

WSI 250 - GROUNDWATER MONITORING AND AQUIFER SAMPLING

Course Description

This hands-on course will introduce students to sampling protocols, procedures, quality control, preservation technology, field analysis, and data interpretation. Students will learn how to sample soil, sediments, surface water, groundwater, and air using industry-accepted protocols and industry standard equipment. Proper logbook development, Chain of custody and quality assurance (QA) and quality control (QC) methods will be presented. Troubleshooting of equipment will be emphasized. Group 2 course.

Credit Hours

4

Contact Hours

6

Lecture Hours

2

Lab Hours

4

Required Prerequisites

WSI 150, EET 103

General Education Outcomes supported by this course

Quantitative Reasoning

Course Learning Outcomes

Knowledge:

- Demonstrate competency in the use of groundwater and aquifer sampling equipment.

Application:

- Collect groundwater and aquifer samples using standard industry equipment.

Integration:

- Examine and utilize data management and analysis software from collected field samples.

Human Dimension:

- Practice completion of reporting and paperwork required by governmental agencies from sampling activities.

Caring - Civic Learning:

- Classify environmental remediation activities and summarize their impacts on human health.

Learning How to Learn:

- Properly create procedural documents and prepare logbooks for documentation purposes.