### 2.1 Instructional Support Team

**Instructor:** Michael Steele  
**Email:** masteele@uoguelph.ca  
**Office:** ANNU 235

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## 3 Learning Resources

### 3.1 Required Resources

**Required Course Material (Other)**  
Material will be supplied or on CourseLink

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## 4 Learning Outcomes

### 4.1 Course Learning Outcomes

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

1. Be able to interpret and communicate the latest topics related to dairy cow nutrition, physiology, reproduction and health.
  2. Be able to extrapolate, cultivate, construct and apply advanced research and analytical techniques, as demonstrated through modelling and integrated software programs presented in lectures and workshops.
  3. Be able to effectively communicate their thoughts, arguments, and decision-making outcomes in an effective professional manner to a multitude of clientele including stakeholders, academics, government and primary producers. This will be demonstrated through the appraisal of domestic, national and international whole farm-based case studies using individual farm contact and social media interaction both in an individual and group leadership context.
  4. Develop a mature intellectual independence, integrate ethical reasoning and apply it to independent evaluation of issues facing dairy farmers globally.
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## 5 Teaching and Learning Activities

## 5.1 Lecture

**Topics:** Lectures

There will be two 60-90 minute meetings per week, delivered by faculty or guest lecturers from industry, that will introduce all the course topics and material. Class meetings will be interactive presentations, journal article reviews and communication directly with world class leaders in the field of dairy cow biology.

**Tue, Jan 17 - Thu, Jan 19**

**Topics:** Calf Biology & Management

**Tue, Jan 24 - Thu, Jan 26**

**Topics:** Weaning & Beyond

**Tue, Jan 31 - Thu, Feb 2**

**Topics:** Transition Cow Nutritional Physiology

**Tue, Feb 7 - Thu, Feb 9**

**Topics:** Transition Cow Inflammation

**Tue, Feb 14 - Thu, Feb 16**

**Topics:** Protein and Fat Nutrition

**Tue, Feb 28 - Thu, Mar 2**

**Topics:** AMS Management

**Tue, Mar 7 - Thu, Mar 9**

**Topics:** Health

**Tue, Mar 14 - Thu, Mar 16**

**Topics:** Welfare

**Tue, Mar 21 - Thu, Mar 23**

**Topics:** Reproductive Management

**Tue, Mar 28 - Thu, Mar 30**

**Topics:** Genetics

## 5.2 Seminar

Tue, Apr 4 - Fri, Apr 21

**Topics:** MSU/Cornell Visit - Tentative Dates

# 6 Assessments

## 6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Short Research Proposals	30
Proposal and Student Selected Research Topic	30
Class Participation	40
Total	100

## 6.2 Assessment Details

### Short Research Proposals (30%)

**Due:** April 4th, 2022

**Learning Outcome:** 1, 2, 3, 4

**Research Proposals (3 short research proposal based on topics) = 30 %**

- Each student can select a specific topic related to three of the ten modules and develop a 2 page miniature proposal

### Proposal and Student Selected Research Topic (30%)

**Date:** April 4th, 2023

**Learning Outcome:** 1, 2, 3, 4

**Proposal of student selected research topic = 30%**

- Each student will write a 8-10 page proposal based on a topic of interest from lecture (30% of total mark)

### Class Participation (40%)

**Learning Outcome:** 1, 2, 3, 4

- Participation in journal article discussions and class lectures will be evaluated (20% of total mark).
- Participation in tours (20% of total mark)

**6.3 Guidelines for Preparation of Research Proposals**

Refer to courselink for guidelines and samples.

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**7 University Statements****7.1 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.

**7.2 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>

**7.3 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>

## 7.4 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.

## 7.5 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>

## 7.6 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>

## **7.7 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.

## **7.8 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>

## **7.9 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.

## **7.10 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).

## **7.11 Covid-19 Safety Protocols**

For information on current safety protocols, follow these links:

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

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

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