### **HSSP S13083 Summer 2019**

# Mycology: Biology, Behavior, and an Introduction to Fungi

Instructor: Jenni Nguyen

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Meeting Times: Sundays 10:00-11:00am

**Meeting Place:** MIT 2-143

**Prerequisites:** A basic understanding of cell biology preferred

#### **Course Overview**

When learning about biology, both animals and plants are often touched upon in talking about different forms of life on this planet. However, there is a diverse, fascinating group of organisms that are rarely talked about: **fungi!** In this course, we are going to go over the basics of the fungi kingdom and why they are essential to our ecosystem. Along with talking about basic structures and evolutionary relationships, we will also be looking into the basic biochemistry, genetics, and ecological relationships of fungi.

### **Understanding of Topics**

Because I will be touching upon fungi as it pertains to many different topics, I will be explaining the basics of biochemistry and genetics later on in the course. I will try my best to do a brief crash course of each complex subject, however, if you feel that I am going too fast (or too slow, for that matter!) **please** feel free to email me and let me know what pace would be best for you. I want this to be fun for everyone, so do not hesitate to give me feedback!

### **Course Topics**

Everything that we will be learning, for the most part, will be **cumulative**. If you happen to come into this class late, I will provide you with past lecture material and activities. Please note that these topics are also subject to change depending on how the pace of the class changes as well as general class feedback. Please also note the classroom changes for specific dates. Let me know if you have any questions, and if so, email me!

## **Lecture Schedule**

Lecture	Topic	Notes
#1 – July 7	Introduction to Fungi – structures, organismal relationships	
#2 – July 14	Reproductive and Life Cycle	
#3 - July 21	Biochemistry of Fungi	
#4 - July 28	Fungal Genetics	***Classroom changed to 66- 154 JUST FOR THIS SESSION
#5 – August 4	Biology of Decomposition	***I will not be present for this lecture; there will be a substitute. ***Classroom changed to 1- 273 JUST FOR THIS SESSION
#6 – August 11	Fungal Symbioses – Lichens, Mycorrhizae	
#7 – August 18	Positive Applications of Fungi	