

Microbiology of Agricultural Products in New Jersey 11:680:103, 3 credits

Description:

The Microbiology of Agricultural Products in New Jersey is a 3 credit lecture and interdisciplinary engaged learning experience for undergraduates with limited or no science background.

Prerequisites and Registration Restrictions:

None

Course Summary

The course explores the science and culture of microbial agricultural products through readings, lectures, group projects. The course combines applied microbiology with an appreciation of cultural heritage, on site, in New Jersey. This dynamic program investigates the microbiology of agricultural products and food and beverage fermentations, such as cheese production, wine and beer fermentation, fermented sausages, and mushroom cultivation. Students will learn about the factors that control microbiological growth and activity, and how humans exploit and manipulate microbes in food and beverage production. Students will study the complex chemical and biological processes that create different fermented foods, with techniques that blend modern scientific knowledge with traditional values and practices.

During the semester, some days will be devoted to classroom lecture and group assignments, while other days will involve excursions to local producers. Field trips and excursions may include visits to local farms, dairies, and farmer's markets in New Jersey. Readings, lectures, group projects, presentations, and field trips with tastings meld a comprehensive appreciation of the science, history, and culture of fermented foods and other agricultural products.

Instructor

Dr. Jessica Lisa, 848.932.5672 jesslisa@sebs.rutgers.edu
Office: Lipman Hall, 118