CM 4900 – Capstone Project
College of Architecture & Construction Management Term: Spring 2018

Prerequisite: CM 3800, 4510, 4560  If you have not taken these, you cannot take CM 4900

Class Meeting time: Mon/Wed 6:00 – 7:50
Course Website: http://d2l.kennesaw.edu

Class Location: H361
Class instruction methodology: 100% in classroom and Lecture discussion
Instructor: Maureen Weidner
Office Hours: Mon: 7:00-8:00 Wed: 6:00-8:00  Tues/Thurs 5:30-6:30
Course Communications: Preferred method of contact: D2L email only or during office hours
Required Text/ISBN Number: n/a

COURSE SYLLABUS

Construction Management Faculty are involved in the development of knowledge, understanding, and application in an environment where we monitor, manage, and facilitate the learning process. Instructor strives to provide a rich learning environment that allows for a range of individual learning styles. The following syllabus provides specific topics for the course through various forms of teaching and discovery based on a selection of reading materials and other resources.

Course Catalog Description:

This course is the application of course materials covered in the four-year curriculum to an actual construction project. Preparation includes: developing a company organization along with detailed project bid, schedule, construction contracts, cash flow, risk management and safety plan. Students will present and defend their projects to a panel of industry and faculty members.

Student Learning Outcomes (SLO):

#1 Create written communications appropriate to the construction discipline.
#2 Create oral presentations appropriate to the construction discipline.
#3 Create construction project safety plan.
#4 Create construction project cost estimates.
#5 Create construction project schedules.
#14 Understand construction accounting and cost control.
#17 Understand legal implications of contract, common, and regulatory law to manage a construction project.

Course Learning Outcomes (CLO):
1. Provide quantity take-off/pricing for a project.
2. Planning and schedule development
3. Develop project specific safety plan
4. Understand requirements for project cost controls
5. Understand project specific provisions for contracts with Owner and subcontractors.
6. Create a high quality, professional submittal
7. Prepare and delivery a professional presentation
**Purpose of Course:** Real construction project simulation. Refer to the Capstone Handbook for details about your responsibilities during this course.

**Mapping Assessment with CLO**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>CLO 1</th>
<th>CLO 2</th>
<th>CLO 3</th>
<th>CLO 4</th>
<th>CLO 5</th>
<th>CLO 6</th>
<th>CLO 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate signoff</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schedule signoff</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety signoff</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financials signoff</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract signoff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Project Notebook</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Presentation/Defense</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mapping CLO with SLO**

<table>
<thead>
<tr>
<th>Assessment</th>
<th>CLO 1</th>
<th>CLO 2</th>
<th>CLO 3</th>
<th>CLO 4</th>
<th>CLO 5</th>
<th>CLO 6</th>
<th>CLO 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLO 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLO 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SLO 4</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLO 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLO 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SLO 17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Attendance is mandatory in order to participate fully. You are expected to arrive on time. The only acceptable excused absences are: illness (with documentation) or your participation in a University sponsored event which instructor must have prior notice of. Work related conflicts are not excused absences. Weekly meeting attendance – Tuesdays 2:00 per D2L Calendar is mandatory for all capstone students and must sign attendance sheet. Thursdays are open work sessions with instructor available for help.

**NO CELL PHONE USE DURING CLASS!**

The classroom environment will be treated the same way as if this was a corporate meeting in a large conference room in which your boss was delivering a presentation. He/she would not tolerate cell phone use – it is distracting to instructor and classmates and frankly – rude.

You do not have to turn them off but they must be on silent and put away. If any student is on their cell phone during class, instructor will leave the classroom and it will be your responsibility for class material.

**Course Technology:** Capstone lab computers provided with required software

**Evaluation & Grading:** Progress grade determined by instructor for timely submittal of time sheets, progress sign-offs, final review, and mandatory capstone meeting attendance. Project notebook and presentation determined externally by industry professionals.

Progress: 30%  Project Notebook: 50%  Presentation & Defense 20%

A = 90-100  B = 80-89  C = 70-79  D = 60-69  F = Below 60
Inadequate progress on the part of the student, as determined by the Course Professor could result in the student being asked to leave the course. Students not attending scheduled meetings may receive an "I- Incomplete" for the course, and be required to register for the course in the following semester. Only professionally prepared and complete Capstone Projects will be accepted at the end of the term. 

You are responsible for scheduling time for faculty progress sign off either by email or during their office hours as instructed. Student must meet all progress sign off deadlines published on the course D2L calendar.

**NO EXCEPTIONS – NO EXCUSES – NO EXTENSIONS**

**CM 4900 COURSE SCHEDULE – Refer to Course Calendar on D2L for specific dates. Subject to change with notice**

<table>
<thead>
<tr>
<th>WEEK</th>
<th>MEETING TOPICS</th>
<th>Related Reading</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 1    | Capstone Administration  
Work session / Deadline for project approval | n/a | n/a |
| 2    | Estimate  
Work Session | | |
| 3    | Planning & Scheduling-A  
Work Session | | |
| 4    | Planning & Scheduling-B  
Work Session | | |
| 5    | Planning & Scheduling-A  
Change Order Review (GEN) / Work Session | | |
| 6    | Concentration focus  
Work Session | | |
| 7    | Contracts  
Work Session | | |
| 8    | Safety / Risk  
Work Session | | |
| 9    | Project financials / Pay App’s  
Work Session | | |
| 10   | Final Review info  
Work Session | | |
| 12   | Notebook Delivery / Presentation Info  
Work Session | | |
| 13   | **Final Reviews** | | |
| 14   | Notebook Delivery/Industry Panel Review  
Faculty Review | | |
| 15   | **Presentation / Defense** | | |
UNIVERSITY POLICIES: Statement of Student Rights and Responsibilities
KSU Student Code of Conduct

Plagiarism and Cheating:
No student shall receive, attempt to receive, knowingly give or attempt to give unauthorized assistance in the preparation of any work required to be submitted for credit (including examinations, laboratory reports, essays, themes, term papers, etc.). Unless specifically authorized, the presence and/or use of electronic devices during an examination, quiz, or other class assignment is considered cheating. Engaging in any behavior which a professor prohibits as academic misconduct in the syllabus or in class discussion is cheating. When direct quotations are used, they should be indicated, and when the ideas, theories, data, figures, graphs, programs, electronic based information or illustrations of someone other than the student are incorporated into a paper or used in a project, they should be duly acknowledged. No student may submit the same, or substantially the same, paper or other assignment for credit in more than one class without the prior permission of the current professor(s).

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the KSU Student Academic Integrity Policy at http://kennesaw.edu/handbooks/faculty/section2_13.php

University Policy on Accommodating Students with Disabilities:
Students requesting accommodation for disabilities must first register with the Office of Disabled Student Support Services at http://www.kennesaw.edu/stu_dev/dsss/dsss.html. The Office of Disabled Student Support Services will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

**Netiquette: Communication Courtesy:**
All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf

Electronic Recording & Social Media Policy
Electronic recording performed without the consent of the people being recorded chills the free exchange of ideas. Academic freedom, free inquiry, and freedom of expression should not be limited by the fear that one’s brainstorming, polemical discourse, speculative inquiry, or any other kind of expressed curiosity made within the space of a university classroom will be made public without one’s consent. This fear is unacceptable regardless of whether one is in an online, hybrid, or face-to-face classroom setting. Accordingly, no person shall electronically record any class discussion without the written permission of the instructor. No person shall publish online or elsewhere any electronic recording of a class discussion without the written permission of the instructor and any other persons who were recorded. This policy is not intended to discourage electronic recording in the classroom or the use of social media when such actions are performed with the written consent of the instructor and any other persons who were/will be recorded. Faculty accommodate all reasonable requests to electronically record a class discussion; these requests must be documented by the Disabled Student Support Services available at: http://www.kennesaw.edu/stu_dev/dsss/prospect.shtml
GETTING HELP

For issues with technical difficulties, please contact the Student Helpdesk:
1. Fill out a service form http://uits.kennesaw.edu/support/formselect.php?s=tech
2. Email: studenthelpdesk@kennesaw.edu
3. Call: 770-499-3555

Getting Started With Technology Services http://uits.kennesaw.edu/

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from ITS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Additional Technology Resources
1. Student Service Desk and Help Center studenthelpdesk@kennesaw.edu
3. USG Desire2Learn Help Center https://d2lhelp.view.usg.edu/
4. D2L Training Options & Resources for Students https://web.kennesaw.edu/acs/pages/desire2learn/student-resources-d2l
5. Computertrain Online Courses http://www.kennesaw.edu/dlc/FacultyResources/
6. ITS Documentation Center http://uits.kennesaw.edu/docs/netaccess/guides/windows7_wifi_instructions.pdf
7. Check Service Outages http://status.usg.edu/
8. Maintenance Schedule https://usg.desire2learn.com

Academic Resources
1. Academic Tutoring Services http://www.kennesaw.edu/stu_dev/alp/academic.shtml
2. Disability Resources http://www.kennesaw.edu/stu_dev/dss/dss.html
4. Library http://www.kennesaw.edu/library/
7. Math Lab http://mathlab.kennesaw.edu/

Student Support and Wellness Resources
1. Career Services Center https://careercrrt.kennesaw.edu/
2. Counseling and Psychological Services http://sss.kennesaw.edu/cps/
3. Center for Health, Promotion and Wellness http://www.kennesaw.edu/col_hhs/wellness/
4. Student Health Clinic http://studenthealth.kennesawstateauxiliary.com/

KSU desires to resolve student grievances, complaints and concerns in an expeditious, fair and amicable manner. The Complaints and Appeals Page was developed to assist current and prospective students in submitting complaints and appeals and to direct them to the most effective venue for accurate information and resolution. The resources on the page will direct students to the specific venue to appropriately address related student complaint. http://www.kennesaw.edu/complaints_appeals.shtml

Complaints for online students are resolved following the same general procedures for students who attend classes on campus. However, for any process that requires that a student appear in person, the university may make other arrangements. For processes that cannot be completed via telephone, e-mail, or written correspondence, the university may set up a two way Video conference site in place of a meeting on the KSU campus.
STUDENT LEARNING OUTCOMES
Upon graduation from an accredited ACCE 4-year program a graduate shall be able to:

<table>
<thead>
<tr>
<th>ACCE SLO</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLO 1 – Create written communications appropriate to the construction discipline.</td>
<td></td>
</tr>
<tr>
<td>SLO 2 – Create oral presentations appropriate to the construction discipline.</td>
<td></td>
</tr>
<tr>
<td>SLO 3 – Create a construction project safety plan.</td>
<td></td>
</tr>
<tr>
<td>SLO 4 – Create construction project cost estimates.</td>
<td></td>
</tr>
<tr>
<td>SLO 5 – Create construction project schedules.</td>
<td></td>
</tr>
<tr>
<td>SLO 6 – Analyze professional decisions based on ethical principles.</td>
<td></td>
</tr>
<tr>
<td>SLO 7 – Analyze construction documents for planning and management of construction processes.</td>
<td></td>
</tr>
<tr>
<td>SLO 8 – Analyze methods, materials, and equipment used to construct projects.</td>
<td></td>
</tr>
<tr>
<td>SLO 9 – Apply construction management skills as a member of a multi-disciplinary team.</td>
<td></td>
</tr>
<tr>
<td>SLO 10 – Apply electronic-based technology to manage the construction process.</td>
<td></td>
</tr>
<tr>
<td>SLO 11 – Apply basic surveying techniques for construction layout and control.</td>
<td></td>
</tr>
<tr>
<td>SLO 12 – Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.</td>
<td></td>
</tr>
<tr>
<td>SLO 13 – Understand construction risk management.</td>
<td></td>
</tr>
<tr>
<td>SLO 14 – Understand construction accounting and cost control.</td>
<td></td>
</tr>
<tr>
<td>SLO 15 – Understand construction quality assurance and control.</td>
<td></td>
</tr>
<tr>
<td>SLO 16 – Understand construction project control processes.</td>
<td></td>
</tr>
<tr>
<td>SLO 17 – Understand the legal implications of contract, common, and regulatory law to manage a construction project.</td>
<td></td>
</tr>
<tr>
<td>SLO 18 – Understand the basic principles of sustainable construction.</td>
<td></td>
</tr>
<tr>
<td>SLO 19 – Understand the basic principles of structural behavior.</td>
<td></td>
</tr>
<tr>
<td>SLO 20 – Understand the basic principles of mechanical, electrical and piping systems.</td>
<td></td>
</tr>
</tbody>
</table>