



# **ANSC\*4230 Challenges and Opportunities in Dairy Cattle Production**

Fall 2019

Section(s): C01

Department of Animal Biosciences

Credit Weight: 0.50

Version 1.00 - August 12, 2019

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## **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 11:30 a.m. to 2:20 p.m., LLC 1713

### **1.3 Final Exam**

No final exam.

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## **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, EastGen, Guelph  
Email: [mark.carson@eastgen.ca](mailto:mark.carson@eastgen.ca)

Dr. Ken E. Leslie, Department of Population Medicine  
Email: [keleslie@uoguelph.ca](mailto:keleslie@uoguelph.ca)

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.

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## 3 Learning Resources

### 3.1 Additional Resources

#### Field Trips (Other)

For 3 of the 4 Challenges, there will be 3 local, free-stall dairy farm operations selected by the coaches/judges with agreement from the owners/operators. One further challenge will be a large dairy operation in the USA and will require a longer trip for the visit. Please ensure you have the appropriate documents to cross the border to the USA and back to Canada (valid Passport as well as Visa, if required).

#### Other Resources (Other)

A few days prior to each challenge: Dairy Comp information for each farm will be provided in Room 102 ANNU. A detailed farm description, Can West DHI reports and ration formulations will be provided as paper copies.

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## 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 data from Dairy Comp 305 in teams of 4 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 NE regional and National Intercollegiate Dairy Challenge competition. See [www.dairychallenge.org](http://www.dairychallenge.org).
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## 5 Teaching and Learning Activities

### 5.1 Seminar

**Topics:** Seminars

A series of lectures and seminars (Mondays at 11:30 a.m. in Room 1713 OVC/LLC) 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: Milking routines and SCCs

Udder health: Mastitis prevention, diagnosis and treatment

Reproduction: Canada (Pedometry) vs USA (OVSYNCH)

Hoof health and lameness

### 5.2 Lab

**Topics:** Labs

Labs consist of 4 (challenges) farm visits (with production information) followed by analysis and report preparation/presentation. Each occasion will begin Friday

morning, or afternoon depending on distance, through Friday evening with presentations beginning at 0900 h Saturday morning.

## 6 Assessments

### 6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Challenge 1	25
Challenge 2	25
Challenge 3	25
Challenge 4	25
Total	100

### 6.2 Assessment Details

**Challenge 1 (25%)**

**Due:** Sat, Sep 28

**Challenge 2 (25%)**

**Due:** Sat, Oct 26

**Challenge 3 (25%)**

**Due:** Sat, Nov 16

**Challenge 4 (25%)**

**Due:** Sat, Nov 30

### 6.3 Assessment Details

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 three to five days:  
Day 1-3: Release of FarmBiosketch and Dairy Comp 305 data to teams;  
Day 4: Visit to farm (90 minutes). The farm visit will occur on Friday afternoon, depending on the location and travelling time to the farm;  
Day 4-5: Team analysis of farm information and development of presentation (limited to 5 hours, Friday night). This will occur in room 102 ANNU after return from the farm visit. Food and refreshments will be provided in the foyer of ANNU. Team presentations (20 minutes/team) will be made to a panel of judges on Saturday morning and early afternoon in Room 1810 PAHL.

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 throughout the presentations is important to the overall learning outcomes for this course. Therefore, attendance 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.

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## 7 Course Statements

### 7.1 Code of Conduct

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. You will be provided one opportunity to ask questions under supervision, otherwise you are not allowed 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 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.

## **7.2 Grading Policies**

Each team will be scored on the basis of their presentation (see NAIDC scorecard attached at the end of this outline). 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](http://www.dairychallenge.org)) with this score being awarded to each group member.

## **7.4 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.

## 8 University Statements

### 8.1 Email Communication

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

### 8.2 When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals

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

Graduate Calendar - Grounds for Academic Consideration

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

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions

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

### 8.3 Drop Date

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

Undergraduate Calendar - Dropping Courses

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

Graduate Calendar - Registration Changes

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

Associate Diploma Calendar - Dropping Courses

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

## 8.4 Copies of Out-of-class Assignments

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

## 8.5 Accessibility

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

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

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

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

For Guelph students, information can be found on the SAS website  
<https://www.uoguelph.ca/sas>

For Ridgetown students, information can be found on the Ridgetown SAS website  
<https://www.ridgetownc.com/services/accessibilityservices.cfm>

## 8.6 Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity, and it is the responsibility of all members of the University community—faculty, staff, and students—to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff, and students have the responsibility of supporting an environment that encourages academic integrity. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

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

Graduate Calendar - Academic Misconduct



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

## **8.7 Recording of Materials**

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

## **8.8 Resources**

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

Academic Calendars

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

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