



**COURSE OUTLINE**  
**CE 332**  
**CONSTRUCTION ENGINEERING AND MANAGEMENT**  
**Spring 2011-2012**

**1. Credit hours: (3-0) 3**

**2. Catalogue description:** Profile of the construction sector; company and site organization and types of contracts. Construction projects; estimating, tendering, planning and execution. Professional responsibility and engineering ethics. Productivity, quality, health and safety issues. Construction equipment; selection criteria, hourly cost determination and output analysis of excavators.

**3. Course objectives/goals:**

- To introduce the students a general picture of the construction industry together with the contemporary management topics.
- To provide the students with basic information on principles of construction project management and increase their awareness on major tasks of a construction manager.
- To present some of the techniques and methods used during the management of a construction project such as network analysis, cost estimating techniques, hourly output estimation of equipment etc.
- To help the students to understand the roles and responsibilities of all parties involved in a construction project, basic phases of a construction project and the way different parties work together to increase performance in a construction project.
- To give them brief information about the Turkish construction industry and Turkish practice giving reference to current rules and regulations (eg. Health and Safety Regulations for Public Works).
- To increase the awareness of students on the issues of quality, health and safety, professional responsibility, engineering ethics etc. and the environmental and economic impacts of the construction industry.

**4. Instructors:**

Section	Instructors	Course Hour	Room No
1	Assoc. Prof. Dr. Rıfat Sönmez	Friday DR2 13:40 – 16:30	K1-414
2	Assoc. Prof. Dr. Murat Gündüz	Friday TH8 13:40 – 16:30	K1-248
3	Assoc. Prof. Dr. Rıfat Sönmez	Tuesday DR2 10:40 – 13:30	K1-414
4	Assoc. Prof. Dr. Murat Gündüz	Tuesday TH8 10:40 – 13:30	K1-248

## 5. Course Assistants

	Room No
Açelya Ecem Yıldız	K1- 407
Adil Baran Çobanoğlu	K1- 407
Emre Caner Akçay	K1- 411

## 6. Course contents and schedule

Week	Topic
1	Construction project management and construction industry
2	Project delivery systems
3	Cost estimating and bidding
4	Cost estimating and bidding
5	Construction project planning
6	Construction project planning
7	Construction project planning and Managing quality
8	Introduction to MS Project
9	Construction machinery and equipment
10	Construction machinery and equipment
11	Construction machinery and equipment
12	Managing health and safety

## 7. Text book and references

**Lecture Notes** prepared by the Construction Management Staff

### Reference books:

- Harris, F., and McCaffer, R. (2001), “Modern Construction Management”, 5<sup>th</sup> Edition, Blackwell Science, UK.
- Halpin, D. W. (2006), “Construction Management”, 3<sup>rd</sup> Edition, John Wiley and Sons, USA.
- Smith, N. J. (1996), “Engineering Project Management”, Blackwell Science Publications, UK.
- Peurifoy, R.L., and Schexnayder, C. J. (2002), “Construction Planning, Equipment, and Methods”, 6<sup>th</sup> Edition, McGraw-Hill Higher Education, International Edition.

## 8. Grading:

1 <sup>st</sup> Midterm Examination:	28%
2 <sup>nd</sup> Midterm Examination:	28%
Final Examination:	40%
Homework:	4%