

# Biology of Fungi

PMB C110 and IB C110

PMB C110L and IB C110L

## Fulfills Integrative Biology Major Requirement Group B

<https://ib.berkeley.edu/undergrad/courses/curriculum.php#ecology>

Lecture, M, W, 1 to 2 pm (2 units) CCN 71176

Laboratory Section 1: M, W, 9 to 12 (2 units) CCN 71185

or

Laboratory Section 2: M, W, 2 to 5 (2 units) CCN 71188

**Course Format:** Two hours of lecture and six hours of laboratory per week. Several field trips are offered, including day trips to a mushroom farm and winery, and a weekend mushroom foray.

**Prerequisites:** Biology 1B

**Short Description :** Selected aspects of fungi: their structure, reproduction, physiology, ecology, genetics and evolution; their role in plant disease, human welfare, and industry. Offered fall semesters in even-numbered years. Also listed as Integrative Biology C110L.

### Instructors

**John Taylor:** Teaching awards: UC, Berkeley, College of Natural Resources, Weston Award, Mycological Society of America. **Ratemyprofessor.com:**

<http://www.ratemyprofessors.com/ShowRatings.jsp?tid=335973>

**Tom Bruns:** Teaching awards: UC, Berkeley, College of Natural Resources, Weston Award, Mycological Society of America. **Ratemyprofessor.com:**

<http://www.ratemyprofessors.com/ShowRatings.jsp?tid=335981>

**Expanded Course Description.** Plant Biology 110, Biology of Fungi, is designed to introduce you to the major groups of fungi: Myxomycota, Chytridiomycota, Oomycota, Zygomycota, Ascomycota, Basidiomycota, and Fungi Imperfecti (Deuteromycota). In addition, we want you to learn how to isolate, culture and collect fungi.

Biology of Fungi is listed as two courses, PB 110 and PB 110L, the lecture material is designed to introduce the lab material. Both courses must be taken concurrently, and the lecture and lab are treated as one course. Students receive the same grade for both PB 110 and 110L.

Of course, there is a textbook and two hours of lecture per week to introduce you to what mycologists know about the fungi. However, the heart of the class is the laboratory, which is filled with living and collected fungi; it is here that you will learn to observe, isolate, and culture fungi. To see the industrial applications of fungi we will have two Saturday field trips, one to a winery and another to a mushroom farm. To see fungi in their native habitat, we take a weekend field trip to Mendocino to collect fungi.

For exams we will have one lecture midterm (100 points), one lab midterm (100 points), a lab final (100 points) and a lecture final (200 points). There also will be several lab quizzes (50 points). In the laboratory you will have the opportunity to broaden the public understanding of fungi by adding two class fungi and one fungus that you cultivate to the Mushroom Observer web site, an exercise that will include identifying the fungi both from phenotypic and DNA characteristics and reporting your efforts to the class (150 points).