BIOL 307 Chordate Zoology Syllabus – Spring 2025

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 the ecological and evolutionary context of chordate adaptations. The course combines classical comparative anatomy with modern quantitative approaches to studying vertebrate morphology.

Lecture Contact Location & Hours

A01 - Tuesday, Wednesday & Friday, 10:30am - 11:20am, Elliott 062

Laboratory Contact Location & Hours

Petch Building 110,
B01 - Monday 2:30pm-5:20pm, or B02 - Monday 5:30pm-8:20pm, or B03 – Tuesday 11:30am-2:20pm, or B04 - Tuesday 2:30pm-5:20pm
enrolment in a laboratory section is mandatory*

Prerequisites

BIOL 184, BIOL 186, or 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 relatively new (2019) transplant to Victoria, he spends most weekends learning about biodiversity in the Pacific Northwest, often playing on/in the ocean. 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 and hopes that you will share her excitement.

Contacting the Instructors

Dave (davidpunzalan@uvic.ca) and Rossi (zoology@uvic.ca) are available to meet by appointment.
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): https://bright.uvic.ca/d2l/home/332149 Please check this page regularly for important information and announcements.
2) Lectures will be delivered in person; 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) Optional 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

Lab Notebook	10%
Assignment 1 (Chordate Adaptations)	10%
Assignment 2 (Meta-abstract & Annotated Biibliography)	15%
Assignment 3 (Summary Table)	15%

Lecture Content

Prep Survey & Career Exercises [x2]	2%
Packback Assignments (approximately weekly)	10%
Discussion(s) [x3]	3%
Morphometrics Assignments	5%
Lecture Midterm - Stage I (12%) + Stage II (3%)	15%
Lecture Exam (during Final Exam period)	15%

To pass the course, students must:

1) Write **Lecture** Test 2
2) Complete all **Lab** Assignments
3) Score a grade of 25 points, or greater, out of a possible 50 in the **Laboratory** component
4) Score a grade of 50 points, or greater, combined across **Lecture** and **Laboratory** components

If either 1 or 2 are not completed, the student will automatically fail the course and receive an "N" ('Incomplete') on their transcript. If a student successfully completes 1 and 2 but is not successful in either 2 or 3, they will receive an "F" on their transcript.

Appendix & Policies

Territory Acknowledgment

The instructors of BIOL307 are grateful to live and work in the unceded territories of the Lekwungen speaking First Nations, and we support the University of Victoria's official territory acknowledgment:

"We acknowledge and respect the lək̓ʷəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day."

Public Health Concerns, Expectations and Policies

We are currently living through a global pandemic in which we have a shared responsibility in maintaining safety in our communities. All staff and students are expected to abide by the guidelines provided by the University of Victoria (https://www.uvic.ca/covid19/).

Academic Integrity

The University of Victoria and the Department of Biology take academic integrity (including plagiarism) as a serious matter. Please read this:
https://www.uvic.ca/calendar/undergrad/index.php#/policy/Sk_0xsM_V
All assignments in this course are individual assignments, not group assignments. Failure to comply with this is considered a violation of academic integrity.

Minimum Technology Requirements

Students are responsible for having access to a reliable computer and internet connection. Refer to the **University's minimum technology requirements for students**: www.uvic.ca/systems/status/features/min-tech-requirements.php

Missed examinations and assignments

You are NOT required to provide a medical note. If a test is missed (with valid reason), contact your instructor immediately. Your instructor may opt to have you write a deferred test or have those grades reallocated to another assessment. If the Lecture Exam is missed, arrangements must be made to: 1) Write a deferred exam before the end of the exam period, or 2) Request an Academic Concession (https://www.uvic.ca/students/academics/academic-concessions-accommodations/request-for-academic-concession/index.php)
to write the exam at a later date. For missed laboratory quizzes refer to contact your Lab Instructor/Senior Laboratory Instructor as soon as possible.

Code of Conduct, and Commitment to Equity, Diversity and Inclusion (EDI)

All faculty, staff, and students are expected to treat each other with mutual respect. The course team welcomes students of all backgrounds, regardless of nationality, ethnicity, gender, sexual orientation, religion, age, etc.

Accessibility and special needs

Students with special needs will be welcomed and accommodated, provided those needs are registered through the Centre for Accessible Learning (https://uvic.ca/services/cal; phone: 250-472-4947).

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%
A	85 – 89%	B	73 – 76%	C	60 – 64%
A-	80 – 84%	B-	70 – 72%	D	50 – 59%

A grade less than 50% is a failing grade and results in an "F" on your transcript. Failure to complete lab requirements will result in an incomplete course