

Course Outline Form: Winter 2018

General Information

Course Code: ANSC*4100

Course Title: Applied Environmental Physiology and Animal Housing

Course Description: Basic concepts of environmental physiology and their application to animal housing and management will be introduced. The course will review the physics of heat flow, light and air quality as they relate to animal biology and health. Other aspects, such as the physical environment, that impact on animal health and well-being will be discussed.

Credit Weight: 0.5

Academic Department (or campus): Animal Biosciences

Campus: Guelph

Semester Offering: Winter 2018

Class Schedule and Location: Tues, Thur 8:30-9:50AM, MCLN Room 102

Instructor Information

Instructor Name: Vern Osborne

Instructor Email: vosborne@uoguelph.ca

Instructor Phone and Extension: (519) 824-4120

Office location and office hours: Please email instructor to set up an appointment.

GTA Information

GTA Name: Sasha Arseneau

GTA Email: arseneas@uoguelph.ca

GTA office location and office hours: TBD

GTA Name: Paige Kennedy

GTA Email: kennedyp@uoguelph.ca

GTA office location and office hours: TBD

GTA Name: Angela Wilson

GTA Email: awilso17@mail.uoguelph.ca

GTA office location and office hours: TBD

Course Content

Specific Learning Outcomes:

1. Develop a basic understanding of animals' physiological responses to the environment and how these responses influence health, productivity and well-being.
2. Develop science-based recommendations for animal housing and management.
3. Integrate, interpret and synthesize information from multiple disciplines (environment, genetics, economics, nutrition, housing, society and agrology) to improve animal building envelopes.
4. Extrapolate, cultivate, construct and apply advanced research and analytical techniques.
5. Effectively communicate their thoughts, arguments, and decision-making outcomes in a professional manner.
6. Develop a mature intellectual independence and to integrate ethical reasoning and apply it to improve animal housing designs.
7. Be able to effectively participate in group settings to collaboratively come to innovative solutions to current issues in animal housing design.

Lecture Content:

- Environment/Animal Integrated Physiology/Performance Relationships
- Basic Principles of the Thermal Environment, Ventilation principles
- Meteorology/Biological Rhythms/Photoperiods/Sound
- Environment and Animal and Stockperson Health
- Environment and Animal Handling
- Animal Building Envelopes, Materials, Equipment and New Technologies

Labs: N/A

Seminars: N/A

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Mid-term Exam	Feb 15	25	1-6
Design Project	April 5	30	1-7
Personal Research Notebook	April 5	18	1-5
Special Project	April 5	2	2,3,7
Final Exam	April 16	25	1-6

Additional Notes (if required):

Design Project: Each student(s) should create, retrofit and/or research a design item/concept that could be applied to a number of the topics covered in this class. Template will be provided and will discuss further in first class period.

Personal Research Journal: Over the course of the semester, students maintain a personal research journal based on the topics discussed during class. This is to develop and enhance the student's knowledge on the subject and which research group(s) around the world is leading the industry, academia or government. The journal is to be handed in on last class day. The template (available on CourseLink) for the journal will be discussed in the first class period.

Special Project: Discussed in class.

Final examination date and time: TBD

Final exam weighting:

The final exam is worth 25% of the final grade.

Course Resources

Required Texts: N/A

Recommended Texts: N/A

Lab Manual: N/A

Other Resources: N/A

Field Trips: N/A

Additional Costs: N/A

Course Policies

Grading Policies: N/A

Course Policy on Group Work: N/A

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.

University Policies

Academic Consideration:

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 VIII \(Undergraduate Degree Regulations and Procedures\) 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 \(http://www.uoguelph.ca/csd/\)](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

N/A