

# Course Outline Form: Winter 2016

## General Information

**Course Code:** ANSC\*6710

**Course Title:** Assessing Animal Welfare in Practice

### **Course Description:**

A lecture/seminar course covering the principles of applied animal welfare assessment. Students will learn what influences an animal welfare assessment and will understand the components necessary to create an effective and targeted animal welfare program for industry or regulatory application.

**Credit Weight:** 0.5

**Academic Department (or campus):** Animal Biosciences

**Campus:** Guelph

**Semester Offering:** Winter 2017

**Class Schedule and Location:** Monday 11:30 a.m. – 2:20 p.m. ANNU Room 101

## Instructor Information

Instructor Name: Penny Lawlis

Instructor Email: pclawlis@gmail.com

Instructor Phone and Extension: 226-688-7878

Office location and office hours: via phone or email

## GTA Information

GTA Name: N/A

GTA Email: N/A

GTA office location and office hours: N/A

## Course Content

### Specific Learning Outcomes:

This graduate level course will review current science related to the practical assessment of animal welfare. Students will be exposed to a wide variety of approaches to understanding and assessing animal welfare in practical settings. Students will investigate the role of legislation, guidelines and standards in the development of a practical animal welfare assessment and how the goal of the assessment influences the final document. They will review a wide variety of animal-based welfare measures and through field trials, learn the pitfalls in the validity and reliability of some of these measures. In addition, students will learn how to develop an effective animal welfare assessment program.

### Lecture Content:

Date	Topic	Suggested Readings	Activities and Assignments
Jan. 9	Part 1. Introduction to animal welfare assessment in practical settings.  Part 2. How to measure animal welfare in practical settings – resource-based vs. animal-based measures.	No readings for the first class.	1. Discuss parameters for presentations, final project and field trip.  2. Formal lecture given by instructor - the importance and reason for assessing animal welfare.
Jan. 16	Regulations and Codes of Practice.	1. Farm animal welfare in the U.S.A.: farming practices, research, education, regulation, and assurance programs. Applied Animal Behaviour Science 13: 298-312. <b>EDUCATION, ETHICS &amp; WELFARE</b> Blackwell Publishing Asia  2. The questionable value of some science-based 'welfare' assessments in intensive animal farming: sow stalls as	1. Lecture on codes of practice.  2. Animal welfare/cruelty regulations - Guest speaker.

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		<p>an illustrative example. MP CAULFIELD and H CAMBRIDGE</p> <p>3. Main DCJ, Whay HR, Green LE and Webster AJF (2003). Effect of the RSPCA Freedom Food scheme on the welfare of dairy cattle. Veterinary Record, 153:227-231. Supplemental Material: Animals for Research Act- <a href="http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90a22_e.htm">http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90a22_e.htm</a></p> <p>Animals for Research Regulations (go to Animals for Research Act and click on the + sign) - <a href="http://www.e-laws.gov.on.ca/Browse?queryText=&amp;resultCount=200&amp;sortField=dDocTitle&amp;sortOrder=ASC&amp;startIndex=1&amp;type=statutes&amp;letter=A&amp;lang=en#result">http://www.e-laws.gov.on.ca/Browse?queryText=&amp;resultCount=200&amp;sortField=dDocTitle&amp;sortOrder=ASC&amp;startIndex=1&amp;type=statutes&amp;letter=A&amp;lang=en#result</a></p> <p>Ontario Society for the Prevention of Cruelty to Animal Act- <a href="http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o36_e.htm">http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o36_e.htm</a></p> <p>A Report on Animal Welfare Law in Canada- <a href="http://www.afac.ab.ca/lawsregs/awlc_anada.pdf">http://www.afac.ab.ca/lawsregs/awlc_anada.pdf</a></p> <p>Animal Welfare Rankings: <a href="http://api.worldanimalprotection.org/?_ga=1.44031333.1156176736.1410789560">http://api.worldanimalprotection.org/?_ga=1.44031333.1156176736.1410789560</a></p>	
Jan. 23	How to measure animal welfare in practical settings – discussion of	1. Animal-based measures for the assessment of dairy cattle, pigs and laying hens: consensus of expert opinion. Animal Welfare. Whay HR,	1. Formal lecture on animal-based measures.  2. Review video on gait

Date	Topic	Suggested Readings	Activities and Assignments
	<p>animal-based measures.</p> <p>Goals of the assessment and types of animal welfare assessment and auditing programs – indexes, scores, questionnaires and determining what aspects should be measured.</p>	<p>Main DCJ, Green LE and Webster AJF (2003). 12:205-217.</p> <p>2. Definition of criteria for overall assessment of animal welfare. Botreau R, Veissier I, Butterworth A, Bracke MBM and Keeling LJ (2007). <i>Animal Welfare</i>, 16:225-228.</p> <p>3. The reliability and repeatability of a lameness scoring system for use as an indicator of welfare in dairy in dairy cattle. . Winckler C and Willen S. (2001). <i>Acta agriculturæ Scandinavica</i>. Section A, Animal science, Suppl 30:103-107</p> <p>4. Assessing lameness in cows kept in tie-stalls. K. A. Leach, S. Dippel.t J. Huber.i S. March,§ C. Winckler.f and H. R. Whay J. <i>Dairy Sei.</i> 92:1567-1574 10.3168/jds.2008-1648. American Dairy Science Association, 2009.1.Mench JA (2008).</p>	<p>scoring in cattle</p> <p>3. Review video on body condition scoring.</p> <p>4. Body condition scoring exercise.</p> <p>5. Student participate in body condition and pain behaviour exercises.</p>
Jan. 30	Analysis of existing codes vs. regulations vs standards	<p>1. The Food Marketing Institute and the National Council of Chain Restaurants: animal welfare and the retail food industry in the United States of America. Brown KH and Hollingsworth J (2005). <i>Revue scientifique et technique (International Office of Epizootics)</i>, 24:655-663.</p> <p>2. How can farmers make use of welfare assessment schemes? – A case study. In: Koene P (Ed.). Ingemann R, Sondøe P and Forkman (2008). <i>Proceedings of the 4<sup>th</sup> International Workshop on the Assessment of Animal Welfare at Farm and Group Level (WAFL,Wageningen, The</i></p>	Students present comparisons/contrast of codes of practice, regulations or standards for their specific species.

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		<p>Netherlands, pp. 66).</p> <p>3. Assessment of farm animal welfare at herd level: many goals, many methods. Acta agriculturæ Scandinavica. Section A, Animal science, Suppl 30:26-33.</p>	
Feb. 6		<p>1. Science-based assessment of animal welfare: farm animals. Duncan IJH (2005). Revue scientifique et technique (International Office of Epizootics), 24:483-492.</p> <p>2. The assessment and implementation of animal welfare: theory into practice. Webster J (2005). Revue scientifique et technique (International Office of Epizootics), 24:723-734.</p> <p>3. Assessing Animal Welfare: Different Philosophies, Different Scientific Approaches. Fraser, David. Zoo Biology 28 : 507–518 (2009)</p>	<p>1. Review of existing aw assessment programs.</p> <p>2. Guest speaker.</p> <p>3. Prepare for data field trip/data collection.</p>
Feb. 13	Student reports on assessment programs.		Students present on an existing animal welfare assessment program.
Feb. 20	Reading week	Reading week	Reading week
Feb. 27	Field trip and data collection	Review assessment protocols.	Students visit a farm.

Date	Topic	Suggested Readings	Activities and Assignments
Mar. 6	Validity and reliability (repeatability)	<p>1. De Rosa G, Tripaldi C, Napolitano F, Saltalamacchia F, Grasso, F, Bisegna V and Bordi A (2003). Repeatability of some animal-related variables in dairy cows and buffaloes. <i>Animal Welfare</i>, 12:625-629.</p> <p>2. Lehner PN (1996). <i>Handbook of ethological methods</i>. Second edition. Cambridge University Press, Cambridge, pp. 212-221; pp. 389-390.</p> <p>3. Zar JH (1999). <i>Biostatistical Analysis</i>. Fourth Edition (Prentice hall, New Jersey, pp. 443-447; pp. App106; pp. App.12-15).</p> <p>4. Courboulay V (2007). Body condition score. In: Velarde A and Geers R (eds.) <i>On Farm Monitoring of Pig Welfare</i> (Wageningen Academic Publishers, Wageningen, pp. 111-115).</p>	Students report and discuss results of inter-observer trials and different measures.
Mar. 13	Qualitative animal welfare assessment	<p>1. Wemelsfelder F, Hunter EA, Mendl M and Lawrence AB (2000). The spontaneous qualitative assessment of behavioural expressions in pigs: first explorations of a novel methodology for integrative animal welfare measurement. <i>Applied Animal Behaviour Science</i>, 67:193-215.</p> <p>2. Wemelsfelder F (2001). Qualitative assessment of animal behaviour as an on-farm welfare-monitoring tool. <i>Acta agriculturæ Scandinavica. Section A, Animal science, Suppl 30:21-25</i>.</p> <p>3. Wemelsfelder F (2007). How animals communicate quality of life: the qualitative assessment of behavior. <i>Animal Welfare</i>, 19(S):25-31.</p>	<p>1. Formal lecture given by instructor.</p> <p>2. Students explore and discuss the language of qualitative behaviour assessment.</p> <p>3. Guest speaker – TBD.</p>

Date	Topic	Suggested Readings	Activities and Assignments
		4. Savory CJ, Hocking PM, Mann JS and Maxwell MH (1996). Is broiler breeder welfare improved by using qualitative rather than quantitative food restriction to limit growth rate? <i>Animal Welfare</i> , 5:105-127.	
Mar. 10, 17, 24	Final project presentations and discussion		Final projects
			Students present a welfare assessment/audit they developed followed by a class question and discussion period

**Labs:**

N/A

**Seminars:**

Seminar	Activity	Mark
January 30	<p>Students lead the seminar by giving a brief presentation comparing and contrasting different codes of practice, regulations or standards for different types of animals.</p> <p>The codes of practice etc. that the students will present will be the basis for the culminating activity i.e., the development of an animal care assessment. For example, a student may decide to focus on dairy cows and dairy welfare assessment.</p> <p>The presentation should involve at least three documents – if three documents (i.e, two dairy codes of practice – one from Canada and one from Australia and the European regulations on the keeping of dairy cows) are not available, the student should discuss this with the instructor. Students need to select a species with enough published information to base the assessment on.</p>	15%

Seminar	Activity	Mark
	The presentation should be about 15 minutes long including time for discussion. In addition, the students should provide a written critique of the documents examined. This can be in point form (15 marks for the presentation + 5 marks for the written).	
February 13	Students present a critique of a welfare assessment program. Students will provide a comprehensive overview of the assessment program – the assessment program should be the same species as for the first activity and the culminating activity. For example, the student will provide a critique of the dairy welfare assessment from the US and provide details, measures, pros and cons. No written report required. The presentation should be approximately 20 minutes in length.	20%
March 6	Students report results of inter-observer reliability trials conducted at an animal facility  Students will be required to submit the completed statistics as outlined with an analysis.	20%
March 20, 27 and April 3.	Students present a welfare assessment/audit they developed followed by a class question and discussion period *  Students will use the research done throughout the course to design a practical animal welfare assessment protocol, including a check list that could be used by auditors/assessors in the field. The written report should include the referenced assessments, guidelines, codes of practice etc. (10 marks for the presentation + 25 marks for the written).	35%
	Class participation	10%
	Total	100%

**Course Assignments and Tests:**

See above.

**Additional Notes (if required):**

N/A

**Final examination date and time:**

N/A



**Final exam weighting:**

N/A

## **Course Resources**

**Required Texts:**

N/A

**Recommended Texts:**

N/A

**Lab Manual:**

N/A

**Other Resources:**

N/A

**Field Trips:**

One field trip to a local animal facility.

**Additional Costs:**

N/A

## **Course Policies**

**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 II \(Academic Accommodation for Students with Disabilities, Guidelines and Procedures\) of the Graduate Program 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 II \(General Regulations\) of the Graduate 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](mailto: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 I \(Schedule of Dates\) of the Graduate 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.

**Additional Course Information**

N/A