

**BIOL 184 – Evolution and Biodiversity
University of Victoria
Syllabus (Fall 2022)**

General Course Information

Welcome! This course will survey biological diversity – prokaryotes, protists, plants, fungi and animals – and will use a fundamental fact of the living world, evolution, to tie together this diversity. We will introduce you to population genetics and evolution. The course will be taught -to- and will be complemented by online tools.

Intended Learning Outcomes

After completion of this course, you will be able to distinguish the major groups of living organisms, and you will demonstrate a solid understanding of the evolutionary process (including natural selection and inheritance). You will be able to demonstrate fundamental laboratory skills including microscopy, biological observations, and interpreting phylogenetic trees. Critical evaluation of scientific literature and understanding of/adherence to academic integrity standards are also essential learning outcomes. A graphical representation of the intended learning outcomes also appears below.

Lecture Contact Hours & Delivery of Course Materials

Mondays & Thursdays @ Bob Wright Centre B150

8:30am-9:50am (A01) or 11:30am-12:50pm (A02) or 3:30pm-4:50pm (A03)

NOTE: *Enrolment/attendance in a laboratory section is mandatory*

Prerequisites

Any one of: Biology 11, Biology 12, Biology 150A, Biology 150B, Biology 186. You may also take this course if you have a high school biology course from outside British Columbia, or a post-secondary biology course from another institution. A course in chemistry at either the high school or university level is strongly recommended. If in doubt, contact [davidpunzalan@uvic.ca](mailto: davidpunzalan@uvic.ca).

Instructors:

Dr. David Punzalan (davidpunzalan@uvic.ca)
Dr. Patrick von Aderkas (pvonader@uvic.ca)
Dr. Lan Tran (lttran@uvic.ca)

About the Instructors

This course is co-taught by Dr. David Punzalan (Lectures and Course Coordination), Dr. Patrick von Aderkas (Lectures), and Dr. Lan Tran (Laboratory Coordination). Dave originally hails from Ontario and specializes in insect ecology and evolutionary biology. As a new (2019) transplant to Victoria, he spends most of his free time learning about Pacific Northwest biodiversity by beachcombing, staring into tidepools, and bug-chasing. Patrick is also originally from Ontario and does research on embryology and sexual fluids of plants, such as nectar and pollination drops. He has been a professor at UVic since 1989. His main interest is the evolution of reproduction in gymnosperms. Lan is a local and is a plant biologist with research interests in how plants produce natural chemicals and pollinator interactions. She previously studied at UVic and at UBC. You can find out more about the instructors [on Brightspace](#).

Assessment

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

Lecture Component (55%)

Pre-Lecture Preparation Quizzes (approx. 8 x 0.5%)	4%
Lecture Test 1	12%
Lecture Test 2	15%
Lecture Final Exam (cumulative)	24%

Laboratory Component

All tests and exams will be administered online using Brightspace. These assessments will be open book and must be written individually, computer, or on computer on campus (a limited number will be reserved for this purpose). Lecture Test 1 (September 29th), Lab Test 1 (October 13th), and Lecture Test 2 (October 31st) and will be written during your scheduled lecture time. Deferred tests are scheduled for the Saturday following the original date, at 9:00am, but be sure to contact the course coordinator (davidpunzalan@uvic.ca) in advance.

Required Materials and Technology

1. The Brightspace (BRS) course website: <https://bright.uvic.ca/d2l/home/136731> will serve as the primary means of sharing learning resources, so please check this page regularly for important information and announcements.
- 2.

October 13th Lab Test 1
October 31st Lecture Test 2
November 9th -11th Reading Break
December 5th Last day of classes (officially, but no classes b/c of Day of Recognition of Violence Against Women)
December 9th Exam period begins

Frequently Asked Questions

Detailed policies are outlined in this syllabus, as well as the lab manual please read those carefully. For ease, a selection of questions and answers are depicted in the graphic, below.

What happens if...

I want to drop the course?	
I miss a lecture?	
I miss a test?	
I miss more than 2 labs?	
I have specialized learning challenges?	
I am experiencing mental or emotional distress?	

A- 80 84%

B- 70 72%

D 50 59%

A grade less than 50% is a failing grade and results in a Failure to complete.