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 

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  

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