

# **Mycology - 20373 - BIOL 415C - A01**

**Spring 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 Tuesday January 9<sup>th</sup> and last lecture on Friday, April 5<sup>th</sup>

**Reading Break:** Monday, February 19<sup>th</sup> until Friday, February 23<sup>rd</sup>

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

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

### **Welcome to Mycology! What is the course about?**

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. We will begin with a series of lectures introducing you to fungal taxonomy, how fungi grow, their variability in morphology, and the different life strategies they follow (e.g., pathogens, parasites, saprophytes and symbionts). We will then move on to a range of topics that include fungal genetics and mating systems, fungal growth and biochemical processes, fungal plant pathology and the different ecological roles of fungi.

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**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. **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 chosen.



