CM 3260 – Temporary Structures
College of Architecture & Construction Management
Term: Fall 2015

Prerequisite: CM 2210

Class Meeting time: (Mon & Wed 5:00 PM to 6:50 PM)

Course Website: http://d2l.kennesaw.edu

Class Location: H323

Class instruction methodology: 100% in classroom and Lecture discussion

Instructor: Pavan Meadati

Office Location & Hours: Mon & Wed: 3:00 PM to 5:00 PM

Course Communications: Email/Phone: pmeadati@kennesaw.edu/678-915-3715

Preferred method of contact: D2L email only or during office hours

Required Text/ISBN Number:

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:
A study of structural design and analysis concepts of temporary structures used in the construction process. Topics include formwork design, scaffolding, and material handling equipment and staging.

Purpose of Course: Introduction to structural design and analysis concepts of concrete form work.

Course Goals, Objectives & Expectations:

This course will cover design, erection and maintenance of support and access structures used in construction work. Formwork, underpinning, falsework/shoring, dewatering, earth retaining structures, erosion control, access road and hauling will be discussed. The course will provide a basic overview of technical and business practices-ethics, construction safety, legal aspects and estimating related to temporary structures.

1. Design concrete formwork
2. Analyze shoring and reshoring process
3. Identify methods for construction of temporary structures
4. Identify soils, their problems and suggest remedial actions.

How This Course Relates to the Student Learning Outcomes in the Construction Management Program: Prepares students to communicate with construction project team members
Student Learning Outcomes:

1. Understand the basic principles of structural behavior.

COURSE POLICIES

Attendance Policy:
Students are expected to be present for every meeting of the course. It is expected that students will arrive to class on time and if expected to be absent from class, prior notification to the instructor is required (e-mails are accepted for this purpose). All absences will be considered unexcused absences, unless they are cleared with the instructor with a memorandum, submitted electronically (i.e., via Email), stating the date and reason for the absence.

Quiz / Exam Policy:
There are two exams and three quizzes in the course. The exams will test the individual student's understanding of some of the principle concepts covered in the course. The exams cover material discussed in the lectures, or included in the assigned readings up to the time of the exam. If an exam is missed as a result of an excused absence, it needs to be made up. If an exam is missed as a result of an unexcused absence or being late to class, it will not receive any credit at all (i.e., 0 points).

Make-up Policy:
There are no make-up quizzes or lab assignments - so don’t ask.

Assignment Policy:
Homework or Class project should have a professional appearance, being neat, logically formatted, and legible. Homework or Class project will be turned in at the beginning of class on the date due. It is each student’s responsibility to deliver late submission to the instructor. Homework or Class project that is submitted after the beginning of class will receive a penalty of 10%. Homework or Class project submitted the day after the class on which that is due will receive a penalty of 25%, 2 days after 50%, 3 days after 100% off.

Course Technology: N/A

Evaluation & Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>30%</td>
</tr>
<tr>
<td>Exam I</td>
<td>17.5%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>17.5%</td>
</tr>
<tr>
<td>Final Project</td>
<td>30%</td>
</tr>
<tr>
<td>Class Participation &amp; pop quizzes</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

A = 90-100   B = 80-89   C = 70-79   D = 60-69   F = Below 60

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](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](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](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, polemic 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](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](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/](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
2. Browser Checker
   https://usg.desire2learn.com/d2l/tools/system_check/systemcheck.asp?ou=6606
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. Computer 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://careerctr.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.
<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Temporary Structure &amp; Recent Developments/Formwork Materials</td>
<td>Ch 1, Ch 2, Ch 4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Loads &amp; Pressures</td>
<td>Ch 5, Problems, HW-1 (Pressure Distribution) Assigned</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Form Design – Slab</td>
<td>Ch 6, Problems</td>
<td>HW-1 due</td>
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<tr>
<td>4</td>
<td>Form Design – Slab</td>
<td>Ch 6, Problems, HW-2 (Slab Form Design)</td>
<td></td>
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<tr>
<td>5</td>
<td>Form Design-Wall</td>
<td>Ch 6, Problems</td>
<td>HW-2 due</td>
</tr>
<tr>
<td>6</td>
<td>Form Design-Wall</td>
<td>Ch 6, Problems</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Form Design – Column &amp; Form Design - Beam</td>
<td>Ch 6, Problems, HW-3 (Column Form Design)</td>
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<tr>
<td>8</td>
<td>Form Design-Using Tables</td>
<td>Ch 6, Problems, HW-3 (Column Form Design)</td>
<td>HW-3 due</td>
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<tr>
<td>9</td>
<td>Form Design-Shoring &amp; Reshoring &amp; Test-1</td>
<td>Ch 5, Ch 6, Problems, HW-4 (Shoring and Reshoring)</td>
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<tr>
<td>10</td>
<td>Form Design-Shoring &amp; Reshoring</td>
<td>Ch 5, Ch 6, Problems, HW-4 (Shoring and Reshoring)</td>
<td>HW-4 due</td>
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<tr>
<td>11</td>
<td>Building and erection of formwork, Using the forms, Formwork cost/economics/planning, Form estimating &amp; Guest Lecture-I</td>
<td>Ch 9, Ch 10</td>
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<tr>
<td>12</td>
<td>Soil Introduction, Index properties, and Soil Classification</td>
<td>Ch 1, Ch 2, Ch 3 (TB-2), HW-5 Soil Classification</td>
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<tr>
<td>13</td>
<td>Construction dewatering, Earth retaining structures/shoring/sheeting</td>
<td>Ch 7 (TB-2), Ch 9 (TB-2)</td>
<td>HW-5 due</td>
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<tr>
<td>14</td>
<td>Soil compaction and stabilization, Access roads, hauling and decking,</td>
<td>Ch 8 (TB-2), Ch 12 (TB-2), Ch 10 (TB-2)</td>
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<tr>
<td>15</td>
<td>Ethics, Standards and Regulations &amp; Presentations of final project</td>
<td>Handout</td>
<td>Final project due</td>
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<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points, percentage or measurement</th>
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</thead>
<tbody>
<tr>
<td>HW-1 (Pressure Distribution)</td>
<td>10 points</td>
</tr>
<tr>
<td>HW-2 (Slab Form Design)</td>
<td>10 points</td>
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<tr>
<td>HW-3 (Column Form Design)</td>
<td>10 points</td>
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<tr>
<td>HW-4 (Shoring and Reshoring)</td>
<td>10 points</td>
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<tr>
<td>HW-5 Soil Classification)</td>
<td>10 points</td>
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<tr>
<td>Final project</td>
<td>200 points</td>
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</table>

**Note:** The outline is intended to represent the general format of class. The instructor may make changes to better suit the needs of the class.