

Mycology - 24223 - BIOL 415C - A02

Spring Term 2022

Course Outline

Instructors: **Dr. Will Hintz**, course coordinator (whintz@uvic.ca) and
Dr. Paul de la Bastide, (pdelabas@uvic.ca)
Online office hours by appointment
Office (Dr. Paul de la Bastide): Petch 055, Tel. (250) 721-7145

Scheduled class time: Tuesday, Wednesday & Friday from 12:30 pm – 1:20 pm

First lecture on Tuesday January 11th and last lecture on Friday, April 8th

Reading Break: Monday, February 14th until Friday, February 18th

Location: All lecture material will be provided remotely through BrightSpace

Pre-requisites: BIOL 215, BIOL 225, and BIOL 230

What is the course about?

The course is designed to give you a better understanding of how different fungal taxa are related to one another, the importance of fungi to human activities, and a deeper appreciation for the role of fungi in human-modified and natural systems. We will begin with a series of lectures introducing you to the different taxa of fungi and how they differ in their growth, morphology and life strategies. We will then move on to a range of topics that include fungal genetics and mating systems, growth and biochemical processes, fungal plant pathology and the ecological role of fungi.

The lectures will consider current research topics in mycology of general interest to the class. The course will also include individual presentations by students on a research paper and topic selected by the student, as well as a written critique of the published mycological research.

Textbook: There is no official text book for the course, although there may be assigned readings from the primary literature.

Lecture material will be posted on BrightSpace for all students. The primary source of course content will be provided as the recorded lecture material, as well as some assigned readings. The course will also include a regular live question and answer period. Online office hours are available by appointment.

Lecture Topics (including, but not limited to the following)

Introduction to Fungi

Fungal Classification

The Phylum Oomycota (similar to fungi but not the same)

The Phylum Chytridiomycota

The Phyla Neocallimastigomycota, Blastocladiomycota and Microsporidia

The Phylum formerly known as Zygomycota

The Phylum Ascomycota

Mycorrhizal fungi

The Phylum Basidiomycota

Mycotoxins

Topics in fungal genetics

Fungal growth and physiology

Fungi and human health

Fungal endophytes

Topics in fungal plant and forest pathology

Truffle fungi (Guest lecturer – to be confirmed)

The use of molecular approaches to identify fungi (Guest lecturer - to be confirmed)

Evaluation: The midterm and final exams will be completed through an online format. The student presentation will be pre-recorded by students and questions concerning the subject material will be provided in advance by the instructors.

Midterm exam	30%	(TBD)
Individual Written Scientific Critique	20%	(Electronic submission)
Critique Group Discussion	10%	(Participation by student)
Final exam	40%	(TBD)

Grade Conversion: A+ 90-100%; A 85-89.5%; A- 80-84.5%; B+ 77-79.5%; B 73-76.5%; B- 70-72.5%; C+ 65-69.5%; C 60-64.5% D 50-59.5%; F <49.5%

If you cannot attend the mid-term exam for a valid reason (illness, accident, family crisis), it is your responsibility to inform us as soon as possible and provide suitable

documentation (doctor's note or counselor's note). No supplemental mid-term exams will be offered.

You are eligible to write a deferred final exam if you have a valid reason for missing the final exam.

General regulations:

Failure to complete at least 70 points of coursework (either midterm and final or all assignments and final) will result in a grade of "N". An N is a failing grade, and it factors into a student's GPA as O. The maximum percentage that can accompany an N on a student's transcript is 49.

Please read the appropriate section of the current UVic Academic Calendar regarding your rights and obligations.

It is your responsibility to be aware of ADD/DROP dates published in the Calendar.

Course work and exams can be very stressful. You can reduce stress by avoiding last minute studying, reviewing course material every week, and discussing it with your classmates. Stay healthy, and talk to us if you have any concerns and questions. UVic Counselling Services is free and can help if you feel overwhelmed:

<https://www.uvic.ca/services/counselling/>

You are expected to observe UVic standards of scholarly integrity, especially with regards to plagiarism. See UVic's guidelines on how to avoid it:

<https://www.uvic.ca/library/research/citation/plagiarism/>

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