

COURSE ADDITION (CE 4743/6743)

1. CATALOG DESCRIPTION

CE 4743/6743. Anal Mitigation of C2D. (3) (Prerequisite: Senior Standing). Three hour lecture. Overview of the different techniques used to analyze and mitigate conflicts, claims, and disputes (C2D) in civil engineering projects.

2. DETAILED COURSE OUTLINE

A detailed course content outline is provided below:

<i>Topic</i>	<i>Contact Hour(s)</i>
1) Procurement and Delivery Methods	3
2) Standard National Civil Engineering Contracts	3
3) Standard International Civil Engineering Contracts	3
4) Resolution Mechanisms for Conflicts, Claims, and Disputes	3
5) Categories of Conflicts, Claims, and Disputes:	
a) Design	3
b) Tenders and Bids	3
c) Extension of Time	3
d) Liquidated Damages	3
e) Schedule, Programme, and Delays	3
f) Payment	3
g) Variations	3
h) Loss and Expense	3
i) Practical Completion and Defects	3
j) Rights and Remedies	3
k) Exams	3
Total	45

3. METHOD OF EVALUATION

Students will be evaluated as shown below:

<i>Item</i>	<i>Percentage (%)</i>
1) Participation	5
2) Assignments	15
3) Projects	30
4) Exams	50

Consequently, the following ten-point grading systems will be used

A	> 90%
B	80-90%
C	70-80%
D	60-70%

4. JUSTIFICATION AND LEARNING OUTCOMES

As the total annual cost of conflicts, claims, and disputes in the construction sector has exceeded \$5 billion; there is a pressing need by both undergraduate and graduate students as well as industry practitioners to get more educated in this field. This class provides a detailed overview that will make the students able to analyze and mitigate conflicts, claims, and disputes as related to various issues including differing site conditions, time and schedule impacts, change orders and changed conditions, acceleration, lost productivity, and others. Also, it helps in understanding the complex triangular relationship between the construction procurement and delivery methods, construction contracts, and construction resolution mechanisms both nationally and internationally. This class was offered as a special topics course and received very favorable feedback from the students.

The learning objectives include developing the students' ability to:

- Select and use appropriate procurement and delivery methods;
- Apply different national and international standard construction contracts;
- Demonstrate knowledge of construction conflicts, claims, and disputes resolution mechanisms;
- Understand procedures for granting extension of time;
- Comprehend floats as it relates to time and compensation; and
- Develop basic understanding of various concepts including concurrent delays, interest and finance charges, formulas for head office overhead, and disruption.

Also, this class will also address the following ABET outcomes:

- d. Ability to function on multidisciplinary teams.
- e. Ability to identify, formulate and solve engineering problems.
- f. Understanding of professional and ethical responsibility.
- g. Ability to communicate effectively.
- j. Knowledge of contemporary issues.
- k. ability to use the techniques, skills and modern engineering tools necessary for engineering practice.

5. INSTRUCTOR OF RECORD

Dr. Imad Aleithawe, P.E., M-ASCE
Adjunct Professor: Civil and Environmental Engineering
235C Walker Engineering Building, Mississippi State, MS 39762
E-mail: ialeithawe@mdot.ms.gov

6. GRADUATE STUDENT REQUIREMENT

Graduate students will be assigned additional requirements in the assignments, projects, and exams.

7. PLANNED FREQUENCY (or schedule of offering)

This course will be offered every year in the spring semester.

8. EXPLANATION OF ANY DUPLICATION

This course does not duplicate any classes.

9. METHOD OF INSTRUCTION

C. Lecture. Students receive structured units of information and accompanying material through direct contact with the instructor; typically considered the traditional classroom.

10. METHOD OF DELIVERY

F. Face to face. Course instruction and structured units of information delivered in person by the instructor.

11. PROPOSED C.I.P. NUMBER

14.0801

12. PROPOSED 24 CHARACTER ABBREVIATION

Infrastructure Systems

13. PROPOSED SEMESTER EFFECTIVE

Spring 2013

14. OTHER APPROPRIATE INFORMATION

N/A

15. PROPOSAL CONTACT PERSON

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SECTION B. SPECIAL NOTES

1. CROSS-LISTING - Not Applicable.
2. EFFECTIVE DATE - Spring 2013
3. REQUIRED COURSE – This course is an elective
4. MASTER SCHEDULE - Intentionally left blank.