Zoology 567 – Course Outcomes

By the end of the course, students will be expected to:

1. Compare and contrast variation in sensory modalities and how this variation impacts perception and behavioural responses for different species.

2. Identify and discuss methods to explore proximate and ultimate explanations for behaviour.

3. Describe how genetic differences among individuals and species and in the environments in which they develop could interact to produce differences in behaviour.

4. Develop and evaluate adaptationist arguments for the evolution of behaviours.

5. Use evolutionary trees and comparative phylogenetic techniques to propose hypotheses for the evolution of behaviour.

6. Discuss the role of hormones and the nervous system in recognizing, responding to, and modulating behaviour.

7. Describe the variation in behaviour observed for different animals, including communication, learning and memory, foraging, predator defense, migration and dispersal, habitat selection and territoriality, mating and reproduction, parental care, and social systems.

8. Collect, critique, and develop methods for observing animal behaviour in the field. Identify, discuss, and develop hypotheses and predictions to explore proximate and ultimate explanations for behaviour.

9. Discuss and develop methods to explore a behaviour using proximate and ultimate frameworks.

10. Identify ethical considerations and prepare an ethics application.

11. Prepare a research proposal and provide constructive review of research proposals.

12. Find, organize, and select relevant literature to explore a topic in animal behaviour.

13. Critically read and summarize scientific literature.

14. Reflect on effective practices for continual improvement and growth (e.g., time management, self-directed learning and inquiry, seeking professional support and feedback, identifying strengths and weaknesses, incorporating feedback, setting goals and planning for the future).
15. Synthesize and summarize information from different sources to understand and explain a topic.

16. Share knowledge on a topic through writing, visualizations, video, or auditory podcast format.