



Riverside, Monterey Bay, and San Francisco, California

Californian STEAM: Microbial Science, Conservation, and Society

BISC 380 / EDUC 555 / ENVS 399

Credit Hours: 3 for EDUC 555/ENVS 399, 4 for BISC 380

Instructors: **Dr. Renee Cunningham**, Assistant Professor of Education,

Dr. Erik Hom, Assistant Professor of Biology

Dates: On Campus, TBD; Jan 4-14, 2018 in California

Course Fee: \$1295

Application

Deadline: November 9, 2017

To Register: Go to outreach.olemiss.edu/study_usa/how_to_apply.html

Students will:

- Travel to Riverside, CA to begin their 10 day course at University of California, Riverside (UCR).
- Students will spend a few days at UCR and nearby Joshua Tree National Park before traveling north along the Pacific Coast Highway toward Monterey Bay and San Francisco.
- Learn field sampling techniques, how to culture microbes, and enjoy field sampling hikes in some of the varied ecosystems of California.
- Explore the integration of scientific research into STEM education in K-12 schools, as well as meet with museum curators to better understand education outside the classroom.

- Visit the world famous Monterey Bay Aquarium, and see monarch butterflies during their annual migration along the California coast at the Pacific Grove Museum.
- Learn about the role of microbes in conservation, habitat restoration, and agriculture.
- Visit with scientists at world-renowned Californian institutions, including Stanford University and the University of California, San Francisco.
- Other planned visits include excursions to a microbe-oriented bio & agricultural tech company, and a winery/cheese maker to learn about microbes in the context of food and fermentation.

Location:

Coastal California, including the Los Angeles/Riverside area, Monterey Bay, and the San Francisco Bay area.

Students will participate in two days of classwork in Oxford, on December 11th and 12th prior to departure. Students will be in California from January 4th through January 14th, spending 10 days traveling and studying along the California coast.

Who should go?

This course may interest Education, Environmental Science, Biology, Premedical, Pharmacy, Chemistry, Biochemistry, Geoscience, Ocean Sciences, and Engineering students. Students must have completed BISC 160, 161, 162, 163 for BISC credit, or have instructor approval. No prerequisites for ENVS 399 or EDUC 555.

Dates:

Students are responsible for travel to and from California, arriving in the Los Angeles area and leaving out of the San Francisco Bay area. Group ground transportation during the class is included in the Study USA course fee.

Travel:

Students will make their own travel arrangements to and from San Jose, California. If traveling by air, students should fly into San Jose International Airport.

Costs:

Course fee is \$1295. Included in the fee are housing, group ground transportation, some group meals, and field site admission fees. Excluded from the cost are the Study USA application fee, tuition, travel to and from California, most meals, and personal spending money.

Itinerary subject to change. Students should wait to make travel arrangements after confirming dates and times with instructor.