



ANSC*6710 Assessing Animal Welfare in Practice

Winter 2023

Section(s): C01

Department of Animal Biosciences

Credit Weight: 0.50

Version 1.00 - February 06, 2023

1 Course Details

1.1 Calendar 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.

Pre-Requisites: ANSC*6700

1.2 Course Description

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.

1.3 Timetable

Monday 12:30 p.m. – 3:20 p.m. ANNU Room 101

Topics will be presented using traditional seminar format. There will be some formal lectures by the instructor, but a major part of the seminars will be spent in discussion and debate. There will also be one field trip to a local animal facility.

1.4 Final Exam

N/A

2 Instructional Support

2.1 Instructional Support Team

Instructor:	Penny Lawlis
Email:	pclawlis@gmail.com
Telephone:	226-688-7878
Office Hours:	Instructor can be reached via phone or email

2.2 Communicating with your Instructor

During the course, your instructor will interact with you on various course matters on the course website using the following ways of communication:

- **Announcements:** The instructor will use **Announcements** on the Course Home page to provide you with course reminders and updates. Please check this section frequently for course updates from your instructor.
- **Ask Your Instructor Discussion:** Use this discussion forum to ask questions of your instructor about content or course-related issues with which you are unfamiliar. If you encounter difficulties, the instructor is here to help you. Please post general course-related questions to the discussion forum so that all students have an opportunity to review the response. To access this discussion forum, select **Discussions** from the **Tools** dropdown menu.
- **Email:** If you have a conflict that prevents you from completing course requirements, or have a question concerning a personal matter, you can send your instructor a private message by email. The instructor will attempt to respond to your email within 24 hours.
- **Video Call:** If you have a complex question you would like to discuss with your instructor, you may book a video meeting on Teams (or alternate platform being used by your instructor). Video meetings depend on the availability and are booked on a first come first served basis.

2.3 Netiquette Expectations

Inappropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students

- Using obscene or offensive language online
 - 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 online
 - 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
 - Sharing your user name and password
 - Recording lectures without the permission of the instructor
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3 Learning Resources

3.1 Required Resources

Course Technologies (Software)

CourseLink System Requirements

You are responsible for ensuring that your computer system meets the necessary system requirements. Use the browser check tool to ensure your browser settings are compatible and up to date. (Results will be displayed in a new browser window).

<http://spaces.uoguelph.ca/ed/system-requirements/>
<https://courselink.uoguelph.ca/d2l/systemCheck>

Course Technologies

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

Teams (via Office 365)

Office 365 Teams is a collaboration service that provides shared conversation spaces to help teams coordinate and communicate information. This course may use Teams for one on one meetings with your Instructor. It is recommended that you use the desktop version of Teams. As a student you are responsible for learning how to use Teams and it's features.

For Teams Support visit the CCS website for more information.

<https://www.uoguelph.ca/ccs/services/office365/teams>

Zoom

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

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

3.2 Technical Skills

As part of your learning experience, you are expected to use a variety of technologies for assignments, lectures, teamwork, and meetings. In order to be successful in this course you will need to have the following technical skills:

- Manage files and folders on your computer (e.g., save, name, copy, backup, rename, delete, and check properties);
- Install software, security, and virus protection;
- Use office applications (e.g., Word, PowerPoint, Excel, or similar) to create documents;
- Be comfortable uploading and downloading saved files;
- Communicate using email (e.g., create, receive, reply, print, send, download, and open attachments);
- Navigate the CourseLink learning environment and use the essential tools, such as Dropbox, Quizzes, Discussions, and Grades (the instructions for this are given in your course);
- Access, navigate, and search the Internet using a web browser (e.g., Firefox, Internet Explorer); and
- Perform online research using various search engines (e.g., Google) and library databases.

3.2 Library Access

As a student, you have access to the University of Guelph's library collection, including both physical and electronic materials. For information on checking out or couriering physical library items, accessing electronic journals and returning items to the library, visit the library's website.

If you are studying off campus and would like to access the library's electronic resources, use the Off Campus Login and login using your Single Sign On credentials or using your last name and library barcode.

<https://www.lib.uoguelph.ca/>

<https://www.lib.uoguelph.ca/campus-login>

3.2 Ares

To access course reserve materials through the University of Guelph McLaughlin Library, select **Ares** on the navbar in CourseLink. Note that you will need your Central Login ID and password in order to access items on reserve. Please note this course will not have items on reserve.

For further instructions on accessing reserve resources, visit [How to Get Course Reserve Materials](#).

If at any point during the course you have difficulty accessing reserve materials, please contact the e-Learning Operations and Reserve Services staff at:

Tel: 519-824-4120 ext. 53621

Email: libres2@uoguelph.ca

<https://www.lib.uoguelph.ca/find/course-reserves-ares/how-get-course-reserve-material>

4 Learning Outcomes

4.1 Course Learning Outcomes

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

1. Review and discuss current science related to the practical assessment of animal welfare.
 2. Students will be exposed to a wide variety of approaches to understanding and assessing animal welfare in practical settings.
 3. 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.
 4. Students 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.
 5. In addition, students will learn how to develop an effective animal welfare assessment program.
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5 Teaching and Learning Activities

5.1 Lecture

Jan 9

Topics: Introduction to animal welfare assessment in practical settings.

References: Suggested Readings:
No readings for the first class.

Jan 16

Topics: How to measure animal welfare in practical settings - resource-based vs. animal-based measures.

References: Suggested Readings:

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:

Farm animal welfare in the U.S.A.: farming practices, research, education, regulation, and assurance programs. Applied Animal Behaviour Science 13: 298-312.

The questionable value of some science-based 'welfare' assessments in intensive animal farming: sow stalls as an illustrative example. MP CAULFIELD and H CAMBRIDGE. Aust Vet J. 2008 Nov;86(11):446-8.

Jan 23

Topics: Cruelty Legislation v.s. Animal Welfare Legislation

Regulations and Codes of Practice

References: Suggested Readings:

Animal Law in Canada:
<https://www.inspection.gc.ca/animal-health/humane-transport/provincial-and-territorial-legislation/eng/1358482954113/1358483058784>

Animal Protection Index:
<https://api.worldanimalprotection.org/>

Animals for Research Act-
<http://www.omafra.gov.on.ca/english/food/inspection/ahw/ara-index.htm>

Jan 30

Topics: Analysis of existing codes vs. regulations vs. standards

References: Suggested Readings:

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). *Revue scientifique et technique* (International Office of Epizootics), 24:655-663.
<https://pubmed.ncbi.nlm.nih.gov/16358516/>

How can farmers make use of welfare assessment schemes? – A case study. In: Koene P (Ed.). Ingemann R, Sondøe P and Forkman (2008). *Proceedings of the 4th International Workshop on the Assessment of Animal Welfare at Farm and Group Level (WAFL, Wageningen, The Netherlands, pp. 66).*

Assessment of farm animal welfare at herd level: many goals, many methods. *Acta agriculturæ Scandinavica. Section A, Animal science, Suppl 30:26-33.*

Feb 6

Topics:

Animal Welfare Programs

References:

Suggested Readings:

1. Animal-based measures for the assessment of dairy cattle, pigs and laying hens: consensus of expert opinion. *Animal Welfare*. Whay HR, Main DCJ, Green LE and Webster AJF (2003). 12:205-217.
2. Definition of criteria for overall assessment of animal welfare. Botreau R, Veissier I, Butterworth A, Bracke MBM and Keeling LJ (2007). *Animal Welfare*, 16:225-228.
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). *Acta agriculturæ Scandinavica. Section A, Animal science, Suppl 30:103-107*
4. Assessing lameness in cows kept in tie-stalls. K. A.

Leach, S. Dippel, J. Huber, S. March, C. Winckler, and H. R. Whay. *J. Dairy Sci.* 92:1567-1574 10.3168/jds.2008-1648. American Dairy Science Association, 2009.1. *Mench JA* (2008).

Feb 13

Topics: Student Reports, Animal Based Measures

References: Suggested Readings:

1. Science-based assessment of animal welfare: farm animals. Duncan IJH (2005). *Revue scientifique et technique (International Office of Epizootics)*, 24:483-492.
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.
3. Assessing Animal Welfare: Different Philosophies, Different Scientific Approaches. Fraser, David. *Zoo Biology* 28 : 507–518 (2009)

Feb 20

Topics: Reading Week - No Class

Feb 27

Topics: Class Project - practice

References: Suggested Readings:

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. *Animal Welfare*, 12:625-629.
2. Lehner PN (1996). *Handbook of ethological methods*. Second edition. Cambridge University Press,

Cambridge, pp. 212-221; pp. 389-390.

3. Zar JH (1999). Biostatistical Analysis. Fourth Edition (Prentice hall, New Jersey, pp. 443-447; pp. App106; pp. App.12-15).
4. Courboulay V (2007). Body condition score. In: Velarde A and Geers R (eds.) On Farm Monitoring of Pig Welfare (Wageningen Academic Publishers, Wageningen, pp. 111-115).

March 6 - Field Trip

Topics: Data Collection for Class Project

References: IOR

March 13

Topics: IOR

March 20

Topics: Qualitative Animal Welfare Assessment

References: Suggested Readings:

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. *Applied Animal Behaviour Science*, 67:193-215.
2. Wemelsfelder F (2001). Qualitative assessment of animal behaviour as an on-farm welfare-monitoring tool. *Acta agriculturæ Scandinavica. Section A, Animal science, Suppl 30*:21-25.
3. Wemelsfelder F (2007). How animals communicate quality of life: the qualitative assessment of behavior. *Animal Welfare*, 19(S):25-31.
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? *Animal Welfare*, 5:105-127.

March 27

Topics: Final Project Presentations and Discussion

April 3

Topics: Final Project Presentations and Discussion

6 Assessments

6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Presentation: Compare and Contrast	20
Present a Critique	20
Inter-observer Reliability trials	20
Welfare Assessment/Audit	30
Class Participation	10
Total	100

6.2 Assessment Details

Presentation: Compare and Contrast (20%)

Date: Mon, Jan 30

Learning Outcome: 1, 2, 3, 4

Students lead the seminar by giving a presentation comparing and contrasting different codes of practice, regulations or standards for their particular species. 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. 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. The presentation should be about 10 – 12 minutes long including time for discussion. Presentation must be analysis of the documents – similarities, differences, types of language used, focus of standards etc.

Marking Scheme:

Total Mark = 20

Teacher Mark: 15 marks

5 - Review of standards/codes - complete, comprehensive

5 - Organization - is the presentation easy to follow, good use of visuals?

5 - Overall impression

Peer Mark: 5 marks

Present a Critique (20%)

Date: Mon, Feb 13

Learning Outcome: 1, 2, 3, 4

Students present a critique of a welfare assessment program, composed of a 10 minute presentation and a written summary of their analysis. Students will provide a comprehensive overview of an 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.

Marking Scheme:

20 marks – 10 for the presentation and 10 for the written portion.

Inter-observer Reliability trials (20%)

Date: Mon, Mar 20 - Mon, Apr 3

Learning Outcome: 2, 4, 5

Students report results of inter-observer reliability trials conducted at a farm. Students will be required to complete data analysis and to provide a report structured as an academic poster. This can be done individually or in groups.

For this project, students are marked on their poster. Marking scheme:

5 marks - clear, concise

5 marks - elements covered (i.e., background, introduction etc.)

5 marks - originality

5 marks - overall impression

Welfare Assessment/Audit (30%)

Date: Mon. March 27 and Mon. April 3

Learning Outcome: 1, 2, 3, 4, 5

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.

Marking scheme:

15 marks for the presentation + 15 marks for the written

Class Participation (10%)

Date: Throughout the course

Learning Outcome: 1, 2, 3, 4, 5

Class Participation

Marking scheme: Individual's contribution to the class discussions and debates throughout the semester.

7 University Statements

7.1 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.

7.2 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>

7.3 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>

7.4 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.

7.5 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>

7.6 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>

7.7 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.

7.8 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>

7.9 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.

7.10 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).

7.11 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.
