



COURSE OUTLINE

1. **Course:** BIOL 435, Biology of Fungi - Fall 2020

Lecture 01:

Instructor	Email	Phone	Office	Hours
Dr Heather Addy	addy@ucalgary.ca	403 220-8963	EEEL 235C	MWF 3-4 pm; additional times TBA

Online Delivery Details:

Some aspects of this course are being offered in real-time via scheduled meeting times. For those aspects you are required to be online at the same time.

Welcome to BIOL 435!

Both lectures and labs in BIOL 435 will be online in Fall 2020; the lectures will be asynchronous while labs will be synchronous. There are no in-person components in the course this term.

For the asynchronous lectures: I will post readings & videos and reading guides that you will complete prior to working with your team via the discussion board in D2L (and also during synchronous labs). I will be available via Zoom and email during the usual lecture times (MWF 3-4 pm) as well as during additional Zoom office hours. In addition to the team assignments and discussions, there are several individual assignments to help you structure your time and keep up with course material; see the information under Grading below.

For the synchronous labs: you will meet via Zoom at the regularly scheduled times for your lab section each week (other than the week of Sept 8: there are no labs that week). You will work with your teammates to apply what you have learned from readings and videos to complete team assignments. In addition, your TA will lead discussions of scientific papers and data interpretation. Lab times will also be used for peer feedback on assignments and project drafts. These synchronous lab sections will not be recorded because they involve team discussions in Zoom breakout rooms. The interactive nature of the labs means that it would be very difficult for you to make up any labs that you miss; please discuss any missed labs with me as soon as possible.

For these synchronous labs, you are required to meet via Zoom at the same time as the other students in your lab section. This means, as per the Provost's communication, you need to have reliable access to the following:

- computer with a supported operating system, as well as the latest security, and malware updates
- webcam/camera (built-in or external);
- microphone and speaker (built-in or external), or headset with microphone;
- current and updated web browser
- current antivirus and/or firewall software enabled
- stable internet connection

Please let me know if you have concerns about your access to any of this technology or if your circumstances make it difficult for you to meet these requirements.

Be sure that you check your UofCalgary email account regularly: I will send out regular reminders and updates via email to help you keep up with with the course and assignments. I will respond to your emails within 24 hours, and sooner than that when possible; it may not always be possible for me to respond on weekends.

Course Site:

D2L: BIOL 435 L01-(Fall 2020)-Biology of Fungi

Note: Students must use their U of C account for all course correspondence.

2. **Requisites:**

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

Prerequisite(s):

Biology 313 and 331.

Antirequisite(s):

Credit for Biology 435 and 335 will not be allowed.

3. Grading:

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar. In this course, overall grades will be determined following the information outlined below.

In BIOL 435, I use a grading approach called specifications grading, in which your course grade is not based on the percentage score you earn on assignments but rather on how many and which assignments you successfully complete. Each assignment is graded according to a rubric that outlines the specifications for that assignment. To earn a given letter grade, you must successfully complete **all** the requirements listed for that letter grade, as indicated in the table below. The table looks daunting but don't panic! Many of the assignments are brief and are designed to help you stay on track with the course, and also to help me know what material is not yet clear to you.

See the syllabus posted on D2L for more information on specifications grading and the assignments, including time estimates for completing them.

Summary table of requirements for each learning outcome for each letter grade					
Component	Assessed by:	Requirements for each letter grade*			
		D	C	B	A
Individual work demonstrating understanding of course content & self-regulated learning	Weekly contributions to team discussions and assignments (12 weeks total)	8/12	9/12	10/12	11/12
	Discussion posting portfolio	1/2	1/2	2/2	2/2
	Individual lab reflections (completed in lab and submitted at end of lab period)	1/5	2/5	3/5	4/5
	Unit summaries (including updates on teaching topic assignment and optional project, if applicable)	1/5	2/5	3/5	4/5
	Course Goals & Background Assignment	No	Yes	Yes	Yes
	Final portfolio (Includes final report on optional project for an A)	No	Yes	Yes	Yes
Collaborative learning	Successful completion of Lecture Team Assignments (via weekly discussions)	8/12	9/12	10/12	11/12
	Successful completion of Lab Team Assignments (submitted at end of lab period)	4/8	5/8	6/8	7/8
	Peer evaluation of teammates' teaching topic assignment	Yes	Yes	Yes	Yes
	Team process and feedback: completion of team contract and two peer feedback surveys (at mid-semester & end of term) via ITP Metrics	Yes	Yes	Yes	Yes
		Final peer score ≥ 0.75	Final peer score ≥ 0.80	Final peer score ≥ 0.90	Final peer score ≥ 0.95
Scientific Communication	Pre-lab assignments on research articles	1/3	1/3	2/3	2/3
	Teaching topic assignment (includes presentation of draft in lab during week of Nov and final version submitted in last week of class)	Yes	Yes	Yes	Yes
	Optional project	No	No	No	Yes

* Determination of "+", "-", and F letter grades:

- If your work does not successfully meet all of the requirements for a D grade, you will earn an F grade.
- If your work exceeds all requirements for a given letter grade, you will earn a "+"-letter grade.
- If your work does not successfully meet one (and only one) of the specifications required for a given letter grade and meets all of the specifications for the next-lower letter grade, you will earn a "-" letter grade

In this course, all assignments are marked using "pass/fail" rubrics. For most assignments, you can revise and re-submit (once) work that does not yet meet expectations using a free pass as outlined below, so I use the terms "Acceptable" and "Not Yet Acceptable" rather than "pass/fail". A key feature of specifications grading is that your work does not have to be perfect to earn an "Acceptable" grade: this grade means that your work has demonstrated understanding of the concept, has met the expectations for the assignment, and it is complete and well-communicated. You will receive lots of feedback and support from me, your teammates and the TAs to support your revisions and achieve your best work. The syllabus posted on D2L indicates which assignments can be re-submitted using a free pass.

You will have 5 'free passes' that can be used to re-submit assignments. The completed free pass and revised assignment must be submitted within one week (7 days) of the graded assignment being returned to you. There is only one free pass per assignment and one re-submission per free pass. The free pass must be completed and attached to the re-submitted assignment, along with a brief statement describing how you have revised your assignment in response to feedback. Free passes can also be used to extend the due date for some assignments by up to one week after the original due date; information on D2L indicates which assignments are eligible for this extension. Free passes are not transferable to other students.

Each team will have 3 free passes that can be used to re-submit team lab assignments, following the same procedures as described for

individual free passes. These team passes cannot be used for extending the deadlines of team lab assignments, nor for individual assignments.

4. **Missed Components Of Term Work:**

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

5. **Scheduled Out-of-Class Activities:**

There are no scheduled out of class activities for this course.

6. **Course Materials:**

Required Textbook(s):

Jens Petersen, *The Kingdom of Fungi (2013)*: Princeton University Press.

Each week, I will assign readings, videos or other resources as part of the asynchronous lectures; links to these resources will be provided on D2L.

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Stable internet connection.

For more information please refer to the UofC [ELearning](#) online website.

7. **Examination Policy:**

There are no exams in this course for Fall 2020.

Students should also read the Calendar, [Section G](#), on Examinations.

8. **Approved Mandatory And Optional Course Supplemental Fees:**

There are no mandatory or optional course supplemental fees for this course.

9. **Writing Across The Curriculum Statement:**

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section [E.2](#) of the University Calendar.

10. Human & Living Organism Studies Statements:

Students will not participate as subjects or researchers in human studies.

See also [Section E.5](#) of the University Calendar.

STUDIES IN THE BIOLOGICAL SCIENCES INVOLVE THE USE OF LIVING AND DEAD ORGANISMS. Students taking laboratory and field-based courses in these disciplines can expect involvement with and experimentation on such materials. Students perform dissections on dead or preserved organisms in some courses. In particular courses, students experiment on living organisms, their tissues, cells, or molecules. Sometimes field work requires students to collect a variety of living materials by many methods, including humane trapping.

All work on humans and other animals conforms to the Helsinki Declaration and to the regulations of the Canadian Council on Animal Care. The Department strives for the highest ethical standards consistent with stewardship of the environment for organisms whose use is not governed by statutory authority. Individuals contemplating taking courses or majoring in one of the fields of study offered by the Department of Biological Sciences should ensure that they have fully considered these issues before enrolling. Students are advised to discuss any concern they might have with the Undergraduate Program Director of the Department.

Students are expected to be familiar with [Section SC.4.1](#) of the University Calendar.

11. Reappraisal Of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See [Section I.3](#) of the University Calendar.

- a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within **ten business days** of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections [I.1](#) and [I.2](#) of the University Calendar
- b. **Final Exam:** The student shall submit the request to Enrolment Services. See [Section I.3](#) of the University Calendar.

12. Other Important Information For Students:

- a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, [Mental Health Services Website](#)) and the Campus Mental Health Strategy website ([Mental Health](#)).
- b. **SU Wellness Center:** For more information, see www.ucalgary.ca/wellnesscentre or call [403-210-9355](tel:403-210-9355).
- c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email (syva@ucalgary.ca) or phone at [403-220-2208](tel:403-220-2208). The complete University of Calgary policy on sexual violence can be viewed at (<https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>)
- d. **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct may include: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a report. **These are only examples.**
- e. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for

accommodations for students with disabilities available at [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head, Undergraduate of the Department of Biological Sciences, Heather Addy by email addy@ucalgary.ca or phone 403 220-6979. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See [Section E.4](#) of the University Calendar.

- f. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see [Legal Services](#) website.
- g. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](tel:403-220-3911) Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: [403-220-3913](tel:403-220-3913) Email: sciencerep@su.ucalgary.ca. [Student Ombudsman](#), Email: ombuds@ucalgary.ca.
- h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.
- i. **Copyright of Course Materials:** All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or [non-academic misconduct](#), in addition to any other remedies available at law.

Course Outcomes:

- Contrast the features that distinguish fungi from plants, animals and bacteria
- Describe the phyla of fungi and their life histories
- Describe the characteristic morphology of a fungal mycelium and explain its pattern of differentiation with development
- Explain the links between fungal lifestyle and reproductive biology
- Explain the ecological roles and global importance of fungi as saprotrophs, symbionts, and sources of food, antibiotics, allergens and toxins
- Work safely with fungal cultures using sterile technique
- Critically read research articles about fungi; interpret and explain figures/tables from articles
- Work effectively as part of a team and provide constructive feedback to team members
- Communicate effectively both in writing and orally

Electronically Approved - Aug 31 2020 15:42

Department Approval

Electronically Approved - Sep 01 2020 09:42

Associate Dean's Approval

