CEE 610 – 102: Construction Management

(3 credits)

Lectures	Friday, 6:00 pm – 8:50 pm GITC2315A	
Instructor	Chrissa D. Roessner, P.E. Colton Hall cdr44@njit.edu	Office Hours: Fridays 5:20 pm – 6 pm Email professor for an appointment

Required Textbook

Not applicable.

Other Recommended Texts & Reading

As posted in Canvas throughout the semester.

Course Description

Managerial aspects of contracting. Study of an individual firm in relation to the entire construction industry. Topics include contractor organization and management, legal aspects of construction, and financial planning.

POLICIES & PROCEDURES

Academic Integrity: It is expected that NJIT's University Code on Academic Integrity will be followed in all matters related to this course. Refer to NJIT's Dean of Students website to become familiar with the Code on Academic Integrity and how to avoid Code violations.

https://www.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf

Communication: All communication from the professor to the students will be through Canvas or campus email. The same is expected of the students when communicating with the professor. Weekly course announcements will be posted / emailed utilizing Canvas. Students are strongly encouraged to review these messages carefully.

Lectures/Class: Students are expected to attend every class session in-person, as scheduled. Attendance will be taken. Students are responsible for any missed work, and any absence resulting in missed work must be excused by the Dean of Students. The professor is not to be recorded on video or audio with prior notice and agreement.

Handouts: All course content will be made available through Canvas, as appropriate. Students are responsible for all course content regardless of how it is presented. Students must check Canvas frequently to check for new modules and content.

Quizzes and Exams: Students will take all quizzes and exams in-person as scheduled. All quizzes and exams will be available for student review but will be kept / maintained by the professor. Students are permitted to take notes (**not photographs or videos**) when reviewing quizzes in class. There will be NO makeup quizzes or exams unless a result of an absence that is further substantiated and approved by the Dean of Students Office.

AI statement: The use of artificial intelligence (AI) is permitted in this course only when explicitly stated in assignments. If students use AI for any course-related work, they must cite it according to the guidelines provided on the **NJIT Library AI Citation page**. If you have any questions about AI use in this course, please contact the course instructor before submitting any assignments. In cases where AI use is not allowed, students are expected to complete work without AI assistance to develop their skills in this subject area.

Course Schedule:

Class Meeting Date	Topic	Assignments / Notes
01/24/2025	Introductions / Syllabus / Integrity Construction Project Management	
01/31/2025	Project Delivery Methods & Bidding Financing & Insurance	
02/07/2025	Contracts & Specifications Business Structures & Joint Ventures	Guest Speaker Anthony Giuriceo, Esq. Quiz #1
02/14/2025	Change Management	
02/21/2025	Construction Administration	Quiz #2
02/28/2025	Contractor & Owner Personnel Record Keeping	
03/07/2025	Construction Safety	
03/14/2025	Midterm	Midterm Exam
03/21/2025	NO CLASS	Spring Break
03/28/2025	Materials Management Cost Management	
04/04/2025	Time Management	
04/11/2025	Special Topic: Shotcrete	Frank Townsend, Patriot Shotcrete
04/18/2025	NO CLASS	Good Friday
04/25/2025	Quality Management Best Practices	
05/02/2025	Claims & Dispute Resolution Negotiation Skills Risk Management	Guest Speaker Anthony Giuriceo, Esq.
05/16/2025	TBD Final Exam	Date to be confirmed

CEE Mission, Program Educational Objectives and Student Outcomes

The mission of the Department of Civil and Environmental Engineering is:

- to educate a diverse student body to be employed in the engineering profession
- to encourage research and scholarship among our faculty and students
- to promote service to the engineering profession and society

Our program educational objectives are reflected in the achievements of our recent alumni:

1. **Engineering Practice:** Alumni will successfully engage in the ethical practice of civil engineering within industry, government, and private practice, working toward safe, practical, resilient, sustainable solutions in a wide array of technical specialties including construction, environmental, geotechnical, structural, transportation, and water resources.
2. **Professional Growth:** Alumni will advance their skills through professional growth and development activities such as graduate study in engineering, research and development, professional registration and continuing education; some graduates will transition into other professional fields such as business and law through further education.
3. **Service:** Alumni will perform service to society and the engineering profession through membership and participation in professional societies, government, educational institutions, civic organizations, charitable giving and other humanitarian endeavors.

Our **Student Outcomes** are what students are expected to know and be able to do by the time of their graduation:

1. an ability to identify, formulate and solve complex engineering problems by applying principles of engineering, science and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety and welfare, as well as global, cultural, social, environmental and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Revised: 1/6/2025