

## **CEM 551 – Project Controls.**

Four credit hours

Term to be determined

One four –hour session, timed to coincide with Business coursework.

Location to be determined

### **Instructor:**

CEM Graduate Faculty

Office hours to be announced

Office phone: 541.737.8058

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### **Prerequisite:**

Graduate standing and

CEM or CE Degree or 3 yrs prof. constr. experience/ OR

Instructor approval

### **Reference materials**

#### **Primary text (Required)**

Professional Construction Management, 3<sup>rd</sup> ed.

Barrie, Donald S., Paulson, Boyd C.

McGraw-Hill, Inc.

#### **Other references:**

Lecture notes prepared by instructor.

### **Course Description**

This course covers advanced methods of project controls, including advanced technologies and methodologies for quality, time and cost management; project management organization models; and intra-organizational relationships.

The course will be taught primarily through lecture, highlighted with exercises that develop a case-study project management plan.

### **Course Objectives**

The goal of this course is to expand the student's skills in project controls and management. It is designed to challenge the student's ability to be creative and innovative in structuring a project organization that addresses the fundamental purposes of project management, while taking advantage of advanced technologies and current thought in intra-organizational relationships.

During the class, the students will interact and will use their project management experience to explore creation of a project management plan within the context of a structured project management development process.

In the long term, the student will develop an understanding of how to:

- 1) Assess and document project goals as they relate individually and as a group among the project parties;
- 2) Establish processes that create control over the project goals;
- 3) Develop an organizational structure that performs and controls the project; and
- 4) Manage in the context of ethical and social issues.

In general, the student will learn to use standard principals to create project management plans that vary depending on the direct and indirect goals of their projects.

### Calendar

WK	Topic	Objective
1	Planning and Scoping <ul style="list-style-type: none"> <li>✍ Introduction and overview</li> <li>✍ Project management basics</li> </ul>	1,2
2	Planning and Scoping <ul style="list-style-type: none"> <li>✍ Planning and managing project activities</li> <li>✍ Critical issues for project managers</li> </ul>	1,2,4
3	Project Governance <ul style="list-style-type: none"> <li>✍ Governance models</li> <li>✍ Roles and responsibilities</li> <li>✍ Management of changes</li> </ul>	1,2,3
4	Ethics in Project Management <ul style="list-style-type: none"> <li>✍ Power structures and goal alignment</li> <li>✍ Contractor/client ethics</li> <li>✍ Contractor/subcontractor ethics</li> <li>✍ Contractor/employee ethics</li> </ul>	1,4
5	Project Status <ul style="list-style-type: none"> <li>✍ Reporting structures</li> <li>✍ Evaluation: review, action planning, re-statusing cycle</li> </ul>	2,3
6	Quality Management <ul style="list-style-type: none"> <li>✍ Procedures</li> <li>✍ Change management</li> </ul>	2
7	Schedule Management <ul style="list-style-type: none"> <li>✍ Schedule planning process</li> <li>✍ Change management</li> </ul>	2
8	Job Cost Management <ul style="list-style-type: none"> <li>✍ Measuring job cost</li> <li>✍ Performance measures</li> <li>✍ Total job cost measures</li> <li>✍ Change management</li> </ul>	2
9	Project Close-out <ul style="list-style-type: none"> <li>✍ Elements</li> <li>✍ Reports and documentation</li> </ul>	2
10	Crisis management Review	2,4
FINAL	Final exam	

## Course Requirements/ Grading

Grade evaluations will be based on the following weighting:

Assignments and Quizzes:	25%
Mid-term exam:	25%
Final exam:	25%
Final project:	25%

Classroom lectures, presentations, and in-class group discussion are in integral part of the course; therefore, attendance is considered mandatory to obtain full benefit of the course. Tardiness is disruptive and inconsiderate of those in attendance.

In-class participation is a key element in the learning experience. Each student is expected to share experiences and participate in the exploratory and analytical portions of the class.

## Other

Syllabus may be adjusted during the term to accommodate guest speakers, etc.

Quizzes or exams may be given in-class or using the Blackboard or other electronic system. Students are expected to be familiar with the use of Blackboard for such quizzes or other class communication.

Missed exams and assignments will be counted as no points in the final grade, unless prior arrangements have been made. Any request to change the time of an examination should be presented at least two weeks in advance of the exam date. Students need to be aware that rescheduling the Final Examination may not be possible even for the most meritorious reasons. Approvals are normally limited to the following reasons.

- a) Conflict with working hours on a job that has been held consistently during the term, and for which working schedules cannot be readily adjusted, despite a sincere attempt by the student to reschedule the working hours. Example: driving a school bus;
- b) Religious reasons;
- c) Four finals in one day, where amicable agreement cannot be reached by the student and the other instructors;
- d) Military obligations verified in writing. Example: military orders, preinduction physical; and
- e) Other exceptional hardship cases.

Petitions for reasons of personal convenience are generally not approved.

Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should be aware of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, and no later than the first week of the term. Class materials will be made available in accessible format upon request.