

**Environmental Science 520**  
**Issues in Water Resources**

Master Course Syllabus Outline

**Department:** Chemistry, Geosciences, and Environmental Science

**Course Prefix/Number:** ENV5 520

**Official Course Title:** Issues in Water Resources

Master Syllabus Approved by Department on: \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
month      date      year

**I. Catalog Description**

This course will provide a broad introduction to the critical issues relating to the world's freshwater resources. Students will examine the occurrence, use, management, and conservation of water and water resources in the U.S. and the world. Students will develop an understanding of the history and current issues in water resources and the environmental problems and political response to these issues.

**II. Prerequisites**

Prerequisites: None

**III. Expanded Course Description**

This course concentrates on water-related aspects of environmental science particularly pollution and water supply. Pollutants discussed will include nutrients, pesticides, metals and contaminants of emerging concern with an emphasis on current problems such as hypoxia and nutrient loadings to water bodies. This course is designed for students intending to pursue a career in environmental science. It is required of students in the M.S. Environmental Science program.

**IV. Intended Student Learning Outcomes**

**Knowledge outcomes**

Upon completion of this course students will:

- understand the scientific, social, political and economic aspects of water resource issues
- understand the history of water problems in the U.S. and how it has led to the development of current legal constraints
- understand how pollutants can migrate, concentrate and how water quality standards are set

**Skill outcomes**

Upon completion of this course students will:

- be able to find specific information on water pollutants including standards and health information
- be able to find and use scientific material on a variety of subjects
- be able to distill and present complex subjects in a timely fashion

**Value outcomes**

Upon completion of this course students will have an appreciation of the interaction of technical, political, social, and economic factors in the management of water issues.

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, presentation, and 1-2 reports as well as in-class discussion

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

Department Head Signature/Date:

\_\_\_\_\_

Signature

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Date