

## CE 315 – JUNIOR PROJECT

**Type (check one):** Required:  Elective:

**2005-2006 Catalog Data:** CE 315. Junior Project. Interdisciplinary team design projects are initiated by the student (or suggested by the faculty) and approved by the faculty, investigated and developed throughout three semesters preceding the student's graduation. Students submit proposals for CE 315, CE 431, and CE 432. Students attend senior presentations and other professional lectures. Report writing and oral presentation. Prerequisite: Junior standing. Offered in the Fall and Spring semesters. *One semester; zero credit.*

**Prerequisite:** Junior standing

**Co-Requisites:** None

**Textbook:** None

**Other Required Materials:** None

**Other References:** None

**Instructor:** L. Yu Lin, K. Madhavan, S. Malasri, and G. McGinnis, Department of Civil and Environmental Engineering.

**Course Objectives:** To provide students with information about civil engineering projects.

**Prerequisites by Topic:** None

**Topics:** Students attend student presentations and other professional seminars  
Discussion on writing project proposals  
Write and submit senior project proposal  
Oral presentation of proposal

**Class Schedule:** One 50-minute session per week

Prepared by:     K. Madhavan     Date:     August 2005

**Professional Component:  
CE 315 – Junior Project**

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

