

## **Internships in Environmental Science**

### **Lander University**

Environmental Science students at Lander University must choose between completing an internship or a research project for graduation. Most students select the three credit hours of internship. Students serve in a variety of capacities and with a variety of organizations. These include regulatory agencies, industries, government research, resource protection and non-government organizations (NGOs). Students may perform field sampling, chemical or microbiological analysis of water, soil or air, monitoring of the environment, report writing, inspections, applied research or other activities.

Students are responsible for finding their own internships, though the coordinator of the Environmental Science major will help, and often passes information along. Internships may be taken any semester during their junior or senior year, consistent with student schedules and meeting the minimum requirements set forth in the syllabus (ES 490). Most students opt to complete their internship work during the summer between their junior or senior years.

It is the goal of any approved internship that students learn a variety of skills, tasks or subject matter that builds upon the ES curriculum. Successful internships are good opportunities for learning professionalism in ES and for increasing the competitiveness of students for careers or advanced study.

Below is a partial list of recently completed internships.

ARAMARK, Lander University – Environmental internship.

Buckner Missions – Sustainable agriculture (hydroponics) projects in Mexico.

Capsugel, Greenwood, SC

Microbiology Laboratory internship

Environmental Health and Safety (EH&S) internship

Department of Health and Environmental Control (DHEC)

Upstate Environmental Quality Control Region (EQC) – Greenwood Office

Upstate EQC – Spartanburg Office

Upstate EQC – Summer Pool Inspector

Greenwood Metropolitan District, Wilson Creek POTW – Water quality lab internship

Lake Greenwood State Park

Lander University

Internship – Endangered salamander species project

Internship – Lake Greenwood sediment and water quality project (Limnology)

Santee Cooper Summer Environmental Intern Program – A competitive, statewide internship

Renewable Water Resources (ReWa), Greenville, SC – Environmental Internship, office

United States Department of Agriculture/Agriculture Research Service (USDA/ARS)

Florence – Soil and agricultural internship assisting with research

Newberry Soil and Water Conservation District – Office and field internship

VELUX, Greenwood, SC – EH&S internship

## Research in Environmental Science

### Lander University

Students contemplating post-graduate study are encouraged to complete a research project, under supervision of a Lander faculty member. Research or an internship is required for graduation in the ES program at Lander. Students selecting the research option are required to complete a minimum of three credit hours of ES 407. Research options are available for students in the junior or senior year. Work may be completed in any semester or the summer.

In completing research in ES, it is intended that students are involved in all aspects of the project, from planning through reporting. Students are encouraged to develop their own research problems in which they are interested, though the ES coordinator or other Lander faculty may suggest possibilities, perhaps to assist with their own research programs. Approved research projects normally involve field and/or analytical work (lab). Modeling and data analysis are also possibilities. Key requirements of approved projects are that the project consist of original work and is related to environmental science. Projects must be approved by the ES coordinator.

Students may be supervised by the ES coordinator or another Lander University faculty member. Occasionally, students from another major, such as Chemistry, will complete an ES research project.

Research projects culminate in reports, presentations and/or poster sessions. Projects may be presented in a professional conference or in a publication in the discipline.

Below is a list of research projects that have been completed by ES students

1. A study of groundwater quality in Lake Greenwood (2 projects)
2. Investigation of surface water/ground water relationships in Lake Greenwood
3. Impact of failing septic systems on Lake Greenwood water quality
4. Innovative screening method using spectrophotometry to detect contamination of surface water by failing septic systems
5. Diffusion samplers for water quality determination in surface or pore water (technology development/demonstration/research)
6. Golf course pond water quality in Greenwood County