Course Outline Form: Fall 2017

General Information

Course Code: ANSC*4230

Course Title: Challenges and Opportunities in Animal Production

Course Description:
This course will provide senior level students with experience in working as a team to propose solutions to animal industry problems. Teams of students will critically assess animal-related businesses at the farm or industry level under the supervision of a faculty member. Students and faculty will meet in the preceding Winter semester to identify common interests and develop a preliminary strategy.

Credit Weight: 0.5

Academic Department (or campus): Department of Animal Biosciences

Campus: Guelph

Semester Offering: Fall 2017

Class Schedule and Location: Monday 11:30 a.m. to 2:20 p.m., ANNU 030

Instructor Information

Instructor Name: Dr. Trevor DeVries
Instructor Email: tdevries@uoguelph.ca
Office location and office hours: ANNU 237. Instructors for this course have no office hours. Contact the instructor through email to set up an appointment.

Faculty Coach/Judge: Mark Carson, EastGen, Guelph
Faculty Coach/Judge Email: mark.carson@eastgen.ca
Faculty Coach/Judge: Dr. Ken E. Leslie, Department of Population Medicine
Faculty Coach/Judge Email: keleslie@uoguelph.ca

Additional Coaches: Graduates from ANSC*4230 in previous years are 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.
GTA Information

GTA Name: Not applicable  
GTA Email: Not applicable  
GTA office location and office hours: Not applicable

Course Content

Specific Learning Outcomes:

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).

Lecture Content:

Not applicable.

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.
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

Course Assignments and Tests:

<table>
<thead>
<tr>
<th>Assignment or Test</th>
<th>Due Date</th>
<th>Contribution to Final Mark (%)</th>
<th>Learning Outcomes Assessed</th>
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</thead>
<tbody>
<tr>
<td>Challenge 1</td>
<td>Sept. 23</td>
<td>25%</td>
<td>1 &amp; 2</td>
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<tr>
<td>Challenge 2</td>
<td>Oct. 14</td>
<td>25%</td>
<td>1 &amp; 2</td>
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<tr>
<td>Challenge 3</td>
<td>Nov. 4</td>
<td>25%</td>
<td>1 &amp; 2</td>
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<tr>
<td>Challenge 4</td>
<td>Dec. 2</td>
<td>25%</td>
<td>1 &amp; 2</td>
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</table>

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.

Final examination date and time:

Not applicable.

Final exam weighting:

Not applicable.

Course Resources

Required Texts:

Not applicable.

Recommended Texts:

Not applicable.

Lab Manual:

Not applicable.

Other Resources:
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.

Field Trips:

For 3 of the 4 Challenges, there will be 3 local, free-stall dairy farm operations selected by the coaches/judges with agreement form 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).

Additional Costs:

None

Course Policies

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.

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.

**Course Policy on 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.

**Course Policy regarding use of electronic devices and recording of lectures:**

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

**Course Policy regarding 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.

**University Policies**

**Academic Consideration:**

If you encounter a Calendar-acceptable conflict with any of the challenges, we would ask that you notify Dr. DeVries as early as possible. We shall attempt to involve you as much as possible with the challenge you miss and will require you to prepare a written report of your group’s evaluation and recommendations for the farm in question (due within 7 days of the farm visit;
i.e. the following Friday at 1630). Completion of a satisfactory report will qualify you for the grade earned by the rest of your group in your absence.

The University of Guelph is committed to supporting students in their learning experiences and responding to their individual needs and is aware that a variety of situations or events beyond the student’s control may affect academic performance. Support is provided to accommodate academic needs in the face of personal difficulties or unforeseen events in the form of Academic Consideration.

Information on regulations and procedures for Academic Consideration, Appeals and Petitions, including categories, grounds, timelines and appeals can be found in Section VII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar.

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.

Detailed information regarding the Academic Misconduct policy is available in Section VIII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar.

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. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Student Accessibility Services (SAS), formerly Centre for Students with Disabilities (CSD), as soon as possible.
For more information, contact SAS at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or visit the Student Accessibility Services website (http://www.uoguelph.ca/csd/).

Course Evaluation Information:

End of semester course and instructor evaluations provide students the opportunity to have their comments and opinions used as an important component in the Faculty Tenure and Promotion process, and as valuable feedback to help instructors enhance the quality of their teaching effectiveness and course delivery.

While many course evaluations are conducted in class others are now conducted online. Please refer to the Course and Instructor Evaluation Website for more information.

Drop period:

The drop period for single semester courses starts at the beginning of the add period and extends to the Fortieth (40th) class day of the current semester (the last date to drop a single semester courses without academic penalty) which is listed in Section III (Schedule of Dates) of the Undergraduate Calendar.

The drop period for two semester courses starts at the beginning of the add period in the first semester and extends to the last day of the add period in the second semester.

Information about Dropping Courses can be found in Section VIII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar.
## Additional Course Information

### Diary Challenge Scorecard

<table>
<thead>
<tr>
<th>1. Material presented - 55 points</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Fair</th>
<th>Poor</th>
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<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>5</td>
<td>4</td>
<td>3</td>
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<tr>
<td>• Clear overview of farm operation</td>
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<td>• Benchmarking with regional or national averages</td>
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<td>• Clear understanding of farm’s goals</td>
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<tr>
<td><strong>Assessment</strong></td>
<td>25</td>
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<tr>
<td>• Identification of relevant opportunities within context of the farm’s goals</td>
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<tr>
<td>• Appropriate order of importance of opportunities</td>
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<tr>
<td>• Opportunities identified were described in detail and justified based on data provided or information obtained during farm visit</td>
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<tr>
<td><strong>Recommendations</strong></td>
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<tr>
<td>• Recommendations provided in appropriate order of importance</td>
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<tr>
<td>• Recommendations are justified based on economic significance, farm’s goals, and sustainability of the dairy industry</td>
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<td>• Suggestions provided are realistic and practical</td>
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<tr>
<th>2. Presentation and visual aids - 20 points</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Fair</th>
<th>Poor</th>
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<tr>
<td><strong>Presence</strong></td>
<td>15</td>
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<tr>
<td>• Enthusiastic, confident, professional, knowledgeable</td>
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<td>• Maintained eye contact, few distracting mannerisms</td>
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<td>• Spoke clearly with appropriate volume, speed and grammar</td>
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<tr>
<td><strong>Visual aids</strong></td>
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<td>• Legible, organized, appropriate use of pictures</td>
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<td>• Void of excessive wordage and distracting colors</td>
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<tr>
<th>3. Preparation and organization - 10 points</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Fair</th>
<th>Poor</th>
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<tr>
<td>• Planning and preparation by all team members</td>
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<td>• Knowledge of farm practices by all team members</td>
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<td>• Stated concise assessments and recommendations with logical order</td>
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<td>• Used 20-minute time limit wisely</td>
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<tr>
<th>4. Response to questions - 15 points</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provided confident and concise answers to questions</td>
<td>15</td>
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<tr>
<td>• Provided an effective summary of relevant supporting information</td>
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<td>• All team members involved in answering at least one question</td>
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<td>• Team members may have conferred briefly but no lengthy conferences</td>
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<thead>
<tr>
<th>Total - 100 points</th>
<th>Team's Score:</th>
<th>Team #</th>
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**Team's Score:**