**State University of New York**

**College of Environmental Science and Forestry**

**COURSE SYLLABUS**

**CME 440 Capstone Planning**

Fall 2024

TBD

**Instructor:** Dr. Endong Wang

**Office Hours and Location:**

TBD

**Please note: Emails are always online and actively responded.**

**Phone and Email:** (Phone) 315-470-6747

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**Teaching Assistant:** TBD

**DESCRIPTION OF THE COURSE:** One hour of discussion, project instruction, and planning for a Capstone project per week. Based on a typical real-world project, this class allows the students to experience the concept of integrated project management by participating in the early stage business of project management. It requires the students to utilize the knowledge and skills to generate corresponding construction management products in the early stages of a project (even when the project is still under design). The course covers organizational structure, construction estimating, business model, construction scheduling, value engineering, and sustainability. Fall.

**Prerequisite:** CME 343, CME 453, senior standing, or permission of instructor.

**COURSE LEARNING OUTCOMES**

1. CLO 1- To identify and define different organizational structures and personnel responsibilities.
2. CLO 2- To form a firm for team work on projects and perform leadership assessments,

identify team strengths and develop communication plans.

1. CLO 3-To list different project delivery methods and construction business models.
2. CLO 4-To analyze construction documents for construction planning and management.
3. CLO 5-To create preliminary cost estimates for selected projects.
4. CLO 6-To create preliminary schedules for selected projects with PERT Analysis being included.
5. CLO 7-To identify construction risks.
6. CLO 8-To develop appropriate presentation materials and present outcomes to stakeholders.

**PROGRAM LEARNING OUTCOMES**

1. SLO 2- Create oral presentations appropriate to the construction discipline.
2. SLO 4- Create construction project cost estimates.
3. SLO 7- Analyze construction documents for planning and management of construction processes.
4. SLO 9- Apply construction management skills as a member of a multidisciplinary team.
5. SLO12-Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process.
6. SLO13-Understand construction risk management.

**SLO and CLO relations:**

|  |  |  |
| --- | --- | --- |
| **SLO** | **CLO** | **Assessment** |
| SLO 2 | CLO 8 | Presentations, Assignments |
| SLO 4 | CLO 5 | Reports, Exams, Assignments |
| SLO 7 | CLO 4, CLO 6 | Reports, Exams, Assignments |
| SLO 9 | CLO 1, CLO 2 | Reports, Exams, Peer evaluations, Assignments |
| SLO 12 | CLO 3 | Reports, Exams, Assignments |
| SLO 13 | CLO 7 | Reports, Exams, Assignments |

**COLLEGE LEARNING OUTCOMES:** Choose the following College Learning Outcomes that this course addresses. For detailed information about the college learning outcomes please visit [www.esf.edu/facgov/iqas.htm](http://www.esf.edu/facgov/iqas.htm)

1. Scientific Reasoning
2. Quantitative Reasoning
3. Basic Communication Skills
4. Technological and Information Literacy
5. Values, Ethics and Diverse Perspectives
6. Critical Thinking

Examples of student work from this course may be used for assessment purposes: Student names and all identifiers will be removed.

**TEXTBOOKS AND SUPPLIES:**

**Course Materials/Resources: Textbook recommended.**

**Recommended:**

1. Project Management: A Managerial Approach, 10th Edition

Book Author: Jack R. Meredith, Samuel J. Mantel Jr., Scott M. Shafer

Wiley, 2017

ISBN-13: 978-1119369097

ISBN-10: 1119369096

Publisher: Wiley

Format: Hardback

**SOFTWARE: Procore is encouraged to be used.**

**GRADING**

**ASSIGNMENTS:**

For each individual assignment, your primary source should be ppt slides, lecture materials, and text readings. You are also allowed to search, utilize, and reference any other available sources that offer insights into relevant questions. All the students are intended to complete the corresponding assignments and submit them by the specified due dates. Make-up of missing assignments is to be coordinated with instructor’s written approval of a deadline. Each assignment should have student’s name, date, course, and semester on the first page. The assignments will be assessed and graded based on the expected learning outcomes associated with the specific assignment.

Grading of assignments will be in terms of the below criteria:

* Completeness – Whether the solutions include major facts, elements, and so on.
* Clarity – Whether the solutions are logical, concise, and coherent.
* Understanding – Whether the solutions show a mastering of relevant theories, skills and knowledge.
* Honesty – Whether the solutions are described with students’ own language.
* Instructions – Whether the solutions follow the specific instructions in terms of formats, structure, etc.
* Professionalism – Whether the solutions are well-organized and in professional looks.

**EXAMS:**

There will be a Mid-Term Exam and a Final Exam, at the minimum. Additional exams may be given at the discretion of the instructor. Exams will be administered at the instructor’s discretion. Make-up exams may be scheduled with instructor’s written approval **7 days prior** to the exam date. Failure to coordinate make-up exams will result in zeros.

Exams will be offered on the assigned date(s). Exams could be multiple choice, true/false, fill in blanks, short essay, etc. and will cover all the material up to that time point.

**OVERALL EVALUATION:**

The final grade of this course will be determined by all the work assigned in the format of:

Homework/Assignments/Project 55%

Quizzes/ Exams /Discussions 40%

Class participation/attendance/forums 5%

All the assignments are due by 11:59 pm (EST) of the due date. Late assignments may be penalized by 5% of the total points (for the corresponding assignment) per calendar day. You may do late assignment submissions if you get the instructor’s written approval ahead of the due date with reasonable excuses.

Grading Scale:

95-100 A 87-89 B+ 80-83 B- 72-75 C 64-67 D

90-94 A- 84-86 B 76-79 C+ 68-71 C- <64 F

**COURSE SCHEDULE**

|  |  |  |
| --- | --- | --- |
| #Week | Project Tasks | Assign Due |
| **1** | Week #1 Team Up  Syllabus |  |
| **2** | Week #2 discussion  Organizational structures |  |
| **3** | Week #3 Assign  Organizational structures |  |
| **4** | Week #4 Discussion  Project delivery methods and bidding | Week #3 Assign Due |
| **5** | Week #5 Assign  Project delivery methods and bidding |  |
| **6** | Week #6 Discussion  Costing | Week #5 Assign Due |
| **7** | Midterm Exam/Week #7 Assign  Costing |  |
| **8** | Week #8 Discussion  Scheduling | Week #7 Assign Due |
| **9** | Week #9 Assign  Scheduling |  |
| **10** | Week #10 Discussion  Sustainability | Week #9 Assign Due |
| **11** | Week #11 Assign  Sustainability |  |
| **12** | Week #12 Discussion  Value Engineering | Week #11 Assign Due |
| **13** | Week #13 Assign  Value Engineering |  |
| **14** | Final Presentations | Week #13 Assign Due |

**Note:** The instructor of this course reserves the right to modify this schedule as he/she sees fit.

**ATTENDANCE POLICY**

Attendance is STRONGLY recommended due to the project nature of the class. It is the STUDENT’S responsibility to keep up with all the coursework, assignments, and exams. I strongly encourage you to participate in all classes. Those who attend class will undoubtedly learn more than those who choose not to show up. Please be aware that some lecture notes may not be available online, nor will they be sent electronically. As college students, you are responsible for making this choice and are also accountable for the consequences. You may, if you miss class for a valid reason, meet with the Instructor or TA to go over the lecture slides. There are no make-up opportunities for assignments, quizzes, or exams without a valid reason as determined by the Instructor. Please keep me advised of any absences, in advance, if at all possible. An attendance list will be kept for all classes.

**STUDENTS WITH LEARNING AND PHYSICAL DISABILITIES**

SUNY-ESF works with the Office of Disability Services (ODS) at Syracuse University, who is responsible for coordinating disability-related accommodations. Students can contact ODS at 804 University Avenue- Room 309, 315-443-4498 to schedule an appointment and discuss their needs and the process for requesting accommodations.  Students may also contact the ESF Office of Student Affairs, 110 Bray Hall, 315-470-6660 for assistance with the process.  To learn more about ODS, visit [http://disabilityservices.syr.edu](http://disabilityservices.syr.edu/).  Authorized accommodation forms must be in the instructor's possession one week prior to any anticipated accommodation.  Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

**ACADEMIC DISHONESTY**

Academic dishonesty is a breach of trust between a student, one’s fellow students, or the instructor(s). By registering for courses at ESF you acknowledge your awareness of the ESF Code of Student Conduct (<http://www.esf.edu/students/handbook/StudentHB.05.pdf> ), in particular academic dishonesty includes but is not limited to plagiarism and cheating, and other forms of academic misconduct. The Academic Integrity Handbook contains further information and guidance (<http://www.esf.edu/students/integrity/>). Infractions of the academic integrity code may lead to academic penalties as per the ESF Grading Policy ([http://www.esf.edu/provost/policies/documents/GradingPolicy.11.12.2013.pdf](https://www.google.com/url?q=http://www.esf.edu/provost/policies/documents/GradingPolicy.11.12.2013.pdf&sa=U&ei=ohKmUrLJIsK9qwH8w4DACw&ved=0CAYQFjAA&client=internal-uds-cse&usg=AFQjCNHZd7HcPTMsgnRah5i7um3UJOoM6Q)).

**INCLUSIVE EXCELLENCE STATEMENT**

As an institution, we embrace inclusive excellence and the strengths of a diverse and inclusive community. During classroom discussions, we may be challenged by ideas different from our lived experiences and cultures. Understanding individual differences and broader social differences will deepen our understanding of each other and the world around us. In this course, all people (including but not limited to, people of all races, ethnicities, sexual orientation, gender, gender identity and expression, students undergoing transition, religions, ages, abilities, socioeconomic backgrounds, veteran status, regions and nationalities, intellectual perspectives and political persuasion) are strongly encouraged to respectfully share their unique perspectives and experiences. This statement is intended to help cultivate a respectful environment, and it should not be used in a way that limits expression or restricts academic freedom at ESF.

**OTHERS**

1. If you have questions, the best way to reach me is through email. I will try best to respond to you within 24 hours.

2. I would appreciate if you can turn of cell phones and other electronic devices prior to entering the classroom. If there are special circumstances regarding the need for a cell phone during class, please discuss with me prior to class. Failure to comply with this expectation may result in the student being asked to leave the classroom and/or referring the student to the ESF Judicial Affairs Officer.

3. Cell phones will NOT be allowed in the classroom during quizzes and/or exams. Should you be caught with a cell phone, your exam may be terminated and a grade of zero may be entered.

4. The ESF student code of conduct will be followed at all times in the classroom. Please respect your classmate’s right to learn at all times.

5. In order to comply with FERPA regulations, graded assignments, and exams will be returned to the student in a manner that does not disclose the student’s grade to anyone except the student.

6. Place your name in the upper right corner of each page of assignments, quizzes and/or exams and identify each page as 1/10, 2/10, etc. in the upper right corner.

SUNY-ESF Construction Management Family Rules

When you joined CM at ESF, you joined a family. We want you to know the rules!

1. **Be on time.**

It shows respect for your fellow students and your instructors.

2. **Bring a positive attitude.**

We spend more time at ESF than we do outside ESF. These people will become your friends and family. Make it pleasant, don’t be a downer.

3. **Take pride in what you do.**

You are part of a team that is studying cool stuff. You represent ESF to the people you talk to and the firms you work for. You represent ESF when you are walking across campus. When you take pride in your work you make ESF look good in all those places, all thanks to you.

4. **Treat things, people, and the planet with respect.**

Your workplace, yourself, your classmates, your staff and instructors, your campus, and your earth are all deserving of your respect.

5. **We are about teamwork. Show up. Be dependable for your team. Try to solve problems, try not to create them.**

Don’t call in sick unless you’re wiped out. Our program is depending on you. If you must be out, communicate it to the team and make sure it’s easy for your classmates to pick up where you left off.

6. **Pick up after yourself.**

Seriously. We have other people that we share our spaces with, and your classmates don’t want to deal with your mess. Keep your area clean in the class, the lab, and across campus. A clean/organized workspace is an efficient workspace.

7. **Seek excellence, commit yourself to quality & safety**.

Do what needs to be done to do the job right. Commit to doing the right job the first time, not over and over and over.

8. **Don’t ask for more than you give.**

Be engaged and ready to contribute. Your teammates are counting on you. Don’t be afraid to ask your classmates for help. If you are struggling ask for help, don’t wait until it is too late.

9. **Work with integrity.**

Always.

10. **Have fun.**

Thanks to Jennifer Young from Pioneer Millworks for the inspiration!