EASTERN ILLINOIS UNIVERSITY

1902

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2012

INT 4243 CONSTRUCTION PROJECT MANAGEMENT (3-0-3) SPRING 2012

MW 2:00 – 3:15 p.m. KH 4431 ********

COURSE DESCRIPTION

Principles of project management applied in the construction industry. Contracting, specifications, codes, safety practices, and management practices utilized in the modern construction projects.

COURSE OBJECTIVES

Upon completing the course, students should be able to:

- Explain the *Project Management Cycle*; Estimating, Planning, Controlling.
- Recognize the diverse *participants in a construction project* such as owner, architect, engineer, contractor, construction project manager, and inspector.
- Define the *chain of command* and the *basic responsibilities* of each one of the project participants and *the role they play*.
- Differentiate between different *types of contracts*
- Demonstrate working knowledge of the *methods applied to successfully manage related activities* in construction projects.

ADOPTED TEXT

Gould, F.E. and Joyce, N.E., "Construction Project Management," Second Edition, Prentice Hall Publishers, NJ, 2003.

RECOMMENDED TEXTS

- 1. Collier, K., "Managing Construction," Delmar Publishers, Inc., Albany, NY, 1994.
- 2. Barrie, D.S. & Paulson, B.C., "Professional Construction Management," 3rd Edition, McGraw-Hill, Inc., NY, 1992.
- 3. Oberlender, G.D., "Project Management for Engineering and Construction," McGraw-Hill, Inc., NY, 1993.

COURSE OUTLINE

Class	<u>Date</u>	<u>WK</u>	Topic	Readings
1	M 1-9	1	Introduction	
2	W 1-11		Text Preface Ch 1: Conclusion Ch 1: Objectives Ch 1: The Construction Industry	v-vii 24-25 2 1-26
	M 1-16	2	No Classes (MLK Birthday)	
3	W 1-18		Ch 2: Conclusion Ch 2: Objectives Ch 2: Project Participants	54 30 29-54
4	M 1-23	3	Ch 3: Conclusion Ch 3: Objectives Ch 3: Organizing & Leading the Construction Projection	81 58 ect 57-68
5	W 1-25		Ch 3: Organizing & Leading the Construction Projection	ect 69-82
6	M 1-30	4	Ch 4: Conclusion Ch 4: Objectives Ch 4: Project Delivery Methods (Research paper topic selection)	115-117 86 85-100
7	W 2-1		Ch 4: Project Delivery Methods	100-117
8	M 2-6	5	CPMan Cycle	НО
9	W 2-8		CPMan Cycle TEST I	НО
10	M 2-13	6	Ch 5: Conclusion Ch 5: Objectives Ch 5: Project Chronology	132 120 119-132
11	W 2-15		Ch 6: Conclusion Ch 6: Objectives Ch 6: Construction Services During Design	164 136 135-141
12	M 2-20	7	Ch 6: Construction Services During Design	141-152
13	W 2-22		Ch 6: Construction Services During Design	152-164
14	M 2-27	8	Ch 7: Conclusion Ch 7: Objectives Ch 7: Bidding & Procurement	194-195 168 167-181
15	W 2-29		Ch 7: Bidding & Procurement	181-195

Class	<u>Date</u>	<u>WK</u>	<u>Topic</u>	Readings
16	M 3-5	9	Ch 8: Conclusion Ch 8: Objectives Ch 8: Construction & Closeout TEST II	216 200 199-207
17	W 3-7		Ch 8: Construction & Closeout	207-216
	M 3-12 to F 3-16		Spring Recess	
18	M 3-19	10	Ch 9: Conclusion Ch 9: Objectives Ch 9: Estimating Project Costs	246 220 219-230
19	W 3-21		Ch 9: Estimating Project Costs	230-246
20	M 3-26	11	Ch 10: Conclusion Ch 10: Objectives Ch 10: Project Planning & Scheduling	275 250 249-261
21	W 3-28		Ch 10:Project Planning & Scheduling	261-275
22	M 4-2	12	Ch 11: Conclusion Ch 11: Objectives Ch 11: Controlling Project Cost, Time, and Quality	313-314 280 279-293
23	W 4-4		Ch 11: Controlling Project Cost, Time, and Quality	294-305
24	M 4-9	13	Ch 11: Controlling Project Cost, Time, and Quality TEST III	305-314
25	W 4-11		Ch 12: Conclusion Ch 12: Objectives Ch 12: Job Site Administration (Research paper submission)	352-353 318 317-329
26	M 4-16	14	Ch 12: Job Site Administration	330-347
27	W 4-18		Ch 12: Job Site Administration Ch 13: Conclusion Ch 13: Objectives Ch 13: Construction Law	347-353 375 356 368-371, 375
28	M 4-23	15	Ch 14: Conclusion Ch 14: Objectives Ch 14: Construction Safety & Health	405 380 379-392
29	W 4-25		Ch 14: Construction Safety & Health	392-405

THE SYLLABUS AND THE COURSE

This syllabus is offered as a guideline to assist students in understanding the overall direction of the course. It is important to note, however, that the syllabus does not account for all possible circumstances and is subject to change. While student opinions may be solicited with respect to changes in the course, the instructor reserves the right to make alterations. The course will employ a technique that includes readings, videos, lectures, discussions, quizzes, homework, tests, and a written research project. Students are encouraged and expected to actively participate in class discussions and activities. Subject matter depends largely on students' independent readings and library and Internet research.

Students who are organized and serious learners, who begin with genuine interest in construction project management, along with basic arithmetic, written communication, reading skills, and ability to work with people, can end with the knowledge and skills required to become successful construction project managers.

COURSE WORK CRITERIA

- **Homework QQ4U:** All chapter review questions at the end of each chapter are posted weekly in the WebCT in **Assessments**. They are labeled QQ4U-# where QQ4U stands for "Quick Quiz For You" and where # is the chapter number. They are mainly in a multiple choice, True/False formats. **They are submitted on-line.** Submission deadlines are listed in the **Schedule**.
- Quiz WQ4U: Are posted weekly in the <u>WebCT</u> in Assessments. They are labeled WQ4U-# where WQ4U is Weekly Quiz For You and where # is the chapter number. They are mainly in an essay format. They are submitted on-line. Submission deadlines are listed in the Schedule.
- Special assignments/Activities: Are assigned periodically during the semester. They are submitted in both hard copy and digital formats. Submission deadlines are one week after assignments/Activities are given. Digital copy is submitted as a Word ".doc" or ".docx" or ".rtf" attached to an e-mail sent to wahby@eiu.edu
- A student may get an extra 5% bonus for additional work of his or her choice that shows involvement and command of subject matter. This work must be approved and discussed during the semester with the professor as it is being prepared. No work duplicates are allowed, and work approval is first-come, first served.
- There are **three** open book **tests**, utilizing an essay, true-false, and multiple choice formats. **They** are administered on-line.
 - Test I covers materials discussed from first class through last class before the test.
 - Test II covers materials discussed from Test I through last class before Test II.
 - Test III covers materials discussed from Test II through last class before Test III.
- An open book, **comprehensive final exam** covering all materials discussed throughout the semester, utilizing an essay, true-false, and multiple choice formats.

All <u>WebCT</u> assignments, postings and tests will be due by 11:59 p.m. CST on Sunday of each week unless otherwise indicated.

GENERAL NOTES

- □ <u>Homework</u>: The course work includes readings, homework (QQ4U) & (WQ4U), special assignments, a research project, three tests, and a final exam. All QQ4U are found at the end of each chapter in the text from which the readings are assigned, unless otherwise indicated. <u>You will answer the questions</u> in WebCT.
- □ Each of the assigned readings is expected to be completed <u>before</u> corresponding class date, *regardless* of the activities that may take place in that class. The quizzes and tests will cover those readings besides what is presented in class. It is recommended that students stick to the dates given for each reading to organize their study time. **Before** starting the first reading assigned in a particular chapter, it is also recommended that students would read the Student Learning Objectives as well as the Conclusion of that chapter. The Student Learning Objectives, found at the beginning of the chapter, would help focus students' thoughts as they read. The Conclusion, found at the end of the chapter, would help students get the big picture of that chapter.
- □ Research Paper: Each student shall write in a topic of his or her own choosing in the area of Construction Project Management. The instructor must approve these topics before beginning the process and before Monday, January 30, 2012. No topic duplicates are allowed, and topic approval is first-come, first served. Progress of report must be discussed with professor at least twice during the writing process. Research papers, after editing, may become part of the ongoing EIU/SoT Undergraduate Research Publications. Deadline for submitting the hard copy, the digital copy, and a PowerPoint presentation of the reports is Monday, April 9, 2012.
- □ If you "miss" classes, you will not "miss classes" meaning you will become numbed to missing classes. Attending classes as well as missing them is a habit. Get into the habit of always being in class. Attendance will be taken in each class to help you with that resolution. Students with documented excused absences may take make-up exams.

COURSE WORK EVALUATION SYSTEM

- Homework and assignments must be submitted by the deadlines announced.
- Students with documented excused absences may take make-up exams.
- Typical Scale for Grading:

$$90 - 100 = A$$

 $80 - 89 = B$
 $70 - 79 = C$
 $60 - 69 = D$
 $0 - 59 = F$

Breakdown of final grades:

Homework - QQ4U	15%
Quiz - WQ4U	15%
Special assignments	15%
Class participation	5%
Research project	15%
Three tests	15%
Final exam	<u>20%</u>
Total	100%

• <u>Students with disabilities</u>: If you have a documented disability and wish to discuss academic accommodations, please contact me or the coordinator of the Office of Disability (581-6583) as soon as possible.

FINAL EXAM

On-Line via WebCT: Thursday, May 3, 2012, from 8:00 to 10:00 a.m.

Professor: Wafeek S. Wahby, Ph.D., B.Th.

Office: 3151 Klehm Hall Office Phone: 581-2318 E-mail: wahby@eiu.edu

Web Site: www. eiu.edu/~wahby

Office Hours:

T 8:00 a.m. – 11:00 a.m. 2:00 p.m. – 5:00 p.m. R 10:00 a.m. – 11:00 a.m. 4:00 p.m. – 5:00 p.m. F 8:00 a.m. – 10:00 a.m. 2:00 p.m. – 5:00 p.m. Other times by appointment