

Fall 2023

CE 610-101:Construction Management

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Course Schedule:

| Class Meeting Date | Topic | Assignments / Notes |
|--------------------|--|----------------------------|
| 09/08/2023 | Introductions / Syllabus / Integrity | |
| 09/15/2023 | Overview, Bidding & Contract Management | |
| 09/22/2023 | Business & Legal Aspects of Construction Contracts Specifications Working with Lawyers | Quiz #1 |
| 09/29/2023 | Extra Work Change Orders | |
| 10/06/2023 | Business Structuring (Overview) Financing Insurance | Quiz #2 |
| 10/13/2023 | Contractor Personnel Owner Personnel Record Keeping | |
| 10/20/2023 | Midterm | Midterm Exam |
| 10/27/2023 | Construction Safety | |
| 11/03/2023 | Estimating & Resource Allocation Materials Management | |
| 11/10/2023 | Scheduling | Ungraded Homework Assigned |
| 11/17/2023 | Scheduling Discussion (Re: Claims) Introduction to Claims | Quiz #3 |
| 11/22/2023 | Negotiation of Contracts / Changes Dispute Resolution | Guest Speaker |
| 12/01/2023 | Risk Management Global Economy - Supply Chain | Guest Speaker |
| 12/08/2023 | Student Presentations | Research Showcase |
| TBD | Final Exam | Final Exam |

Note: Friday classes meet on Wednesday, November 22, in advance of Thanksgiving.

Calculation of Course Grade: A weighted average grade will be calculated as follows:

| <u>Breakdown</u> | | <u>Scale</u> | |
|------------------|------------|--------------|----------|
| Quizzes | 30% | A | 100-89 |
| Midterm | 25% | B+ | 88-83 |
| Research Project | 20% | B | 82-78 |
| <u>Final</u> | <u>25%</u> | C+ | 77-70 |
| Total | 100% | C | 69-65 |
| | | F | Below 65 |

Instructor Commitment: You can expect the Instructor to be courteous, punctual, organized, and prepared for lecture and other class activities; to answer questions clearly; to be available during office hours or to notify you beforehand if office hours are moved; to provide a suitable guest lecturer or pre-recorded lecture when they are traveling or unavailable; and to grade uniformly and consistently.

Students with Documented Disabilities: NJIT is committed to providing students with documented disabilities equal access to programs and activities. If you have, or believe that you may have, a physical, medical, psychological, or learning disability that may require accommodations, please contact the Coordinator of Student Disability Services located in the Center for Counseling and Psychological Services, in Campbell Hall, Room 205, (973) 596-3414. Further information on disability services related to the self-identification, documentation and accommodation processes can be found on the webpage at: (<http://www.njit.edu/counseling/services/disabilities.php>)

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 practice of civil engineering within industry, government, and private practice, working toward safe, practical, 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 technical and interpersonal 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