

# Plant and Microbial Biology (PLANTBI)

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## **PLANTBI 10 Plants, Agriculture, and Society 2 Units**

**Department:** Plant and Microbial Biology

**Course level:** Undergraduate

**Term course may be offered:** Fall

**Grading:** Letter grade.

**Hours and format:** 2 hours of Lecture per week for 15 weeks.

Changing patterns of agriculture in relation to population growth, the biology and social impact of plant disease, genetic engineering of plants: a thousand years of crop improvement and modern biotechnology, interactions between plants and the environment, and effects of human industrial and agricultural activity on plant ecosystems. Knowledge of the physical sciences is neither required nor assumed.

Instructors: Staskawicz, David Zilberman

## **PLANTBI 11 Fungi, History, and Society 3 Units**

**Department:** Plant and Microbial Biology

**Course level:** Undergraduate

**Term course may be offered:** Spring

**Grading:** Letter grade.

**Hours and format:** 2 hours of lecture, 1 hour of discussion/ demonstration, and 3 optional weekend field trips.

Fungi have interacted with humans in both positive and negative ways throughout history. These interactions have included production of foods, medicines, fuels, plant and animal diseases, decay, allergies, and mind-altering drugs.

Instructors: Bruns, Taylor

## **PLANTBI 13 Genetic Revolutions 3 Units**

**Department:** Plant and Microbial Biology

**Course level:** Undergraduate

**Term course may be offered:** Spring

**Grading:** Letter grade.

**Hours and format:** 2 hours of Lecture and 1 hour of Discussion per week for 15 weeks.

Genetic discoveries have changed our lives. All are controversial. Especially changed are human physical and mental health, agriculture, social systems, and worldviews. Having many DNA-sequenced genomes, including human, accelerates discovery. This course will study the science, history, and philosophical implications behind past discoveries and will contemplate future genetic revolutions.

Instructor: Freeling

## **PLANTBI 20 Introduction to the Plant Sciences at Berkeley 1 Unit**

**Department:** Plant and Microbial Biology

**Course level:** Undergraduate

**Term course may be offered:** Fall

**Grading:** Offered for pass/not pass grade only.

**Hours and format:** 1 hour of lecture/discussion per week plus field trips.

This course will include discussions on the academic path (courses) needed for the Genetics and Plant Biology major; an introduction to resources and facilities for studies of the plant sciences at Berkeley, such as the University Herbarium and the Botanical Garden; an exploration of plant science related careers, including presentations from guest speakers who work in organic farming, government, and Cooperative Extension; talks by faculty about their current research, and information about how to do research in a lab.

Instructor: Feldman

## **PLANTBI 22 Microbes Make the World Go Around 2 Units**

**Department:** Plant and Microbial Biology

**Course level:** Undergraduate