



ANSC*4230 Challenges and Opportunities in Dairy Cattle Production

Fall 2022

Section(s): C01

Department of Animal Biosciences

Credit Weight: 0.50

Version 1.00 - July 20, 2022

1 Course Details

1.1 Calendar Description

This course will provide senior level students with experience in working as a team to propose solutions to dairy cattle industry problems. Teams of students will critically assess dairy cattle-related businesses at the farm or industry level under the supervision of a faculty member.

Pre-Requisites: ANSC*3080, ANSC*3120, MBG*3060

Restrictions: Instructor consent required.

1.2 Timetable

Monday class sessions, 11:30 a.m. to 2:20 p.m., ANNU 102

Dairy farm challenges will occur in ANNU 102 on:

1. Friday, September 30th, 2:00pm*-10:00pm and Saturday, October 1st, 9:00am to 1:00pm
2. Friday, October 21st, 10:30am**-10:00pm and Saturday, October 22nd, 9:00am to 1:00pm
3. Friday, November 18th, 2:00pm*-10:00pm and Saturday, November 19th, 9:00am to 1:00pm
4. Friday, December 2nd, 11:30am***-10:00pm and Saturday, December 3rd, 9:00am to 1:00pm

*Departure times for farms will vary depending on distance of farm from university

**Farm visit in New York will require an earlier departure time, likely 10:30am. Note, a valid passport will be needed for entry into the US.

***Given a Monday schedule that date, farm visit will leave at 11:30am

COVID-19 Disclaimer: please be aware that the information on course delivery, accessibility and examinations presented in this outline were developed based on current University guidelines. However, due to the continuously evolving situation and resulting changes in public health recommendations, the format and delivery of this course may be revised with limited notice.

1.3 Final Exam

No final exam.

2 Instructional Support

2.1 Instructional Support Team

Instructor:	Trevor DeVries
Email:	tdevries@uoguelph.ca
Telephone:	+1-519-824-4120 x54081
Office:	ANNU 237
Office Hours:	Instructors for this course have no office hours. Contact the instructor through email to set up an appointment.

2.2 Faculty Coach/Judge

Mark Carson, Semex, Guelph
Email: mcarson@semex.com

Matt Groen, Purina-Cargill, Guelph
Email: Matt_Groen@cargill.com

Graduates from ANSC*4230 in previous years are also invited to return as judges. These individuals are usually employed in the Ontario Dairy Industry or are graduate students in Animal Science or Animal Health Management.

3 Learning Resources

3.1 Additional Resources

Other Resources (Other)

In the week prior to each of the 4 farm challenges, Dairy Comp health and production data and information for each farm will be provided (by download from a secure site). A detailed farm description, Lactanet milk recording reports, and ration formulations will also be provided (by download from Courselink).

3.2 Course Technology and Technical Support

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

Zoom

This course may use Zoom for lectures. Check your system requirements to ensure you will be able to participate.

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

4 Learning Outcomes

4.1 Course Learning Outcomes

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

1. The appraisal of dairy enterprises together with their relevant production, nutrition and health information in the context of increasing economic return utilizing skills related to analysis, problem solving and critical thinking.
2. Course participants will evaluate dairy operations and their data from Dairy Comp 305 and other records in teams of 4 to 5 students. Each team will create and deliver a presentation of their findings and recommendations to a panel of judges, composing a presentation as a team and utilizing presentation skills.
3. Interested students will also be evaluated for selection to represent the University of Guelph in the NorthEast regional and National Intercollegiate Dairy Challenge competitions. See www.dairychallenge.org.

5 Teaching and Learning Activities

5.1 Seminar

Topics: Seminars: Starting Monday September 13th

A series of lectures and seminars (Mondays at 11:30 a.m.) is designed to provide helpful background for the Challenges as the semester progresses. Topics that we expect to cover are listed below, but since these will be organized during the semester, the timing/content might vary somewhat according to timely relevance and availability of speakers.

Introduction to Dairy Comp 305

Finding answers using Dairy Comp 305

Benchmarking, observations and data creation

Practical nutrition of lactating dairy cows

Calf feeding and health

Transition cows

Cow comfort

Udder health and milk quality: Mastitis prevention, diagnosis and treatment, milking routines, SCCs

Reproduction: Natural vs timed

Hoof health and lameness

5.2 Lab

Farm 1: Sept. 30/Oct.1; Farm 2: October 21/22; Farm 3: November 18/19; Farm 4: Dec. 2/3

Topics: Labs

Labs consist of 4 (challenges), which include farm tours*, along with health and production information, followed by analysis and report preparation/presentation. Each occasion will begin Friday afternoon through late Friday evening, with presentations beginning at 9:00am on the Saturday morning.

*In person farms tours will occur in accordance with University guidelines

6 Assessments

6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Challenge 1	25
Challenge 2	25
Challenge 3	25

Name	Scheme A (%)
Challenge 4	25
Total	100

6.2 Assessment Details

Challenge 1 (25%)

Due: Sat, Oct 1

Challenge 2 (25%)

Due: Sat, Oct 22

Challenge 3 (25%)

Due: Sat, Nov 19

Challenge 4 (25%)

Due: Sat, Dec 3

6.3 Assessment Details

Learning outcomes assessed:

Challenge 1: Learning outcomes 1, 2, and 3-optional

Challenge 2: Learning outcomes 1, 2, and 3-optional

Challenge 3: Learning outcomes 1, 2, and 3-optional

Challenge 4: Learning outcomes 1, 2, and 3-optional

There will be NO formal evaluation of the seminars beyond the team performance during challenges. We expect to have a range of interesting speakers from industry and the University and anticipate the class will want to attend out of interest in the topics being presented.

The course will be scheduled as four separate “challenges”, each involving a unique dairy farm, with each challenge occurring approximately every 3rd week of the semester:

Each challenge is focused and time-limited over a period of 10 days:

Day 1-6: Release of FarmBiosketch and Dairy Comp 305 data to teams.

Day 9: Farm visits (see above) and opportunity to ask questions of dairy producer (30 min), followed by team analysis of farm information and development of presentation (limited to 6 hours, Friday afternoon and evening).

Day 10: Team presentations (20 minutes/team) will be made to a panel of judges on Saturday

morning and early afternoon.

Each team will be scored on the basis of their presentation (see NAIDC scorecard – at the end of this course outline). Each member of each team will be assigned the same score; so, we expect to see equal contribution by team members. The instructors believe that attendance (and/or viewing) throughout the presentations is important to the overall learning outcomes for this course. Therefore, attendance/viewing is mandatory unless previous approval for absence has been granted. Students arriving late or leaving the presentation early will be deducted one mark for each presentation missed.

The use of laptop computers and cellular phones by the audience during presentations is expressly forbidden.

7 Course Statements

7.1 Code of Conduct

You will be provided one opportunity to ask questions of the farm owner/manager, under supervision of the instructors, otherwise you are not allowed to make any individual contact to discuss the farm with the owner or farm staff.

Contact with the other teams is discouraged. Within the teams, be respectful of the ideas of others, be committed to the task and exercise leadership without domination.

All farm-related information provided to you is to be treated as strictly confidential. Please do not discuss farm details with other classmates not participating in Dairy Challenge or with family or friends. After each exercise is completed, any remaining information (data, videos, pictures, files) should be securely destroyed. The only remaining evidence of your participation will be the team's PowerPoint presentation. This will be returned to Dr. DeVries, who will forward these to the participating farm for information.

For farm visits, any student with obvious signs of alcohol intoxication will not be allowed to board the bus for the farm visit and will forfeit the grade for that challenge (zero out of 25). On farm, please recognize your status as guests and respect the need for biosecurity. Avoid upsetting the livestock or getting in the way of normal farm operations.

Safety:

You are responsible for your own safety and that of those around you. Avoid any potentially risky situations (bull-pens, slippery floors, do not climb gates/silo ladders etc.). **SPECIAL WARNING:** Bunker silos represent an unseen danger and we would ask you to be especially careful when evaluating these. While the face of the silage material may appear stable, there have been many accidents reported after the silage face has collapsed with an avalanche of dense/heavy material. This rush of material is completely unpredictable and impossible to escape. Individuals caught in such slippages have had broken limbs, life-threatening injuries or died as a consequence. **DO NOT** underestimate the risk of serious injury from this cause.

As a guide: NEVER get closer to a silage face than the height of the face itself. The instructors will provide you with samples of each silage for you to assess more closely at a separate location away from the silage face.

7.2 Grading Policies

Each team will be scored on the basis of their presentation (see NAIDC scorecard on class Courselink site). The instructors believe that attendance throughout the presentations is important to the overall learning outcomes for this course. Attendance is therefore mandatory at the presentations unless previous approval for absence has been granted. Students arriving late or leaving the presentation early will be deducted one mark for each presentation missed.

The use of laptop computers and cellular phones by the audience during presentations is expressly forbidden.

7.3 Group Work

The aggregate performance of the group will be assessed using the NAIDC scorecard (www.dairychallenge.org) with this score being awarded to each group member.

7.4 Netiquette Expectations

The course website is considered the classroom and the same protections, expectations, guidelines, and regulations used in face-to-face settings apply. Inappropriate behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students;
- Using offensive language;
- 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;
- 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

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-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.
