

Course syllabus

CMG 4243- Construction Project Management Capstone

Term: Spring 2026

Course Time: Tuesday and Thursday: 12:30 pm - 2:10 pm

Classroom: Klehm Hall 3135

Course Dates: Jan. 12- May 08, 2026

Faculty: Dr. Reachsak Ly

Email: rlly@eiu.edu (Preferred communication method)

Office: Klehm Hall 4014

Office Hours:

Monday, Wednesday and Friday (10:00 AM to 11:00 AM)

Tuesday and Thursday (11:30 AM to 12:30 PM)

Course description:

This course explores and applies business and construction management practices related to the development and preparation of a response to an RFP to an actual Design-Build capstone project. Various topics related to the Design-Build contracting are covered through the development of the RFP response including Design-Build advantages, alternative design-build formats, design-build project scope, performance criteria versus specification criteria, design-build RFP. Topics are reinforced through working on a real-life D/B project.

Course objectives:

This course is designed to prepare students to understand concepts and principles of the D/B contracting method through working on preparing and delivering responses to an RFP for a real-life D/B project.

Student learning outcome:

Upon successful completion of this course, students will be able to:

- Analyze the requirements of a D/B project and apply appropriate building systems, estimating, planning, scheduling, resource management, cost controls and building systems theory.
- Evaluate the variables and constraints involved in a building construction project in order to properly plan for its successful execution.
- Distinguish and manage the construction resources and sequences required for the completion of a construction project simulation.
- Identify and apply appropriate team building methodology to successfully complete the vertically integrated capstone lab exercise.
- Produce and deliver the team solution of the D/B capstone project using appropriate written and verbal skills.

Instructional Methods

Teacher centric

- Team meetings, lectures, and discussions
- Didactic questioning (what when, where, and how?)

Learner centric

- Interactive group meetings and presentations focusing on critiquing student solutions for semester project
- Readings and open discussions

Teams

Teamwork can be challenging, and certain teams have more difficulty working together than others.

It is **YOUR** responsibility, as a team, to complete the work. Teams should consider themselves the contractor and Faculty the client, meaning one would not want the client to know about team problems.

Still, it is important to work out any team problems. So, if problems are not able to be reconciled, please contact the instructor for options sooner in the semester, rather than later. Often, it can be too late to change directions!

Further, at the end of the semester, each individual will be allowed to anonymously report the performance of other team members, which will affect the other members' overall grade.

- Teams are responsible to develop a team contract that defines goals, responsibilities and how team members will work together the entire semester. The team contract should also include provisions of how the team will deal with conflict related to performance and function of each team member.
- If a member of a team is not functioning according to established team goals and objectives, and the team decides to let go of that member, he/she will then be responsible to complete all course requirements on their own.

Policies for Team Presentations

This course requires team presentations of assignment materials to test personal knowledge of the subject matter. Due to the nature of this requirement, all members of the team are required to attend and participate in all presentations. The following are basic requirements for presentations, unless otherwise instructed:

- Respect the time limit allotted for presentations. Substantial overruns will be penalized.
- All team members must wear nametags to presentations.
- Teams may not enter the room until it is time for your presentation.
- Professional attire is expected (no ripped jeans, shorts, sneakers, flip flaps, hats, or other casual clothing).
- Please speak audibly and clearly.
- Expect questions regarding your logic and decision-making, as well as those pertaining to the major components of the project (schedule, estimate, etc.)
- Presentation style should be formal, including your behavior before, during, and after the presentation. Think of this as an actual interview for a new project starting as soon as you walk through the door.
- Come prepared. Familiarize yourself with the AV system in presentation space beforehand (Review printed instructions, determine the correct projector input, lighting, etc.). Also, bring everything you need (laptop, memory stick, laser pointer, etc.).

COURSE OUTLINE & MILESTONES

Introduction and Course Syllabus

Form Teams

Request for Proposal (RFP) Documents

Milestone M1: RFP Review, Research and Planning (20 points)

1. Support Documents

1.1. Table of Contents

1.2. Executive summary and response to RFP document

2. Team Management Plan

2.1. Teamwork plan, Roles and Responsibilities Matrix

2.2. Company description and suitability

3. Outline Specifications and systems descriptions:

3.1. Major systems

3.2. Materials selections: interior Walls, Floors & Ceilings

3.3. Finishes

Milestone M2: (60% Completion) (30 points)

4. Drawings:

4.1. Site plan

4.2. Floor plans

4.3. Elevations

4.4. Building sections

4.5. Building information model

5. Cost Estimate:

5.1. Detailed Estimate using RS Means

5.2. General Conditions

5.3. Design Costs

5.4. Construction Costs

5.5. Commissioning

5.6. OH & Fees

5.7. Cash Flow (and possibly market segmentation analysis showing potential profit)

6. Scheduling:

6.1. Overall construction phasing plan, including planning, design, procurement, construction, and certificate of occupancy

6.2. CPM with major milestones

7. Construction Management Plan

7.1. Procurement and site logistics

8. Safety Plan

- 8.1. Overall Construction Phasing Plans: To include apartment building, pool and site work. Phasing plans are expected to be graphical (Gantt chart or similar) as opposed to descriptive.
- 8.2. Corporate Safety Policies and enforcement
- 8.3. Project-Specific Safety Plans: For each major improvement category
- 8.4. Job Hazard Analysis

Milestone M3: Final Submission (40 points)
Presentations (10 points)

Attendance

All team members must be present and contribute during binder reviews, presentations, and full-class meetings.

Grading Structure

Content	Percentage
Milestone 1 (M1) Binders	20%
Milestone 1 (M2) Binders	20%
Milestone 1 (M3) Binders	40%
Presentation	10%
Total	100%

Grading Scale:

Individual grade items and your final grade will be assessed as follows:

A = 100- 90%

B = 89- 80%

C = 79-70%

D = 69-60%

F = less than 60%

Course outline:

* The course schedule is subject to change throughout the semester. Revisions will be noted in class.

Week	Date	Class topics	Activities and Assignments
Week 1	Jan 13 Jan 15	Overview of Class Syllabus Team building Project Overview	
Week 2	Jan 20 Jan 22	Lecture Lecture	
Week 3	Jan 27 Jan 29	Team meeting / Q&A Session Lecture	
Week 4	Feb 03 Feb 05	Team meeting / Q&A Session Lecture	
Week 5	Feb 10 Feb 12	Team meeting / Q&A Session Lecture	M1 submission
Week 6	Feb 17 Feb 19	Team meeting / Q&A Session Lecture	
Week 7	Feb 24	Team meeting / Q&A Session	

	Feb 26	Lecture	
Week 8	Mar 3 Mar 5	Team meeting / Q&A Session Lecture	
Week 9	Mar 10 Mar 12	Team meeting / Q&A Session Lecture	
Week 10	Mar 17 Mar 19	Spring Break No Class	
Week 11	Mar 24 Mar 26	Team meeting / Q&A Session Lecture	M2 submission
Week 12	Mar 31 Apr 2	Team meeting / Q&A Session Lecture	
Week 13	Apr 7 Apr 9	Team meeting / Q&A Session Lecture	
Week 14	Apr 14 Apr 16	Team meeting / Q&A Session Lecture	
Week 15	Apr 21 Apr 23	Presentation practice	
Week 16	Apr 28 Apr 30	Final Presentation	M3 submission

Note: This is a tentative schedule, and subject to change as necessary. The instructor reserves the right to make changes to the topics or sequence of topics, schedule, assignments, grading plan, and content of the course.

Academic Integrity:

Students are expected to maintain the principles of academic integrity and conduct as defined in EIU's Code of Conduct (<http://www.eiu.edu/judicial/studentconductcode.php>). Violations will be reported to the Office of Student Standards. In this class, students may assist each other in accomplishing a homework assignment, but the submitted work must be the student's own original work. **Copying work or plagiarism will not be tolerated. Students may *not* collaborate on tests or quizzes. Cheating or plagiarism will, at least, result in a zero on the assignment or exam.**

- AI expectations: Check the FDIC recommendation https://www.eiu.edu/fdic/ai_guidance.php

Students with Disabilities:

If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Student Disability Services (OSDS). All accommodations must be approved through OSDS. Please stop by Ninth Street Hall, Room 2006, or call 217-581-6583 to make an appointment

Emergency Preparedness Plan:

Instructions regarding procedures to follow in the event of an emergency are posted in all classrooms. Students are responsible for acquainting themselves with these instructions so that they are prepared in the event of an emergency.

The Academic Success Center:

Students who are having difficulty achieving their academic goals are encouraged to contact the Academic Success Center (www.eiu.edu/~success) for assistance with time management, test taking, note taking,

avoiding procrastination, setting goals, and other skills to support academic achievement. The Center provides individualized consultations. To make an appointment, call 217-581-6696 or go to 9th Street Hall, Room 1302.

Skill Requirements

An Internet connection is necessary to participate in the assignments, access readings, transfer course work, and receive feedback from your instructional associate and/or professor. For this course, students should have a basic working knowledge of computers and Internet use as well as access to a computer with a broadband (DSL, cable, satellite) Internet connection. At a minimum, you must have a computer with Windows 7.0 or MAC 10.6. Microsoft Office 2010 including Microsoft Word, PowerPoint, and Excel are necessary. Adobe Acrobat may be used only if necessary, and with the permission of the instructor. Microsoft Office is the standard office productivity software utilized by EIU faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required.