APBI 415 – Applied Animal Behaviour
Tuesday and Thursday 11-12:20pm

Instructor
Dr. Borbala Foris borbala.foris@ubc.ca

Teaching Assistant
Emeline Nogues enogues@mail.ubc.ca

Virtual office hours: There will be a waiting room so we will be able to chat with students individually. If you cannot make this time, please contact Emeline or Borbala to set up an appointment.

Borbala's office hours: Wednesdays 2:00 – 3:00pm

Emeline's office hours: Thursdays 1:30 – 2:30pm

Course Catalogue Description
Application of principles and research methods of animal behaviour to practical problems in the care of farm, companion, wild and research animals, and in animal training and human-wildlife conflict.

Pre-requisite: 3rd year standing or higher.

Course Learning Outcomes
By the end of this course, you will:

1. be able to identify, define and solve problems in applied animal behaviour related to the management of companion, research, production and wild animals;
2. apply your understanding of behaviour to address practical issues in animal care and use, as well as human-animal interactions;
3. develop tools to use when reading and critiquing scientific articles;
4. analyze, critique, interpret, and summarize scientific research findings;
5. develop skills to communicate effectively through written and oral means;
6. develop skills in critical thinking and problem solving;
7. and generate ideas for new research, and gain experience in the development of research proposals.

Class Structure
We will use a combination of online lectures, small group discussions and activities, presentations, independent writing and critical analysis throughout this course.

Course Website
All course readings and assignments details are posted on Canvas. http://canvas.ubc.ca

Suggested Textbook Readings

The textbooks below are on hold for use in the Library Reserves (2 hrs). Other versions (2002, 2009) of the Jensen book are available online through the UBC library. I would strongly suggest purchasing Martin and Bateson's book, *Measuring Behaviour*.

- Jensen, P. 2017. The ethology of domestic animals: an introductory text. CABI, Wallingford, UK.
- Bateson, M. and Martin, P. 2021. Measuring behaviour: an introductory guide. 4th ed., Cambridge University Press, NY.

Evaluation

There is emphasis on the comprehension of concepts, critical thinking, and effective communication, as evidenced by assignments, class discussions, a research project, and oral presentations.

	Value (% of Final Grade)
1. First scientific paper critique	**5**
2. Ethogram assignment: *a behavioural catalogue*	**12**
3. Research project: *applied animal behaviour in action*	**40**
4. Oral presentation: *showcasing your research*	**15**
5. Peer review of final presentations	**5**
6. Article critiques: *critical reading, writing and communication*	**15**
7. Group participation	**8**
Total	**100%**

1. First scientific paper critique

For this assignment you will complete a critical analysis of a published scientific article. There are two stages to this assignment: stage 1 – peer review, stage 2 – final version. In the first stage you will complete a draft critique which will be reviewed by two of your peers. This peer review will allow you to receive and give feedback prior to your final submission. The final critique submission will be worth 5 points and will be 2-3 pages in length, double-spaced, 12 pt font. More detailed assignment instructions can be found on Canvas.

2. Ethogram assignment: *a behavioural catalogue*

In this assignment you will gain hands-on experience quantifying behaviours in animals. In this assignment you will (1) create an ethogram for scoring behaviour in animals, (2) formulate a research question/hypothesis, (3) design a hypothetical experiment that addresses your research question, and (4) design a data sheet that would be used to collect data for your hypothetical experiment. This assignment will allow you to build fundamental skills in behavioural data collection that will be utilized in your course research project. The ethogram assignment is worth 12 points. More detailed assignment instructions can be found on Canvas.

3. Research project: *applied animal behaviour in action*
For your research project you will design a research question and project based on an animal of your choice. You will collect behavioural data, analyze and write up your results to be presented in a final research paper (worth 32 pts). This assignment will give you direct behavioural experience in an area of interest to you. There are multiple stages to this project. You will be responsible for handing in a written research hypothesis for approval. You will also be handing in your research data organization, which will include a detailed ethogram and a sample data sheet (worth 4 pts). To help structure your final research paper, a detailed research paper outline will also be required (4 pts). Your final research paper will include a literature review on your research topic. There are a variety of settings and places you can choose to collect data from for your final research paper: captive animals via online web cameras (e.g., Vancouver Aquarium, Melbourne Zoo), in a research lab on campus (via video data), at a local farm such as the UBC Dairy Centre in Agassiz (via video data), or with animals in a wild/urban setting (e.g., Stanley Park, local park). With guidance from Borbala and your TA, you will be responsible for designing your data collection method, as well as for collecting and presenting your data. More detailed assignment instructions can be found on Canvas.

4. Oral presentation: *showcasing your research*
You will gain experience communicating your research findings from your final research project in a final oral presentation to the class. The final presentation is worth 15 points and will consist of a 10-12 min presentation, followed by questions. The presentation will involve a complete overview of your research project – hypothesis, data collection methods and analysis, and conclusions. More detailed assignment instructions can be found on Canvas.

5. Peer review of final presentations
Each student will be assigned to peer-review 5 other student's final research presentations. It is your responsibility to be in class on the days that you are assigned to peer review. Peer reviews are due 24h after the presentation. See Canvas for further instructions and schedule.

6. Article critiques: *critical reading, writing, and communication*
These assignments will give you experience in critical reading, writing and communication related to the scientific literature in the field of applied animal behaviour. You will earn points from 3 submissions 5 pts each (15 pts total). (1) Written critique: Similar to the first assignment, critiques will be 2-3 pages in length, double-spaced, 12 pt font, 1 inch margins. (2) Narrated power point presentation: Critique delivered in a short video featuring 3 slides and your voice recording. (3) Infographic: Main message of the article summarized for a general audience in the form of an infographic. Critiques are to be submitted to Canvas by the beginning of class (deadline of 11am). More information on how to write a critique, create a narrated presentation and an infographic is posted on Canvas and will be explained in class.

7. Group participation
Group participation (8 pts total) will be evaluated by the instructor and teaching assistant, as well as your peers, and will be evaluated on the following basis:

In-Class Participation: small group	4 pts	▪ Small group engagement demonstrated by actively listening and contributing to topic discussions ▪ Each week of working in small groups, the assigned group leader will assess each student's level of participation and preparedness in the group

Group leader	4 pts	▪ One week you will be assigned to facilitate a small group discussion on a scientific article and present your discussion to the entire class. The group leader will be assessed on their facilitation skills (Borbala and peers) and their presentation to the class (Borbala).

Please note that if you are missing class you will also miss out on earning participation points for group participation.

Weeks 4 – 9: Topic weeks

Each week we will explore and discuss a topic related to the study of applied animal behaviour.

Tuesdays

Scientific articles related to the topic of the week will be assigned for each Tuesday, each student is responsible for reading the assigned article before coming to class. On weeks 5, 7, and 9 this article will form the basis of the article critique assignment (due on Thursdays 11 am).

Thursdays

On Thursdays we will have smaller group discussions on a research article related to the topic of the week. Each week at least 5 people will be assigned to be a group facilitator. This group facilitator is responsible for leading a group discussion (via Zoom) on their assigned day/article. As a participating group member you will also be responsible for reading the article prior to class. Group members must bring with them to Thursdays class the following information to be provided to your group leader: (1) one positive critique of the assigned article, (2) one negative critique of the article, and (3) a peer-reviewed article related to the topic being discussed (article must be presented to your group leader either in the form of a full written citation or a link to the article). Group facilitators will be assigning a mark to each of their group members for participation in the group discussion, including the materials listed above.

Course Policies

- Students should come to class prepared (e.g., completing course readings) as this will only enhance your learning experience.
- Students will be required to submit their written Critiques, Ethogram assignment and Final Research Paper through TurnItIn. You will be responsible for submitting your similarity index reported by TurnItIn in the comments section of your assignment submission in Canvas. Failure to submit your similarity index may result in a 10% reduction in your final score for that assignment. You can register for our class at www.turnitin.com using Class ID = *******, Enrollment key = *******
- Students who are registered with the Centre for Accessibility https://students.ubc.ca/about-student-services/centre-for-accessibility should notify the instructor.

Late Assignments: All assignments are due by the specified date and time. **Late assignments are generally not accepted,** extensions can only be granted at Borbala's discretion if contacted **before** the due date.

Absences: If you have physical illness or experience emotional stress that cause you to miss classes, please contact Emeline or Borbala as soon as possible. Absences from classes will be granted at Borbala's discretion.

Academic Integrity: Please remember the importance of academic integrity. Please be aware of UBC's policy on academic integrity and plagiarism: https://learningcommons.ubc.ca/resource-guides/understand-academic-integrity/ . All work completed in this class should be your original work. Academic misconduct of any kind will not be tolerated. The consequence for academic misconduct will include a variety of disciplinary measures (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,959).

Course Feedback: You will have two opportunities during semester to offer feedback on your experience with the course: a midterm course evaluation and the official UBC course evaluation at the end of the term. I can apply the resulting feedback from the midterm evaluation to the remainder of the course. Your feedback is valued greatly so we ask that you please complete the evaluations.

University Values and Policies: UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of emotional and physical violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here (https://senate.ubc.ca/policies- resources-support-student-success).

Proposed Schedule (subject to change)

Week	Date	Topic	Assignments/Due dates
1	Jan 11 Jan 13	Introductions; Critical reading and writing skills Critical reading and writing skills	*Assign written critique #1* Draft critique due by **Jan 13th, 11am**. Peer reviews due by **Friday Jan 14th, 11am**.
2	Jan 18 Jan 20	Measuring behaviour Ethograms	Written critique #1 due by **Jan 18th, 11am** *Assign Ethogram*
3	Jan 25 Jan 27	Ethograms/Research papers Research project activity	 Ethogram due by **Jan 27th, 11am,** *Assign project*

4	Feb 1 Feb 3	**Topic week 1:** Behaviour and physiology Group discussions	Project: Research question and hypothesis due by **Feb 1st,11am** Group article critique *Assign written critique #2*
5	Feb 8 Feb 10	**Topic week 2:** Social behaviour Group discussions	Project: Ethogram, Methods, Sample data sheet due by **Monday Feb 7th, 11am** Written critique #2 due by **Feb 10th, 11am** Group article critique
6	Feb 15 Feb 17	Data collection day Data management (data organization)	 Come to class with preliminary data *Assign short video critique*
Feb 21-26		**Reading Break Week – no classes**	
7	Mar 1 Mar 3	**Topic week 3:** Abnormal behaviours Group discussions	 Short video critique due by **Mar 3rd, 11am** Group article critique
8	Mar 8 Mar 10	**Topic week 4:** Personality Group discussions	Project: Research paper outlines due by **Mar 8th, 11am** Group article critique *Assign article infographic*
9	Mar 15 Mar 17	**Topic week 5:** Preferences Group discussions	 Infographic due by **Mar 17th, 11am** Group article critique
10	Mar 22 Mar 24	Automation and data analysis Final Presentations	
11	Mar 29	Final Presentations	

	Mar 31	Final Presentations	
12	April 5 April 7	Final Presentations Final Presentations	
	April 12		Research paper due – **Tuesday, April 12nd, 11am**