

NEW COURSE PROPOSAL

PROGRAM: ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT

1. **Catalog Description of the Course.** *[Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of ___ units); time distribution (Lecture ___ hours, laboratory ___ hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]*

ESRM 490. SPECIAL TOPICS (3)

Three hours of seminar per week.

Prerequisite: Consent of the instructor.

In-depth analysis of current topics in environmental science and resource management. Topics vary each semester. May be repeated by topic.

2. **Mode of Instruction.**

	Units	Hours per Unit	Benchmark Enrollment
Lecture			
Seminar	<u>3</u>	<u>1</u>	<u>20</u>
Laboratory			
Activity			

3. **Justification and Learning Objectives for the Course.** (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) *[Use as much space as necessary]*

This is an upper division elective toward the Environmental Science and Resource Management major. This course provides an in-depth analysis of environmental science and resource management issues which may not be addressed thoroughly in other courses. Students are introduced to research at the forefront of the field and benefit from the specific expertise of the instructor.

Students who successfully complete this course will be able to:

- Identify specific problems in environmental science and resource management.
- Apply the appropriate analytical tools to assess specific environmental or natural resource problems.
- Summarize and report findings related to the description, assessment or prediction of environmental or natural resource problems.

4. **Is this a General Education Course** **NO**

5. **Course Content in Outline Form.** *[Be as brief as possible, but use as much space as necessary]*

Sample course outline: Topic: Urban Hydrologic Prediction

Fundamentals of Urban Surface Water Management

Hydrologic Quantity and Quality Cycles in the Urban Environment

Techniques and Models for Urban Hydrologic Prediction

Floodplain and Channel Hydraulics

Methods for Flood Mitigation Design

Drinking Water Needs: Quality, Collection, Treatment and Distribution

Wastewater Needs: Quality, Sewerage and Septic Lines, Treatment

Point and Nonpoint Source Pollution Load: Origins and Impact

6. References. [Provide 3 - 5 references on which this course is based and/or support it.]

References for Sample Course Outline

Bedient, Philip and Wayne Huber. *Hydrology and Floodplain Analysis*. Prentice Hall. 2002.

Gribbin, John. *Hydraulics and Hydrology for Stormwater Management*. Delmar Learning. 1996

Water Resources and the Urban Environment. Conference on Water Resources Planning and Management. 1998.

Other selected readings

7. List Faculty Qualified to Teach This Course.

ESRM Faculty

8. Frequency.

a. Projected semesters to be offered: Fall _____ Spring ___x___ Summer _____

9. New Resources Required.

None.

10. Consultation.

Attach consultation sheet from all program areas, Library, and others (if necessary)

11. If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

Proposer of Course

Date