

**Common Course Outline**  
**ENVS 152**  
**Site Assessment, Remediation and Restoration**  
3 Semester Hours

**Community College of Baltimore County**

**Description:**

Site Assessment, Remediation and Restoration

Investigates pollution sources, fundamental principles of site assessment, and techniques, processes, and technologies commonly used to remediate and restore sites; covers how to assess the environmental parameters of a given site, develop site remediation plans, and review site remediation and restoration case studies.

Prerequisite: ENVS 101 or permission of program coordinator.

**Overall Course Objectives**

Upon successful completion of ENVS 152, a student will be able to:

1. Demonstrate an understanding of the fundamentals of soil science as it relates to the environmental assessment and remediation process.
2. Apply the fundamental theory, concepts of site treatment technologies.
3. Apply the methods and protocols of phase I and phase II environmental site assessment.
4. Synthesize solutions to assessment problems.
5. Communicate the findings of assessment in the form and language of the profession..
6. Prepare assessment documentation.
7. Assess the appropriateness and limits of professional protocols.
8. Prepare the rationale for field decisions and recommendations.
9. Successfully and confidently utilize the process of peer review to improve their own performance and contribute to the state of the practice.
10. Design and implement sampling plans.
11. Effectively use historic and regulatory research materials.
12. Discuss and evaluate commonly applied remediation, mitigation and restoration technologies and strategies.

**Major Topics**

Fundamental Soil Science Theory and Concepts

Pollutant Types, Sources and Characteristics

Relevant Laws and Professional Practice

Phase I Environmental Site Assessment Protocols, Language and Resources

Phase II ESA Design and Protocols, Sample Planning and Administration

Risk, Risk Assessment and Management

Risk Based Corrective Action

Site Remediation Planning

Brownfields

Cleanup and Remediation Technology

General Concepts and Problems of Restoration

Professional Ethics and Liability

**Course Requirements**

Grading procedures will be determined by the individual faculty member but may include written or oral exams, completion of written assignments or papers, and participation in class discussion and group activities.

**Other Course Information**

ENVS 152 serves as an elective in the A.A.S. degree and certificate programs in Environmental Science and Technology.

Date Revised: 9/15/00