

Savannah River Environmental Sciences Field Station - 2023



Environmental Sciences Program

The Savannah River Environmental Sciences Field Station (SRESFS) seeks to increase recruitment of Minority Serving Institution students into science, engineering, cybersecurity, and environmental career professions. Coursework and extensive interactions with Savannah River National Laboratory (SRNL) scientists and engineers emphasize current mission driven areas of the Department of Energy Environmental Management Office and introduce students to the work environment of a National Laboratory. Courses are held at the University of South Carolina Aiken (USCA) and the Savannah River Site (SRS). Apartment-style housing is provided on the USCA campus. This course-driven summer program provides education and research opportunities that will prepare you for graduate and professional careers in the areas of environmental science and engineering and management of natural resources.

BENEFITS INCLUDE:

- Stipend of \$3000/session
- Tuition and fees
- Housing accommodations
- Course work, field experiences, and laboratory work related to environmental sciences.
- Course credits that may transfer back to your home institution

ELIGIBILITY:

- ✓ Students must be rising Sophomores, Juniors, or Seniors attending a Minority Serving Institution with a 2.5 GPA or better.
- ✓ Participants must be U.S. citizens.



Interns Collecting Data During Field Excursion

ENVIRONMENTALSCIENCESCOURSES

Session I (Late May to Late June 2023)

Introduction to Environmental Science (4 credits) Introduction to the biological, chemical, political, economic, and cultural factors that affect the environment, as well as the interaction of these factors with the ecosystem concepts of nature.

Radiochemistry (3 credits) Fundamentals of nuclear science and the basic technologies in radiochemistry. Basics of nuclear chemistry, radiation chemistry, health physics, and nuclear counting statistics. Economic effects and social impacts of radiochemistry on energy and environmental problems faced by human beings. Applications of radiometric techniques in many fields such as nuclear energy, molecular imaging, radiotherapy, archaeological dating, and environmental sciences.

Session II (Late June to Late July 2023)
Environmental Health (3 credits) Introduction to environmental effects on human health. Impacts of natural environmental factors and pollutants on human health, including case studies. Effects of natural carcinogens, ultraviolet light, invertebrate disease vector, epidemiology, ecotoxicology, density-dependent disease transmission, food supply health, and water supply quantity and quality.

Environmental Chemistry (4 credits) Chemical principles and practices as they relate to environmental issues. Ozone depletion, global warming, air and water pollution, and the hazards of radioactivity. The laboratory component introduces water, soil, feed and forage analysis. Prereq: Intro to Environmental Science, Chemistry I and II.



Interns pose outside Applied Research Center after Poster Session

TO APPLY:

Submit an application at: <https://sresfs.net>
Applications accepted through March 15, 2023.

PROGRAM APPLICATION QUESTIONS? Email Chris Walker at cwalker3@scsu.edu

PROGRAM QUESTIONS? Email Dr. Bill Pirkle at BillP@usca.edu

