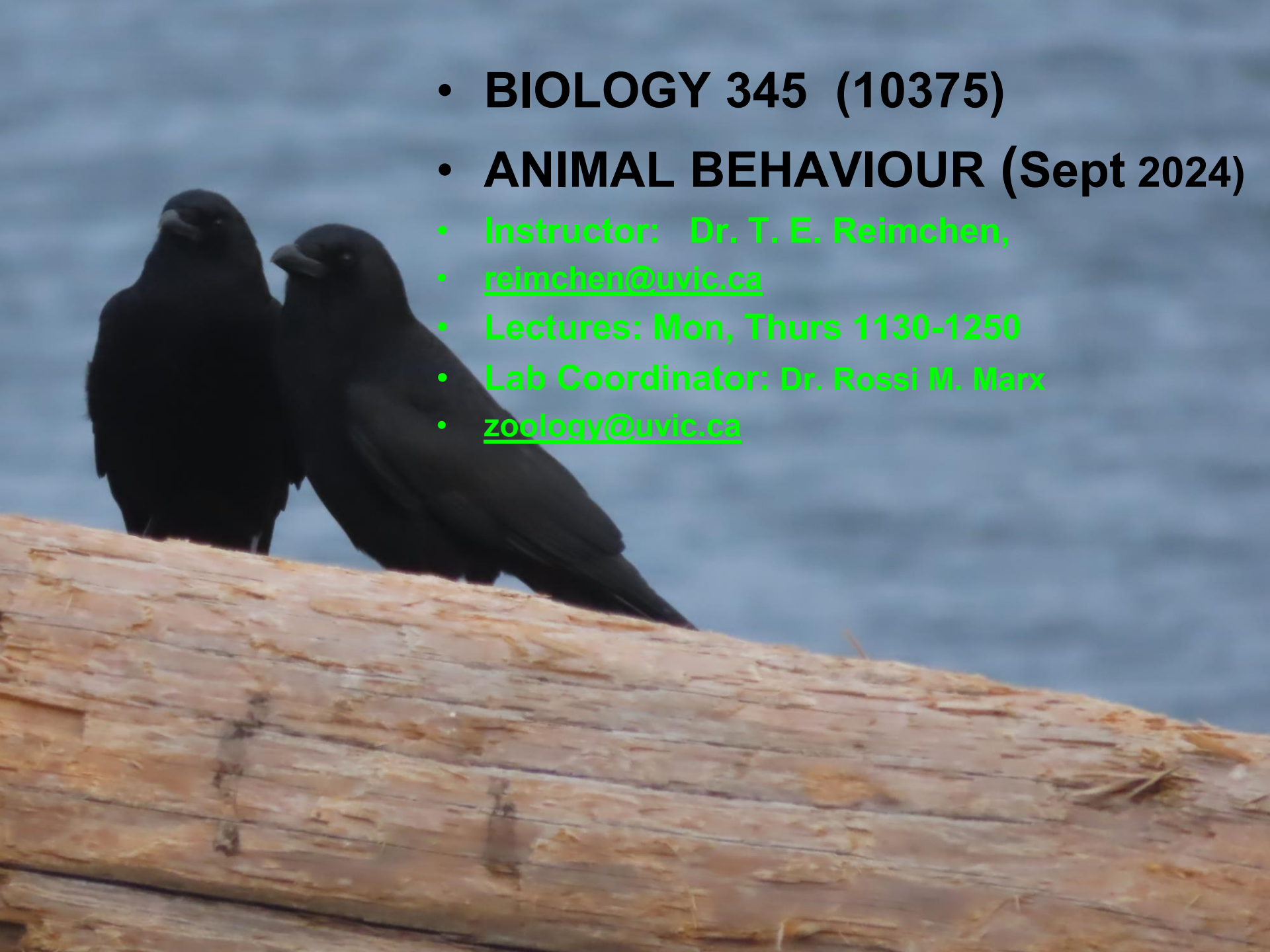
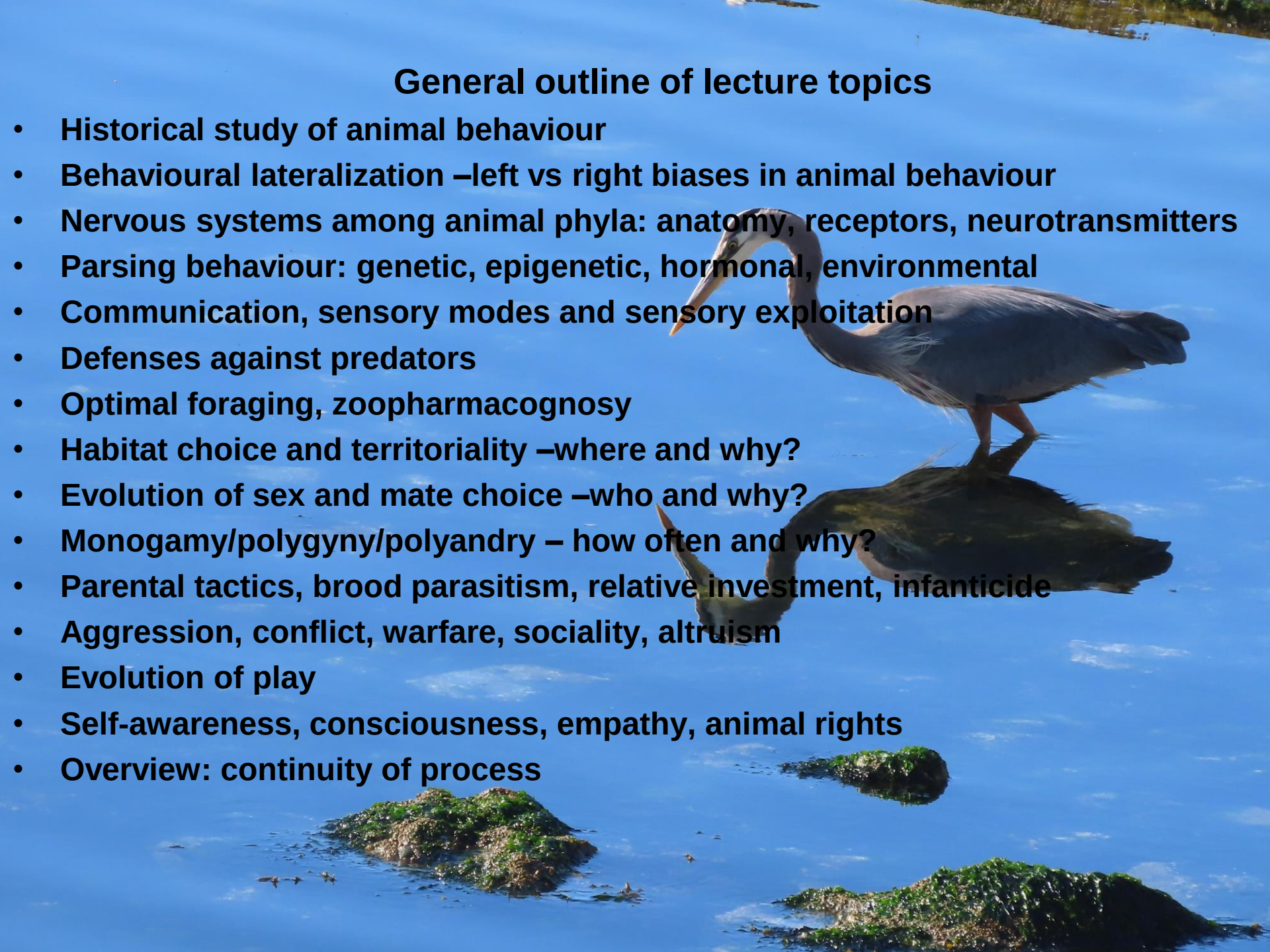


- **BIOLOGY 345 (10375)**
- **ANIMAL BEHAVIOUR (Sept 2024)**
- **Instructor: Dr. T. E. Reimchen,**
- **reimchen@uvic.ca**
- **Lectures: Mon, Thurs 1130-1250**
- **Lab Coordinator: Dr. Rossi M. Marx**
- **zoology@uvic.ca**



General outline of lecture topics

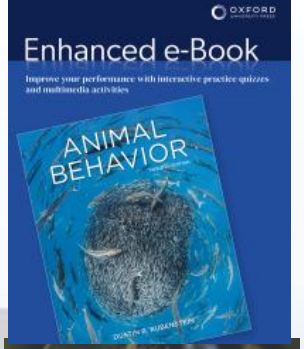
- Historical study of animal behaviour
- Behavioural lateralization –left vs right biases in animal behaviour
- Nervous systems among animal phyla: anatomy, receptors, neurotransmitters
- Parsing behaviour: genetic, epigenetic, hormonal, environmental
- Communication, sensory modes and sensory exploitation
- Defenses against predators
- Optimal foraging, zoopharmacognosy
- Habitat choice and territoriality –where and why?
- Evolution of sex and mate choice –who and why?
- Monogamy/polygyny/polyandry – how often and why?
- Parental tactics, brood parasitism, relative investment, infanticide
- Aggression, conflict, warfare, sociality, altruism
- Evolution of play
- Self-awareness, consciousness, empathy, animal rights
- Overview: continuity of process

Course Text: suggested but not essential:

Animal Behavior (12th edition-2023)

- Author DR Rubenstein Bookstore E-Book ~$85

-alternate: hardcopy text: Animal Behaviour- J. Alcock, any edition

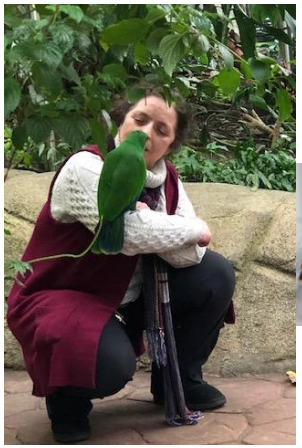


- **Some thought-provoking reading**:
- B. Heinrich 1999: ‘Mind of the Raven’
- V. Evans 2014: ‘The Language Myth’
- D. Griffin 2001: ‘Animal Minds: beyond cognition to consciousness’
- P. Singer 1975-2015 (first to last edition): Animal Liberation
- F. deWaal 2009: ‘The Age of Empathy’
- T. Regan 2004: ‘Empty Cages’’
- Excellent documentaries
  - David Attenborough- The Life of Birds, The Life of Mammals, Mammals,
  - Life in the Undergrowth, Planet Earth, Life in Cold Blood,
  - Blue Planet II, Life, The Hunt, The Cove,

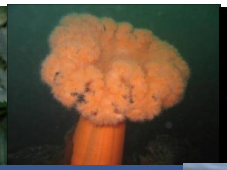
There will be 5 minute break halfway through each lecture devoted to a question and answer session concerning any issues from the previous or current lecture. Students are responsible for checking their own records and registration status and should review the UVic Student Code of Conduct. All lectures and labs are in person.

Laboratory

Simple and complex behaviours across a diversity of taxonomic groups including protists, jellies, sea anemones, flatworms, earthworms, bivalves, nudibranchs, crabs, crickets, crayfish, sea cucumbers and urchins. Students will undertake a field project with an option of studying either crows, ducks, gulls, squirrels or dogs. Students are encouraged to visit any salmon spawning stream during October or November to watch spawning activity (eg. Goldstream near Victoria, Ayum Ck near Sooke).

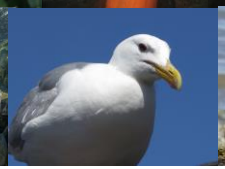












Biol345 Lab Schedule Fall 2024

Week of	Topic	*Assignment due*
Sep. 09	Introductory Lab; Behaviour in Non-Animals	*Preferences for project species*
Sep. 16	Learning Experiments Part 1	√; ***Sep. 16:*** *Project discussion paper 1 (fowl), individual assignment*
Sep. 23	Learning Experiments Part 2	√; ***Sep. 23:*** *Project discussion paper 2 (squirrels), group assignment*
Sep. 30	Writing Workshop	***Oct. 01:*** *Project discussion paper 3 (dogs), group assignment*
Oct. 07	Stimulus – Response Behaviours in Cnidarians	√; ***Oct. 07:*** *Tutorial 1*
Oct. 14	Thanksgiving - Project Work	***Oct. 15:*** *Project interim results*
Oct. 21	Predator - Prey Interactions	√
Oct. 28	Agonistic Behaviour in Crayfish	√
Nov. 04	Statistics and Presentation Workshops	***Nov. 04****: Tutorial 2*
Nov. 11	Reading Break – No Labs	
Nov. 18	TBA	***Nov. 21:*** *Project report & final results*
Nov. 25	Lab exam	
Dec. 02	Project Presentations	*Powerpoint presentation*
TBA	Optional Field Trip: Goldstream Park for Salmon Migration	

Distribution of Marks

Lab Exercises and Pop Quizzes		6%
Tutorials (2@2%)		4%
Project		25%
Paper discussions (3@1%)	3%	
Interim results	2%	
Presentation	5%	
Report	15%	
Lab exam		10%
Total		45%

Lecture Evaluation

Mid-term quiz#1 Oct 07 (12.5%) - short answer questions (35 minutes duration).
Mid-term quiz#2 Nov. 04 (12.5%) - short answer questions (35 minutes duration).
Unauthorized absence from either quiz will receive no marks.
Final exam(TBA) (30%) - combination of short answers and essay.

Deferred exams will be offered for medical issues. Students receiving less than 45% on the final lecture exam receive a failing grade for the course. A supplementary exam is not permitted for those who get less than 50% in the course.

The final exam and the laboratory component must be completed to receive a grade other than "N". Failure to complete one or more of these elements will result in a grade of "N" regardless of the cumulative percentage on other elements of the course. An N is a failing grade, and it factors into a student's GPA as 0. The maximum percentage that can accompany an N on a student's transcript is 49.

Major Course Goals for Biology 345

At the end of this course, you will:

- be able to explain the complexity and continuity of behavioural processes across the diversity of life, from the simplest organism to the most complex and from the less-derived to the most-derived.

-be able to define and provide examples for ethological terms

-be able to analyse and critically evaluate relevant scientific papers

-be able to collect, analyse, and summarize behavioural data and provide an oral and a written scientific report of the data

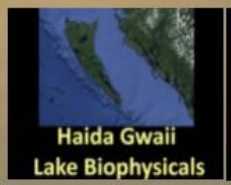
-have gained an appreciation of the ethical issues involved with human-animal interactions

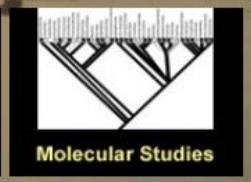
Evolutionary and Ecological Studies in Reimchen's Lab

Dr. T. E. Reimchen
Department of Biology
PO Box 3020
University of Victoria
Victoria, British
Columbia, V8W 3N5,
Canada
reimchen@uvic.ca

1: Brief canoe sequence of Drizzle Lake (video)

2: Underwater video of nesting male stickleback and curious Common Loons in dystrophic (red-shifted) waters (video). see Reimchen 1989 and Marques et al. 2017.





Supporting Agencies

ttp://web.uvic.ca/~reimlab/

Important Dates and Issues

Sept 04: First day of classes
Sept 17: last day for 100% reduction of tuition fees for standard first term and full year courses. 50% of tuition fees will be assessed for courses dropped after this date

Sept 20: Last day for adding courses that begin in the first term

Sept 30: Last day for paying first term fees without penalty
University closed (National Day for Truth and Reconciliation)

Oct 07: First lecture mid-term exam (35 minutes during lecture period)
Oct 08: Last day for 50% reduction of tuition fees. 100% of tuition fees will be assessed for courses dropped after this date

Oct 14: University closed (Thanksgiving Day

Oct 31: Last day for withdrawing from first term courses without penalty of failure

Nov 04: Second mid-term exam (35 minutes during lecture period)
Nov 11: University Closed (Remembrance Day)
Nov 11-13: Reading Break
Dec 04: Last day of classes

Dec 07: Examinations begin for all faculties

We acknowledge and respect the Lək̓ʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Lək̓ʷəŋən and W̱SÁNEĆ Peoples whose historical relationships with the land continue to this day.

Learn lots, study and enjoy the course