

Mycology - 20373 - BIOL 415C - A01

Spring Term 2023

Course Outline

Instructor: **Dr. Paul de la Bastide** (pdelabas@uvic.ca)
Office: Petch 055, Tel. (250) 721-7145
Office hours are available by appointment

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

First lecture on Tuesday January 10th and last lecture on Wednesday, April 5th

Reading Break: Monday, February 20th until Friday, February 24th

Location: Lectures will be provided in person in Cunningham room 146

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

Welcome to Mycology! 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 roles of fungi.

The lectures will consider current research topics in mycology of general interest to the class. The course will also include short, 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 the lecture material, as well as some assigned readings. The course will also include question and answer periods during the lecture schedule.

Course materials uploaded to BrightSpace are for personal use only and should not be distributed without permission of the lecturer. This material is protected under copyright law, even if not marked with a ©. Any further use or distribution of materials to others requires the written permission of the instructor.

Lecture topics to be covered (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
- The Phylum Basidiomycota
- Mycorrhizal fungi
- Mycotoxins
- Topics in fungal genetics
- Fungal growth and physiology
- Fungi and human health
- Fungal endophytes and microbiomes
- Topics in plant and forest pathology
- Truffle fungi (Guest lecturer – to be confirmed)
- Molecular approaches to the study of fungi (Guest lecturer - to be confirmed)

Evaluation: The course will include a written midterm and a final exam. Each student will write a critique of a published scientific article and prepare a short presentation based on that same critique. As well, there will be discussions of each presentation that involve all students. Details concerning the selection of subject material for the written critique and the presentation will be provided in advance by the instructor.

Midterm exam	30%	(TBD)
Individual Written Critique and short presentation	20%	(Electronic submission)
Group Discussion of Critiques	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 me 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. You will find a complete list of important dates that you should be aware of for the winter term: <https://www.uvic.ca/calendar/dates/>

You are expected to observe UVic standards of scholarly integrity, especially with regards to plagiarism. See UVic's guidelines on how to avoid it when writing reports or critiques: <https://www.uvic.ca/library/research/citation/plagiarism/>

Student Wellness Centre

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/student-wellness/>

Centre for Accessible Learning

The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations to help you achieve your learning goals in this course: <https://www.uvic.ca/services/cal>

Office of Indigenous Academic and Community Engagement (IACE)

At UVic, the office of IACE has the privilege of assembling a group of Elders from local communities to guide students, staff, faculty and administration in Indigenous ways of knowing and being: <https://www.uvic.ca/services/indigenous/students/index.php>

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