

Mycology - PATH (PBIO) 4200/6200 - 4200L/6200L
Fall 2022, 4 credits

Course Goals: Students will gain an appreciation of the diversity of fungi and a basic understanding of their biology, ecology, genetics, morphology and taxonomy. Groups of organisms traditionally classified with the fungi will also be discussed. Students will also learn how to collect, isolate, culture, and identify fungi.

Instructor: Dr. Marin Talbot Brewer; 706-542-1254; 1611A Miller PS; mtbrewer@uga.edu

Office hours: By appointment; please do not hesitate to contact me to make arrangements

Teaching Assistants: Xiomy Pinchi Davila, xiomy.pinchidavila@uga.edu; Sujan Paudel, sujanpau@uga.edu

Lectures: Tues & Thurs, 11:10AM – 12:25PM, 2102 Miller PS.

Laboratory: Thurs, 2108 Miller PS; 12:45-3:35PM (Section I) or 3:55- 6:45PM (Section II)

Attendance: You are expected to attend lectures and are required to attend all labs.

Text: There is no required text. Reading assignments will be announced and posted on eLC.

Recommended texts:

Aurora, D. 1986. Mushrooms Demystified, 2nd edition.

Bessette, A.E. et al., 2007. Mushrooms of the Southeastern United States.

Webster & Weber. 2007. Introduction to Fungi, 3rd edition.

Alexopoulos, Mims, & Blackwell. 1996. Introductory Mycology, 4th edition.

Grading:

Exam 1	100 points	(20%)
Exam 2	100 points	(20%)
Exam 3	100 points	(20%)
Lab notebook and lab participation	50 points	(10%)
Fungal collection	100 points	(20%)
Presentation (grad) or poster (undergrad)	50 points	(10%)
Total	= 500 pts.	(100%)

A = 92% to 100%; A- = 90% to 91%; B+ = 87% to 89%; B = 82% to 86%; B- = 80% to 81%; C+ = 77% to 79%; C = 70% to 76%; D = 60% to 69%; F < 60%

Exams (300 points): There will be three exams throughout the semester (100 points each). Exams will include matching, fill in the blank, short answer, and essay questions. There will also be a lab component to every exam. To make up an exam, you must have a legitimate excuse and make every effort to contact the instructor in advance or you will receive a zero.

Lab notebook and lab participation (50 pts): Each lab will consist of several stations and/or activities. Your observations must be documented and any questions posed in lab must be answered. The notebook will be graded for completeness and returned prior to Thanksgiving break. Photographs are acceptable, but must be labeled and organized within the notebook. The lab notebook can consist of paper in a binder, a composition

notebook, or anything else that you can keep organized and bound together. Your lab participation points are based on lab participation and attendance. You must have a legitimate excuse and make every effort to contact the instructor in advance if you will miss lab.

Fungal collection (100 pts): A collection of fungi independently collected from the environment, which could include the woods, campus, or your apartment, but not collected from a culture collection, herbarium, another class, the grocery store, your friend, or your research project, will be a major component of the lab. The specimens must be properly preserved or isolated and identified to the genus level. Additional information on the collection will be provided early in the semester.

Presentation/Poster (50 pts): Graduate students will be required to give a 10-minute presentation to the class toward the end of the semester on a topic related to Mycology. Undergrads will be required to present a poster (in groups of three or four) to the class during the poster session at the end of the semester on a topic related to Mycology. Awards will be given for the best presentation and the best poster. Topics for the poster/presentation should be exciting, cutting-edge mycology, not boring and Wikipedia-like essays, and need to be approved by the instructor. Additional information on the presentation/poster will be provided later in the semester.

Academic honesty: I expect all students to follow the UGA honor code. Any cheating or other academic dishonesty will be reported to the Office of the Vice President of Instruction for action. The university's academic honesty policy may be found at: https://honesty.uga.edu/_resources/documents/academic_honesty_policy_2017.pdf
"I will be academically honest in all of my work and will not tolerate academic dishonesty of others." UGA Student Honor Code

Wellness statement: Mental Health and Wellness Resources:

If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit <https://sco.uga.edu/>. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services. UGA has several resources for a student seeking mental health services (<https://www.uhs.uga.edu/bewelluga/bewelluga>) or crisis support (<https://www.uhs.uga.edu/info/emergencies>). If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (<https://www.uhs.uga.edu/bewelluga/bewelluga>) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center. Additional resources can be accessed through the UGA App.

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	Date	Lecture	Lab
Aug	TH 18	Course overview	No lab
	TU 23	Intro to Fungi	
	TH 25	Ecology, nutrition	How to foray for Fungi!
	TU 30	Classification, systematics	
Sep	TH 01	Basidiomycota	Intro to Fungi and fungal collection
	TU 06	Basidiomycota continued	
	TH 08	Basidiomycota continued	Basidiomycota I
	TU 13	Ascomycota	Basidiomycota II
	TH 15	Ascomycota continued	
	TU 20	Ascomycota continued	
	TH 22	Exam 1	work on collections
	TU 27	Edible and medicinal fungi, commercial production	
	TH 29	Poisonous and hallucinogenic shrooms	Ascomycota
Oct	TU 04	Asexual fungi	Asexual fungi; poster or presentation topic due
	TH 06	Mycotoxins	
	TU 11	Mucormycota, Zoopagomycota	Early-diverging fungi & oomycetes I; collection I due
	TH 13	Chytridiomycota, zoosporic fungi	
	TU 18	Oomycota	Early-diverging fungi & oomycetes II; work on collections
	TH 21	Exam 2	
	TU 25	Fungal genetics	work on collections; barcode project I
	TH 27	Mycorrhizae	
Nov	TU 01	Lichens	mycorrhizae and lichens; medical mycology
	TH 03	Medical mycology 1	
	TU 08	Medical mycology 2	slime molds; barcode project II; undergrad poster first draft due
	TH 10	Slime molds	
	TU 15	Biocontrol, industrial fungi, and pharmaceuticals	Medical mycology, barcode analysis; undergrad poster second draft due; grad recordings due; lab notebook due
	TH 17	Fungi in food & Fungal Feast	
	TU 22	Grad presentations (virtual recordings)	Thanksgiving, NO LAB
	TH 24	Thanksgiving, NO CLASS	
	TU 29	Poster session	
Dec	TH 02	Exam 3	work on collections; collection II due

The course syllabus is a general plan for the course; deviations are likely and will be announced.