



## CE 462 – Construction Contracts and Specifications

**Code and Name:** CE 462 – Construction Contracts and Specifications

**Credit Hours:** 2 (Lecture: 2, Tutorial: 1)

**Textbook:**

- Engineering and Construction Law and Contracts, J. K. Yates, 1<sup>st</sup> Edition, Pearson, 2010

**Other References:**

- *Construction Contracts by Keith Collier, 3<sup>rd</sup> Edition, Pearson, 2001.*

- *Construction Contract Administration for Project Owners by Claude G. Lancome, 1<sup>st</sup> Edition, 2017*

**Course Description:**

Application of the construction contracts, drawings, and specifications to the construction process. Ethical issues in project administration. The methodology, procedures and organizational techniques involved in preparing and evaluating bids and contracts. Types of construction contracts, general and special conditions of contract, standard specifications and contract. Procedures for systematic handling of variations, claims and disputes and their clarification with their legal implications.

**Pre-requisites:** CE461 Construction Engineering and Management

**Co-requisites:** None

**Course Learning Outcomes:**

With relation to ABET Student Outcomes (From Fall 2019-SOs: 1-7)

1. To recognize ethical and professional responsibilities in construction contracts and specification situations related to engineering codes and standards, the semester project, and response to issues in the course. (4)
2. To identify, formulate, and solve complex engineering problems in construction contracts and specifications related to design and construction contracts and their applications. (1)
3. To analyze construction contracts and specifications, claims and disputes resolutions techniques, and apply knowledge to write a simple civil engineering contract terms and conditions. (2)
4. Demonstrate communication skills in both oral and written during the semester project presentation (3)
5. To acquire and apply new knowledge with emphasis on contractual issues, claims and dispute resolutions methods and their application. (7)

**Topics to be covered:**

- Introduction to construction contracts, Types of contracts, Project delivery methods
- Forming engineering and construction contracts
- Contracts for engineering and construction services, Bidding, Contract documents
- Engineering professional ethics
- Contract terms and conditions, Topics covered or avoided in construction contracts, Construction contract clauses requiring interpretation, Performance and Breach of contract, Ways to terminate contracts
- Government contracting. Bonding requirements, Types of bonds, Government construction contracts
- Specifications, Standard specifications, Technical standards
- Change orders and claims, Documentation to support claims, Construction delay claims , Quantification of contractor delay claims, Minimizing delay claims
- Contract dispute resolution techniques, Contract negotiations, Contract mediation, Arbitration, Litigation, Dispute review boards
- ADR methods, risk management and insurance

**Grading Policy:**

The grading for the course is: 60% coursework and 40% Final Exam. The course work consists of two Midterm Exams, where each midterm exam is worth 20%. It also includes quizzes, and projects for the remaining 20% that is modified by the course instructor.

