

Office of Academic Affairs
Tarleton State University
June 2005

Master Course Syllabus Outline

Department: Chemistry and Geosciences **Course Prefix/Number:** ENVS5103

Official Course Title: Environmental Geology

Master Syllabus Approved by Department on: 06/28/2005
month date year

I. Catalog Description

This course will explore the physical controls geology imparts to the global ecosystem through systems analysis of geologic processes. Natural hazards and geologic considerations for land use and waste disposal will be emphasized. Credit for both GEOL 510 and ENVS 510 will not be awarded.

II. Prerequisites

Geology 1054 Physical Geology

III. Expanded Course Description

Environmental Geology is concerned with all aspects of interactions between humans, ecosystems and the earth. Topics may vary and can include water and soil contamination; environmental problems caused by mining; environmental impacts of hazardous facilities; riparian hydrology and riparian area restoration; coastal resources, problems, and management; stormwater problems and management; and others. This course is required for graduate students in Environmental Science and may be taken by other graduate students with an interest in the topic. It would be useful for graduate students in Agronomy and Biology.

IV. Intended Student Learning Outcomes

Knowledge outcomes

Upon completion of this course students will:

- understand laws pertaining to stormwater management and solutions for stormwater control
- understand the basis for riparian restoration including the science and social aspects
- understand the complex legal, social, and scientific problems with waste disposal particularly nuclear waste
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Skill outcomes

Upon completion of this course students will:

- be able to do a comprehensive stream evaluation as part of a stream restoration plan
- be able to find and use scientific material on a variety of subjects
- be able to research complex subjects in a timely fashion

Value outcomes

Upon completion of this course students will:

- be able to appreciate the utility of geology in solving environmental problems

V. Unless otherwise stipulated in this master syllabus by the department, the following items are subject to faculty discretion as described in each faculty member's individual course outline/syllabus:

Course Requirements (grading/evaluation procedures; class attendance policy; term papers, projects, field assignments; examinations; class participation, etc.)

Typically 2 tests, 1 term paper and presentation, 1 field assignment, class participation in discussions is required

Required Text(s) Usually none, readings posted with class notes

Department Head Signature/Date:

Signature

_____/_____/_____
Date