

Course Lecture Syllabus

Course Information, Textbook, and Supplementary Materials

Instructor:

Amy Rechenmacher

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Office: KAP 230D

Office Hours: Tuesday 1:30 – 4:30 pm, KAP 230D

Teaching Assistants:

1. Tyler Pullen, tpullen@usc.edu; Office hours: Monday 12-2 pm, KAP 239

2. Bryan Curtis, bjcurtis@usc.edu; Office hours: Tuesday 4-6 pm, KAP 239

Course Description:

This course will provide an introduction to the field of civil engineering and its various sub-disciplines; and to the design, modeling, analysis and simulation of certain systems dependent upon civil engineering technology. Additionally, we will discuss ethics in civil engineering, and emphasize and promote good communication skills required of civil engineering graduates through two written reports. A separate lab component will provide an introduction to computer graphics software used in the CE profession.

Class Schedule: Monday and Wednesday, 9:00 to 9:50 am, GFS 101

Required for: BSCE, BSCE Structural, and BSCE Building Science

Prerequisites and Co-requisites: None

Assignments, Case Studies, Reports, Essays: During the semester, students will work on several assignments. Students will be required to write at least TWO technical reports.

Website: This course has a website on blackboard (<https://blackboard.usc.edu>)

Presence: Attendance is strongly recommended. Class discussions enrich learning: that is a fact. In-class group exercises, which will aid greatly in assigned homework, will be done often. Students who repeatedly arrive late to class may not be able to fully participate in the discussions. Attendance will be taken during classtime when when group work is undertaken

Grading

Assignments/homework	=	25%
Quizzes	=	25%
Written reports	=	25%
Laboratory	=	20%
Participation, professionalism	=	5%

Expectations

- Come to class on time.
- Be attentive and engaged in class.
- Refrain from using laptops, cell phones and other electronic devices during class.
- Spend adequate time on reports/homework, making an effort to understand each problem.
- Seek help via office hours if needed.

Cheating, Plagiarism, Computer Use

Everyone is required to do individual work on individual assignments. Discussions with other students about concepts and overall approaches to solving individual assignments are permitted and encouraged.

You all can help each other learn the material better if you ask each other clarifying questions and discuss concepts. However, directly copying another student’s answers is clearly plagiarism. Each student must submit their own work and understand what they did on that assignment. In reports, material borrowed from another source must be properly referenced or quoted; otherwise, you are committing plagiarism.

Statement of Academic Integrity

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own. All students are expected to understand and abide by these principles.

SCampus, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A:

<http://www.usc.edu/dept/publications/SCAMPUS/gov/>.

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>.

Statement for Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible.

DSP Contact Information: STU 30, 8:30 a.m. to 5:00 p.m., Monday through Friday, (213) 740-0776

Suggested Textbooks/Resources (NOT required!):

- Civil Engineering Practices in the 21st Century, Knowledge and Skills for Design and Management, by Grigg, Criswel, Fontane and Sillerm, ASCE Press, ISBN 0-7844 0526-3
- Civil Engineering: A Very Short Introduction, David Muir Wood, Oxford Univ. Press, ISBN 978-0-19-957863-4.
- Thinking Like an Engineer: An Active Learning Approach, by Stephan, Bowman, Park, Sill and Ohland, Pearson, ISBN 978-0-13-606442-8.

Topics Covered	Learning Outcomes
An overview of civil engineering history and its sub-disciplines	Students will be introduced to CEE and its sub-disciplines: 1. General Civil Engineering 2. Geotechnical Engineering 3. Structural Engineering 4. Water Resources Engineering 5. Construction Engineering 6. Transportation Systems Engineering 7. Environmental Engineering
An introduction to technical report writing	8. The basic skills to prepare a technical report
The role of civil engineers in society and of professional ethics	9. The societal and ethical responsibilities of a civil engineer

Relation of Course Objectives to ABET Program Outcomes

The Civil Engineering program is designed to teach beyond the technical content of the curriculum and prepare the students to utilize what they learn to poise themselves for success in a professional setting.

This course contributes to the program outcomes as outlined in the adjacent table.

Course Contribution to Program Outcomes (a-k)		✓ Key
f.	An understanding of professional and ethical responsibility.	✓
g.	An ability to communicate effectively.	✓
h.	The broad education necessary to understand the impact of engineering solutions in a global economic and environmental and societal context.	✓
i.	Recognition of the need for, and an ability to engage in life-long learning.	✓
j.	Knowledge of contemporary issues.	✓

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Date: Fall 2015