BIOL 307 Chordate Zoology Syllabus – Spring 2021

General Course Information

Welcome to Chordate Zoology! This course will provide an introduction to the diversity, anatomy, ecology, and behaviour of chordate animals. The Biology 307 Laboratories will provide you with the opportunity to gain an appreciation for the relationship between form and function of chordates and will attempt to do so by taking a comparative approach. The lectures will complement this by providing ecological and evolutionary context of chordate adaptations.

Lecture Contact Location & Hours

A01 - Tuesday, Wednesday & Friday, 10:30am - 11:20am Zoom link and meeting ID/password provided on the course website.

Laboratory Contact Location & Hours

B01 - Monday 2:30pm-5:20pm, orB04 - Tuesday 2:30pm-5:20pmZoom link and meeting ID/password provided on the course website.

*enrollment in a laboratory section is mandatory

Prerequisites

BIOL 184, BIOL 186, or written permission from the Course Coordinator (David Punzalan).

About the Instructors

This course is co-taught by Dr. David Punzalan (Lectures, and Course Coordination) and Dr. Roswitha Marx (Laboratory Coordination). Dave is an evolutionary ecologist, originally hailing from Toronto, Ontario. Although broadly trained in zoology, he admits to having spent most of his 'good years' chasing terrestrial and freshwater non-chordates (*e.g.* insects, spiders, and crustaceans). As a new (2019) transplant to Victoria, he spends most weekends learning about biodiversity in the Pacific Northwest, often staring into tidepools or beachcombing. Rossi is a neurobiologist by training who is in awe of nature and fascinated by how organisms and their systems function. She very much appreciates that we will be able to have many of the specimens from the department's collection on display in the BIOL 307 labs (albeit this year only virtually) and hopes that you will share her excitement.

Teaching Assistants

B01: Jacquie Ballantyne (<u>jballant@uvic.ca</u>) and Leigh Gaffney (<u>lgaffney@uvic.ca</u>) B04: Katie Innes (<u>katieinnes@uvic.ca</u>) and Kelsie Murchy (<u>kmurchy@uvic.ca</u>)

Contacting the Instructors

Dave is available to meet on Zoom by appointment (<u>davidpunzalan@uvic.ca</u>). Rossi is available to meet on Zoom by appointment (<u>zoology@uvic.ca</u>).

*please include "BIOL 307" in the subject line of e-mails, and expect a response within 48h.

Course Website and Materials

- 1) Course website on Brightspace (BRS): Please check this page regularly for important information and announcements.
- 2) Lectures will be delivered via Zoom; electronic (.pdf) versions of the lecture slides and video recordings of (most) sessions will be posted on BRS after class.
- 3) Lab materials: there is no lab manual for this course. Lab write-ups will be posted on BRS the week before each lab. Also check BRS for information regarding assignments.
- 4) Recommended textbook: Kardong, K. V. 2019. Vertebrates: Comparative Anatomy, Function, Evolution. 8th Edition. McGraw-Hill Education, New York. (A list of required readings will be posted on the course website)

Intended Learning Outcomes

This course is designed to provide information that is of fundamental scientific interest and importance but also to impart skills that are valuable in a professional scientific career (in biology and elsewhere). After completion of this course, you will be able to successfully identify and classify the major groups of living (extant) chordate animals based on anatomical features. You will recognize differences among these groups in skeletal, respiratory, and nervous systems and understand their evolutionary origins and ecological context (*i.e.* phylogeny and functional morphology). You will possess the foundational skills for generating and testing hypotheses using comparative data, as well as skills in cooperative learning and effective communication of scientific information.

Assessment

You will have the opportunity to demonstrate your progress and proficiency through various forms of evaluation, including:

Lab Content (breakdown provided separately)	50%
Lecture Content	
Prep Survey	1%
Image J Assignment (Salamanders)	2%
Image J ONC	2%
Geometric Morphometrics Assignment	3%
Discussion 1 Participation	1%
Discussion 2 Participation	1%
Midterm (Lecture)	15%
Final Exam (Lecture)	25%

Please note: you must pass <u>both</u> (lecture and laboratory) sections to pass the course

Appendix: Policies

Academic Integrity

The University of Victoria and the Department of Biology take academic integrity (including plagiarism) as a serious matter. Please read this: https://web.uvic.ca/calendar2020-01/undergrad/info/regulations/academic-integrity.html

Missed examinations and assignments

The University of Victoria accepts three types of valid excuses for missed exams or assignments, provided on the date the exam occurred or the assignment was due:

- illness
- emotional trauma
- UVic-sponsored sporting activities

You are expected to contact your instructors (and/or Teaching Assistant if applicable), as soon as possible. If the Final Exam is missed (with valid reason), arrangements must be made to: 1) write the exam before the end of the exam period, or 2) request an Academic Concession in order to write the exam at a later date.

Accessibility and special needs

Students with special needs will be welcomed and accommodated, provided those needs are registered through the Centre for Accessible Learning <u>https://uvic.ca/services/cal</u>

Commitment to Inclusion and diversity

UVic is committed to promoting, providing and protecting a supportive and safe learning and working environment for all its members.

Course Grade and Academic Transcript

Grades for all UVic courses are submitted as percentiles. A student's academic transcript will include the percentile grade and a letter grade plus the class average and the number of students registered in the course at the time of the final exam. Percentiles will be rounded to the nearest whole number; a grade of xx.5 will be rounded up. Percentile grades will be converted to letter grades on the student's academic transcript according to the table given below.

A+	90 – 100%	B+	77 – 79%	C+	65 – 69%
А	85 – 89%	В	73 – 76%	С	60 – 64%
A-	80 – 84%	B-	70 – 72%	D	50 – 59%

F (Fail) is a grade less than 50% No supplemental exams will be offered for this course