

ANSC*6010 Topics in Comparative Animal Nutrition

Fall 2021 Section(s): C01

Department of Animal Biosciences Credit Weight: 0.50 Version 1.00 - September 14, 2021

1 Course Details

1.1 Calendar Description

Current topics in the feeding and nutrition of agricultural, companion and captive animal species. Emphasis is placed on the influence of nutrients on metabolic integration at tissue, organ and whole-animal levels. A nutritional case study will be conducted to allow students to solve practical feeding problems by applying basic nutritional principles. The course is offered annually.

1.2 Course Description

The course addresses the comparative aspects of food selection, feeding behaviour, digestive anatomy, physiology and function, nutrient utilization and energy metabolism in a diversity of animals primarily vertebrates, including wildlife, zoo animals, pets, experimental and alternate livestock species.

1.3 Timetable

Classes: Monday 8:30am - 11:20am, ANNU Room 102

Timetable is subject to change. Please see WebAdvisor for the latest information.

COVID-19 Disclaimer: please be aware that the information on course delivery, accessibility and examinations presented in this outline were developed based on current University guidelines. However, due to the continuously evolving situation and resulting changes in public health recommendations, the format and delivery of this course may be revised with limited notice.

1.4 Final Exam

There is no final exam in this course.

2 Instructional Support

2.1 Instructional Support Team

Instructor: Jim Atkinson

Email: jatkinso@uoguelph.ca **Telephone:** +1-519-824-4120 x53716

Office: ANNU 228

Office Hours: Please contact instructor using email: jlaaps@gmail.com

3 Learning Resources

Relevant scientific literature is selected in consultation with Dr. Atkinson.

4 Learning Outcomes

4.1 Course Learning Outcomes

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

- 1. Literacy Students will be required to develop an understanding of key review articles, interpret peer-reviewed original research papers and present ideas and research findings to the class orally. Students are expected to be actively involved in class discussions. Students' scientific writing skills will be improved through writing short and focused abstracts of their presentation material during the semester. Students are asked to follow the guidelines and requirements to prepare and carry out oral presentations and abstract writing assignments.
- 2. A sense of Historical Development Comparative aspects of food selection, feeding behaviour, nutrient utilization and energy metabolism in agricultural, companion and captive animal species.
- Understanding forms of Inquiry Various experimental approaches in the nutritional sciences and their interpretation will form an important part of discussions in class, through individual student presentations.
- 4. Depth and Breadth of Understanding Aside from covering various topics related to nutrition, directed by student interests and reflected in their presentations; students will complete a review paper to examine a topic in depth. The topic and scope will be determined in consultation with the instructor.

5 Teaching and Learning Activities

The core of the course will feature individual presentations by students on topics reflecting their personal interests in the relevant scientific literature, selected in consultation with Dr. Atkinson. This format emphasizes the exposure of students in the course to a diversity of species.

Typically four students will present each week, with each student presenting twice over the course of the semester (see schedule in outline). Examples of topics addressed in previous semesters will be suplied to provide guidance on potential topics.

Each student will also submit a review paper at the end of the semester, with the topic and scope again selected in consultation with Dr. Atkinson. It is recommended that at least one of the papers presented should be relevant to the term paper topic selected.

5.1 Lecture

Mon, Sep 13

Topics: Course Introduction

Searching the Comparative Nutrition literature - Jim

Atkinson

Mon, Sep 20

Topics: The scope of Comparative Nutrition - Jim Atkinson

Mon, Sep 27

Topics: The scope of Comparative Nutrition (continued) - Jim

Atkinson

Mon, Oct 4

Topics: First student presentations, Week 1 - TBA

Mon, Oct 11

Topics: Thanksgiving break - no class scheduled

Mon, Oct 18

Topics: First student presentations, Week 2 - TBA

Mon, Oct 25

Topics: First student presentations - Week 3 - TBA

Mon, Nov 1

Topics: First student presentations, Week 4 - TBA

Mon, Nov 8

Topics: Second student presentations, Week 1 - TBA

Mon, Nov 15

Topics: Second student presentations, Week 2 - TBA

Mon, Nov 22

Topics: Second student presentations, Week 3 - TBA

Mon, Nov 29

Topics: Second student presentations, Week 4 - TBA

Mon, Dec 6

Topics: Guest Lecture - Zoo Animal Nutrition - Sara Gourlie

6 Assessments

6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Abstract #1	10
Presentation #1	15
Abstract #2	10

Name	Scheme A (%)
Presentation #2	15
Presentation Feedback	20
Term Paper/Review Paper	30
Total	100

6.2 Assessment Details

Abstract #1 (10%)

Date: Fri, Oct 1 - Fri, Oct 29 **Learning Outcome:** 1, 2, 3

You will provide a brief (approximately 300-350 work) abstract indicating the context and content of your presentation and critically assessing the effectiveness of the study. This should be available to Dr. Atkinson and the other class members no later than the Friday of the week before you are scheduled to present.

Presentation #1 (15%)

Date: Mon, Oct 4 - Mon, Nov 1 **Learning Outcome:** 1, 2, 3, 4

Your two presentations should each last approximately 20 +/- 2 minutes, illustrated by appropriate PowerPoint support, to be followed by a question period of 5-10 minutes. Each presentation will typically focus on one (or at most two) papers selected from the recent literature. (preferably from 2016 onwards).

Abstract #2 (10%)

Date: Fri, Nov 5 - Fri, Nov 26 **Learning Outcome:** 1, 2, 3

You will provide a brief (approximately 300-350 work) abstract indicating the context and content of your presentation and critically assessing the effectiveness of the study. This should be available to Dr. Atkinson and the other class members no later than the Friday of the week before you are scheduled to present.

Presentation #2 (15%)

Date: Mon, Nov 8 - Mon, Nov 29 Learning Outcome: 1, 2, 3, 4

Your two presentations should each last approximately 20 +/- 2 minutes, illustrated by appropriate PowerPoint support, to be followed by a question period of 5-10 minutes. Each presentation will typically focus on one (or at most two) papers selected from the recent literature. (preferably from 2016 onwards).

Presentation Feedback (20%)

Date: On-going through the presentation weeks

Learning Outcome: 1, 3

In order to promote critical evaluation of presentations by the the other participants, on the days they are not presenting students will complete a one page evaluation for each of the presentations by the other students in the course, covering both the abstract submitted and the presentation itself (a template for this feedback will be supplied). These will be

collected and graded by Dr. Atkinson for their effectiveness before being returned anonymously to the presenter. Performance in these evaluations will be reflected in 10% of the "Feedback" grade awarded. Apppropriate participation during question periods will be accounted for in the remaining 10% of this grading component.

Term Paper/Review Paper (30%)

Date: Fri, Dec 10

Learning Outcome: 1, 2, 3, 4

You will submit a fully referenced* scholarly review of between 2000 and 2200 words in length (references not included) on a topic relevant to both the scope of the course and your personal academic interests. Your final topic scope must be confirmed with Dr. Atkinson before you proceed with your full literature research. Your topic will typically build on the content of one or both of your class presentations and will be based on 12 to 15 primary lieterature sources, but this is open to discussion with Dr. Atkinson. Guidelines on the appropriate structure and balance of the term paper will be discussed in class and with students individually.

* referencing should follow that of a journal of your choice, which should be identified.

Your paper topic should be finalized by Monday November 1st at the latest and is due no later than Friday December 10th.

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 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

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.uoquelph.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-campuses/how-u-of-g-is-preparing-for-your-safe-return/
- https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.