

BIOLOGY 345 (10316)

ANIMAL BEHAVIOUR

2014

**Instructor: Dr. T. E. Reimchen, Cunn 056,
Ph 721-7101**

Lectures: Mon, Thurs 1130-1300, ECS 125

Lab. Coordinator: Dr. P. M. Willis, Petch 108

Ph 721-8862 pwillis@uvic.ca

Labs: Petch 110

General outline of lecture topics

Historical approaches to the study of behaviour

General diversity of nervous systems among animal phyla

Partitioning mechanisms for behavioural differences: 'proximate' (genetic, epigenetic, environmental) versus 'ultimate' (ecological and evolutionary)

Animal communication and sensory exploitation

Behavioural lateralization – left brain vs right brain

Defenses against predators

Optimal foraging, zoopharmacognosy (self-medication)

Habitat choice and territoriality

Evolution of sex and mate choice –who and why?

Monogamy/polygyny/polyandry – when and why?

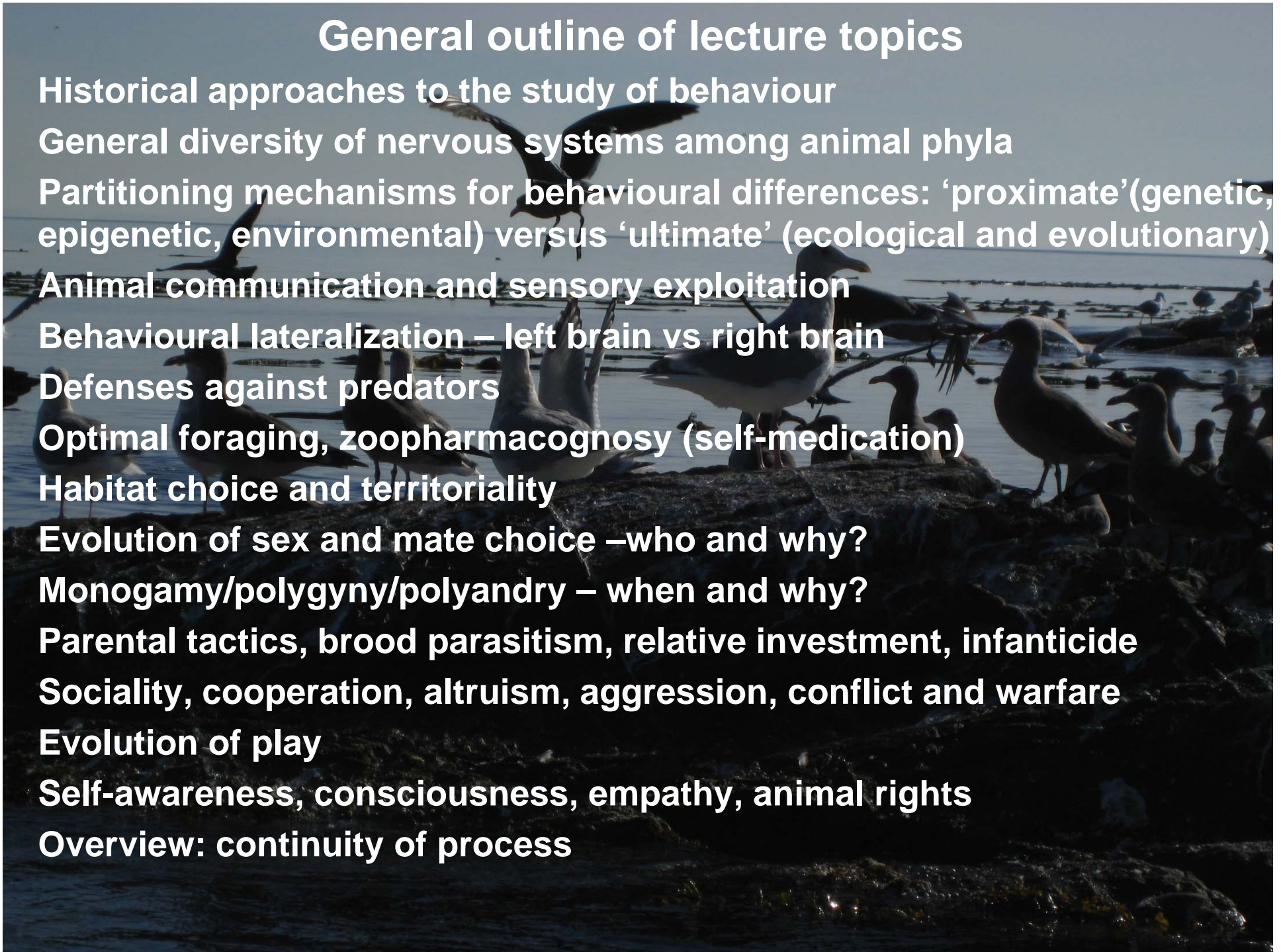
Parental tactics, brood parasitism, relative investment, infanticide

Sociality, cooperation, altruism, aggression, conflict and warfare

Evolution of play

Self-awareness, consciousness, empathy, animal rights

Overview: continuity of process



- **Laboratory**
- Animal Behaviour, Biology 345, Lab Manual: Dr. R. M. Marx
- Hands-on analyses of simple and complex behaviours across a diversity of taxonomic groups including protists, jellyfish, sea anemones, flatworms, annelids, molluscs, sea stars, arthropods, fish, crows, ducks, gulls and dogs. Includes a field project.



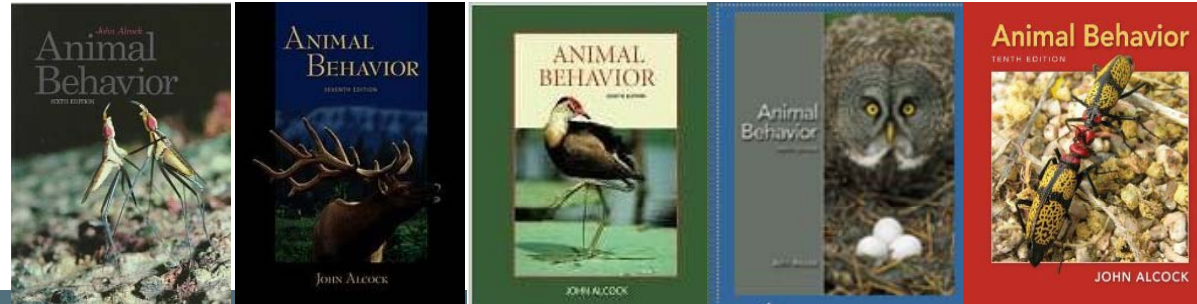
Week of	Topic	Assignment due
Sep. 08	Introductory Lab	
Sep. 15	From Tax is to Shadow Reflex	✓✓
Sep. 22	Learning Experiments Part 1	✓; Tutorial 1
Sep. 29	Learning in Flatworms, Crickets, and Earthworms Part 2	✓; Part A - raw data
Oct. 06	Predator - Prey Interactions	✓
Oct. 13	Thanksgiving – No labs	Part B - proposal (Oct. 16)
Oct. 20	Agonistic Behaviour in Crayfish	✓; Tutorial 2
Oct. 27	Interactions in Siamese Fighting Fish	✓
Nov. 03	Workshop	✓; Tutorial 3
Nov. 10	Reading Break – No labs	
Nov. 17	Lab Exam	✓; Tutorial 4
Nov. 24	Project Presentations	Project Report
TBA	Optional Field Trip: Bees at the UVic Community Gardens	
TBA	Optional Field Trip: Goldstream Park for Salmon Migration	



Marking Schedule

Lecture: Midterm (Oct16) (multi-choice)	20%
Final (TBA) (multi-choice and essay)	35%
Laboratory	
Exercise and pop quizzes	10%
Tutorials (3@3%)	9%
Project	
Part A Data	2%
Part B Proposal	4%
Final Presentation	3%
Report	10%
Lab exam	7%
Total lab marks	45%

Note: Students not wanting their marks posted using ID# should notify me at the beginning of the term. It is the student's responsibility to meet the ADD/DROP dates from the UVic calendar. Students are responsible for checking their own records and registration status, available via WebView (www.uvic.ca/reco). Grades are assigned as follows: A+ 90-100; A 85-89; A- 80-84; B+ 77-79; B 73-76; B- 70-72; C+ 65-69; C 60-64; D 50-59; F 0-49. A supplementary exam is not permitted for those who get F in the course. "UVic is committed to promoting, providing and protecting a supportive and safe learning and working environment for all its members".



- **Textbook:** Animal Behavior (recommended but not required).
 - 6th- 10th Edition
 - John Alcock
 - Students are expected to browse online or hardcopy periodicals in McPherson Main Floor to supplement lecture material
 - Examples of journals
 - Nature, Science, New Scientist, Trends in Ecology and Evolution, Animal Behaviour, Behavioral Ecology and Sociobiology, Animal Cognition, Animal Learning and Behavior, Neurobiology of Learning and Behavior, Neuroscience.
- Much of the lecture material will be posted on the course website after the lecture
All posted material on the website is for personal use only and not to be distributed