

CE 496, 497, 498 – TOPICS IN CIVIL ENGINEERING

Type (check one): Required: _____ Elective: X

2005-2006 Catalog Data: CE 496, 497, 498. Topics in Civil Engineering. Directed work on a special problem. Problems of an interdisciplinary nature are encouraged. A written report is required. A contract outlining the scope of the project is required prior to initiation of work. Prerequisites: Senior standing and a duly executed contract. *One semester; one, two, and three credits respectively.*

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Co-Requisites: None

Textbook: None

Other Required Materials: None

Other References: None

Instructor: Mr. Gene McGinnis, Assistant Professor of Civil and Environmental Engineering

Course Objectives: To provide civil and environmental engineering students an opportunity to work on special problems of an interdisciplinary nature in the area of civil and environmental engineering.

Prerequisites by Topics: Senior standing and a duly executed contract.

Topics:

1. Contract outlining the scope of the project
2. Written report

Class Schedule: Periodic meetings between faculty and student.

Prepared by: Mr. Gene McGinnis, P.E. **Date:** October 2005

**PROFESSIONAL COMPONENT:
CE 496, 497, 498 – TOPICS IN CIVIL ENGINEERING**

Category (check one)	<input type="checkbox"/> Math/Basic Science <input checked="" type="checkbox"/> Engineering <input type="checkbox"/> General Education <input type="checkbox"/> Other
Design (check one)	<input type="checkbox"/> Significant <input type="checkbox"/> Some <input checked="" type="checkbox"/> None
Realistic Constraints (check all that apply)	<input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input type="checkbox"/> Sustainability <input type="checkbox"/> Manufacturability <input type="checkbox"/> Ethical <input type="checkbox"/> Health & Safety <input type="checkbox"/> Social <input type="checkbox"/> Political

Relationship to Program Outcomes:

Check all that apply:

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs
- (d) an ability to function on multi-disciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of engineering solutions in a global and societal context
- (i) a recognition of the need for and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice