

BCN 4880
Methods and Management of Heavy / Highway Construction
Fall 2017

Time: Monday Periods 7 - 8 (1:55 PM - 3:50 PM)
Wednesday Period 7 (1:55 PM - 2:45 PM)

Location: RNK 0225

Instructor: Dr. Aaron Costin, RNK 344, Tel: 352-273-2121, email aaron.costin@ufl.edu

Description: Theory and practice of construction planning, methods, project management. Project Control from conception through the Construction phase. This includes: Procurement of Design Professional, Prime Contractor, Subcontractor, Construction Manager, Project/Program Manager, etc, and the definition of and delineation between each entity; Construction Contract Types; Delivery Systems; Heavy/Highway Plans Reading; Quality Assurance/Quality Control; Nuances of planning and bidding a Unit Price project.

Objectives: Upon completion of the course, it is hoped that the following objectives for student learning and performance will be attained. Each student should be capable of the following: (1) To understand and explain the structure of the heavy/highway construction industry and the relationships that exist between key participants; (2) To understand the current approach to quality applied to heavy/highway construction; (3) To understand the estimating and bidding processes used in the heavy/highway construction industry; (4) To understand and use common heavy/highway construction terminology in context as it applies to project and company situations; (5) To understand and explain the advantages and disadvantages of various contract forms and variations used in the heavy/highway construction industry and identify the best form for a given situation; and (6) To understand the purpose and application of various common types of insurance and bonds in the heavy/highway construction industry.

Required textbook: None

Course Modules:

- (1) Parties to a heavy/highway construction contract.
- (2) Heavy/highway construction contract types and delivery systems
- (3) Heavy/highway construction project cost estimating and bidding (Unit Price)
- (4) Heavy/highway construction contract documents.
- (5) Heavy/highway construction surety bonds.
- (6) Heavy/highway construction project bidding strategy.
- (7) Heavy/highway construction project administration.
- (8) Heavy/highway Plans Reading

Prerequisites by Academic Standing: J-2, S-1, or S-2

Grading System:

Participation	= 5%
Assignments	= 15%
Exams (4@10% each)	= 40%
Final Exam	= 20%
Total	= 100%

A = 93-100; **A-** = 90-92.9; **B+** = 87-89.9; **B** = 83-86.9; **B-** = 80-82.9; **C+** = 77-79.9; **C** = 73-76.9; **C-** = 70-72.9; **D+** = 67-69.9; **D** = 63-66.9; **D-** = 60-62.9; **E** < 60.

Attendance and Make-ups: Attendance to this course is not mandatory, although it is highly recommended for participation. Requirements for class attendance, make-up exams, assignments, and other work in this course are consistent with university policies that can be found at <<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>>. Late assignments may not be accepted at the discretion of the instructor.

Class Demeanor: Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all. Rude and disrespectful behavior will not be tolerated.

Accommodations: Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Online Course Evaluations: Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <<https://evaluations.ufl.edu>>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open.

Honor Code: All students in this course are subject to the requirements of the University of Florida's Honor Code <<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>>. Cheating will not be tolerated. Although joint work on assignments may be acceptable in some cases, duplication of an assignment either manually or electronically will be dealt with as an act of academic dishonesty. We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

Reservations and Remedies: The instructor reserves the right to modify the course schedule and modules as deemed fit. If any questions, issues, or concerns about the course (assessment, policies, schedule, etc.), please contact the instructor to remedy any issue.