

George Mason University
Department of Civil, Environmental and Infrastructure Engineering
Syllabus
CEIE 370 Construction Systems
Fall 2009

Course Catalog Description

Overview of the urban construction industry, including its organizations and interactions. Topics include project and construction management for operations, tactical, and strategic planning and decision making; cost estimation and scheduling, accounting, estimating, resource planning, and structuring of urban systems construction projects; legal theories and relationships between parties in the construction process, including the role of the design professional and manager. Value engineering is introduced.

Note: The prerequisite for this course to CEIE301 beginning in spring 2009.

Class Location and Time

Science & Technology II, Room 15, Fairfax campus
Lecture: Thursday 7:20 – 10:00 pm

Instructor

Jag R. Bhargava, PE, PMP, CCM, DBIA
Department of Civil, Environmental and Infrastructure Engineering

Course Webpage

The course web page will be used extensively. Announcements, assignments, and lectures will be available for viewing/download.

URL: <http://mason.gmu.edu/~jbhargav/>

Course Objectives

- Introduce students to construction management (CM) concepts, practices and techniques.
- Emphasize roles in the contractual framework (owner, contractor, and architect/engineer).
- Provide students with essential CM skills for use in CEIE490 (senior design).
- Prepare students for CM/project management questions on the FE Exam.
- Make students aware of current trends in the construction industry

Grading

Grading will be based on the following factors:

Component Percentage

Mid-Term	30%
Final Exam	30%
Quizzes(2)	20%
Home Work	20%

Policies

- **Course communication.**

It is George Mason University policy that your student email account (i.e., gm.u.edu domain) is the official means of communication for academic purposes. Students are responsible for monitoring their Mason email account for course-related communication.

- **Class attendance.** Class attendance is not required, however students are responsible for all material presented in class.

- **Homework.** Homework assignments will be in the form of problem sets. I reserve the right to slightly alter the details of a homework assignment up until the end of the day (11:59 PM EST) on the day the assignment is listed. Be sure to check the course webpage the day after the assignment is given to make sure the details have not changed.

- **Academic Integrity.** All students are expected to adhere to the George Mason University Honor Code. Please consult the University catalog for a complete statement of the Honor Code. See the instructor if you need further clarification.

- **Observance of religious holidays.** It is the policy of George Mason University to accommodate student absence from class or exams for religious observance. Reasonable opportunities will be provided to make-up for missed class or work. Please contact the instructor well in advance with reasonable notice of the dates of major religious holidays on which they will be absent.

Week	Date	Lecture	Assignment/Read
1	9/3	Chapter 1&2	Read 3
2	9/10	Chapter 3	Read 4
3	9/17	Chapter 4	Read 5
4	9/24	Chapter 5	Read 6 and Read for Quiz 1
5	9/30	Chapter 6, Quiz 1	Read 7
6	10/1	Chapter 7	Read 8
7	10/8	Chapter 8	Read for Mid-Term and Chapter 9

8	10/15	Midterm /Chapter 9	Read 10
9	10/22	Chapter 10	Read 11
10	10/29	Chapter 11	Read 12 and Read for Quiz 2
11	11/5	Chapter 12, Quiz 2	Read 13 and 14
12	11/12	Chapter 13 and 14	Read 15
13	11/19	Chapter 15	Read 16
14	12/3	Chapter 16	Read 17
15	12/10	Chapter 17	Read for Final
16	12/17	Final Exam	

Final Exam Schedule: The final exam will be given in the University designated exam period: Thursday, Dec 17, 7:20pm – 10:00pm, Enterprise Hall, Room 15.

Exams and Submitted Materials

- The mid-term and final exams will be closed-book. The final exam will be comprehensive.
- All submitted homework assignments are expected to be of professional quality. Essay-type questions should be typed or clearly printed on engineering paper. Calculations should be shown clearly.