

Mycology – 10395 - BIOL 415C - A01

Fall Term 2024

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 Wednesday September 4th and last lecture on Wednesday, December 4th

Reading Break: Monday, November 11th to Wednesday, November 13th

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

Pre-requisites required for students: BIOL 215, BIOL 225, and BIOL 230

Course Objectives: Welcome to Mycology! The course will provide an introduction to fungal taxonomy, describe the importance of fungi to human activities, and provide an overview of the role of fungi in human-modified and natural ecosystems.

Intended Learning Outcomes: This course is an introduction to Mycology and will cover a range of topics. By the end of the course, students will have a broad knowledge of the following:

- Fungal taxonomy;
- Fungal morphology and development;
- Ecological strategies of fungi (e.g., pathogens, parasites, saprophytes and symbionts);
- Fungal genetics and mating systems;
- Fungal growth and biochemical processes;
- Fungal plant pathology and the different ecological roles of fungi;
- Current research topics (including presentations by guest mycologists).

Territorial Acknowledgement: *We acknowledge and respect the Ləkʷəŋən (Songhees and Esquimalt) Peoples on whose territory the university stands, and the Ləkʷəŋən and WSÁNEĆ Peoples whose historical relationships with the land continue to this day.*

Textbook and lecture material: There is no official textbook for the course, although there may be assigned readings from the primary literature. Lectures 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, two assignments and a final exam. **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”.** Students will complete a written critique of a published mycological research paper they have selected. Late submissions will be deducted 10% per day following the due date, without a valid reason for late submission. Students will also have a fungal field-collection and identification assignment that will be subject to the same late submission criteria. If the midterm is missed for an acceptable reason, the student will write a deferred midterm exam at a later date.

The course will include a written scientific critique of a published mycological research paper selected by each student and a fungal field-collection project. Details concerning the selection of a paper for the critique and the field collection assignment will be provided in advance, along with details of the written format and evaluation process.

Midterm Exam	30%
Written Scientific Critique	20%
Fungal Field-Collection	10%
Final Exam	40%

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. No supplemental mid-term exams will be offered and marks will be redistributed for students who do not write the midterm for valid reasons.

You are eligible to write a deferred final exam if you have a valid reason for missing the final exam. Specific details for Academic Concessions, particularly Regulations and Guidelines may be found at this UVic webpage in the Undergraduate Calendar:

<https://www.uvic.ca/calendar/future/undergrad/index.php#/policies?group=Undergraduate%20Academic%20Regulations&bc=true&bcCurrent=Undergraduate%20Academic%20Regulations&bcItemType=policies>

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” (Definition: did not write examination or complete course requirements by the end of term or session; no supplemental). 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, particularly drop dates if you decide to drop the course. You will find a complete list of all the important dates that you should be aware of in the winter term: <https://www.uvic.ca/calendar/dates/>

If you are on the course waitlist, be aware that waitlist offers sent by UVic’s registration system are time-limited and are sent to the preferred email listed for the student. Be sure to check your status often in your Online Tools and verify your contact email.

You are expected to observe UVic standards of scholarly integrity, especially with regard to plagiarism. It would be helpful to review guidelines on how to avoid it when writing

reports or critiques (<https://www.uvic.ca/library/research/citation/plagiarism/>). And if you are still not clear on these details, I would be happy to discuss this further.

As well, please be aware of UVic policy on Academic Integrity found in the calendar: (https://www.uvic.ca/calendar/undergrad/index.php#/policy/Sk_0xsM_V?bc=true&bcCurrent=08%20-%20Policy%20on%20Academic%20Integrity&bcGroup=Undergraduate%20Academic%20Regulations&bcItemType=policies)

UVic Services:

Student Supports for Online Technology

Learn Anywhere: <https://onlineacademiccommunity.uvic.ca/LearnAnywhere/>

New Student Mental Health Supports - In addition to providing both face to face and online mental health resources through our new Student Wellness Centre, a new 24x7 phone & online student mental health resource and support program is now available for all UVic students, no matter where they are located, at any time.

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

Counselling Services - Counselling Services can help you make the most of your university experience They offer free professional, confidential, inclusive support to currently registered UVic students.

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

Health Services - University Health Services (UHS) provides a full-service primary health clinic for students and coordinates healthy student and campus initiatives. UVic Health has transitioned to offering services almost entirely by telehealth.

<http://www.uvic.ca/services/health/>

Centre for Accessible Learning - The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations.

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

Elders' Voices - The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students and others in Indigenous ways of knowing and being.

<https://www.uvic.ca/services/indigenous/students/programming/elders/index.php>

Sexualized Violence Prevention and Response - UVic takes sexualized violence seriously. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). If you want to take part in the important prevention work taking place on campus, you can also reach out: Where: Sexualized violence resource office in EQHR; Sedgewick C119.

Phone: [250.721.8021](tel:250.721.8021), Email: svpcoordinator@uvic.ca