Class: CSTM 336
Engineering Technology 336 – Construction Management
Western Illinois University
1 University circle
Macomb, IL 61455-1390

Instructor: Ted N. Renner

Lecture: Wednesday – 5:00 to 7:50 PM Knoblauch 105

Email: T-Renner@wiu.edu

Office hours: Monday 3:30 PM to 4:30 PM, after class, or by appointment.

Work Number: 298-1834 ext. 261

Home Number: 833-2863

Catalog description: A study of residential and commercial uses of aggregate materials as structural systems with a focus upon aggregate, Portland cement concrete, and asphalt cement concrete. Laboratory experiences include application techniques.


Course topics: Used of aggregate in soil stabilization, bituminous concrete, Portland concrete installation and testing methods will be covered. We will also be discussing placement, compaction and consolidation, and testing of these materials as well as the use of steel in reinforcement.

Course objectives: Students will be able to identify, evaluate, and use the various aggregates associated with residential and commercial construction as well as appropriate uses of reinforcement along with basic engineering principals.

Assignment and lecture notes available at WesternOnline. (See me if you need help with this).

My intention this semester is to treat you as though you are an employee in training. You will be assigned one to two chapters a week to read and you will complete assignments as required. Assignments, which are to be typed following the guidelines below, are due at the beginning of class each Wednesday, before lecture begins. If you are late to class no assignment will be accepted after 5:05 PM.

In order to make up a late assignment and receive full credit you will need to complete the missing assignment in full and hand in two two-page papers, by the beginning of the following lecture- the topics(s) will be of my choosing. Each assignment and/or paper handed in for this class must be at least one full page in length, typed, double-spaced with no larger than a 12 pt. Times New Roman font, no larger than one-inch margins at the way around the page, printed on white 8 ½” x 11” paper. All sentences must be complete sentences. Each page of a late-
assignment make-up pager must be complete, Three quarters of a second page is unacceptable. Each paper must also be checked for spelling and grammar. If the two make-up papers are haphazardly thrown together, you will write two more papers in order to receive full credit.

**All subject material is to be written in your own words.** Copying the material directly out of the book will require you to re-write the assignment and hand in two two-page papers for full credit. I will not accept any late assignment that is past due by more than two weeks without a doctor’s note, or written documentation from the university in compliance with the WIU Student Handbook.

All papers/assignments will have the following in the top right hand corner:

**Student’s Name**

**Date the assignment is due**

**CSTM 336**

If this information is typed in the left hand corner of the page, you will be required to write two two-page papers.

Any lecture material presented to the class in Power Point will be available as study material. Material presented during lecture which does not appear in Power Point may still appear on your test. Be sure to pay attention. If I notice individuals coming to class five minutes late on a consistent basis we will begin having quizzes first thing.

Your assignments and tests will be graded as follows

- **A** = 93% – 100%
- **A-** = 91% – 92%
- **B+** = 89% – 90%
- **B** = 83% – 88%
- **B-** = 81% – 82%
- **C+** = 79% – 80%
- **C** = 73% – 78%
- **C-** = 71% – 72%
- **D+** = 69% – 70%
- **D** = 63% – 68%
- **D-** = 60% – 62%
- **F** = < 60%

_Do not send your homework to class with another student: I will not accept it. Do not bring homework to class for another student. I will not accept it. Do no email me your assignment. I will not accept it._

**Extra Credit Policy:** There will be NO extra credit available in this class. If you are unable to complete the work you are given your grade will suffer for it.

**Attendance policy:** Be here. It’s that simple. If you are unable to attend, call me with an explanation; leave a message on my answering machine or voice mail. More than two absences will result in the reduction of your grade by one letter. The student handbook clearly explain that my class takes priority over any fraternity, sorority, (and in many cases athletic) function you may have. These absences will not be excused.

**Online Absence Reporting System (OARS):** In accordance with WIU University Senate policy; students are to report any absences through OARS. Beu Health Center will no longer issue documentation of absence due to illness.
**Test Policy:** You will be tested on one to two chapters at once. These tests will include material covered on lecture notes and discussed in class. If you don’t come to class you could miss potentially important test material. Tests will be given on my schedule, not yours. I will not give a test early or late for any reason other than family illness. If you are ill on test night I want a note from your doctor explaining why you were unable to attend. If you have a family emergency you will need to contact The Office of Student Development and Orientation, and have them contact me with the reason you will be unable to attend. (See *Grades and Class Attendance* in the WIU student handbook). Final Examination- Time and date prescribed on university final exam schedule. Any exceptions to the final exam schedule must be approved by department chair and the Dean of the College of Business and Technology in writing including student's name, ID# and signatures.

If you fail to put your name on an exam you will receive a zero on the exam.

**Resolution of Problems:** Should a problem occur, students should speak to their instructor first. If the problem is not resolved, meet with the chair of the department. If the problem continues to be unresolved, go to the College of Business and Technology’s Dean. Students should observe the following sequence for the resolution of problems: **Student --- Instructor --- Chairperson --- Dean**

**Cell Phones:** **Turn your cell phone off in my class.** If it rings, beeps, makes noise of any kind, the entire class will take a quiz. If you are using your phone to send text messages in my class everyone will take a quiz. If your cell phone rings, beeps, makes noise of any kind during an exam you will fail the exam. If I see you using your cell phone in any way during an exam you will fail the exam. **You will not be allowed to use your cell phone as a calculator during exams.**

**Advisement:** Do NOT simply skip class. If you are not going to be here, CALL ME. Begin to understand that phrase, “when you are in the real world…” is counterproductive. You are in the real world. This is not high school shop class. You are not building appear towel rack or a bird feeder for your mother. This is where you begin to learn the how’s and the why’s of basic construction practices. You have to be able to think on your feet, follow protocol and accepted practices, and get things done when they need to be done or you will have grievous problems in this business.

**Course calendar/ breakdown of assignments:**

**Week 1 - Assignment #1** - Due date - 8-31-16
Read chapter #1. On Page 15, Answer review questions 2, 3, 6*, 7, 8, 12, 14, 15, 17.
*For question #6, discuss the advantages of material specification versus a performance specification only. **DO NOT** research and actual project specification.

**Week 2 - Assignment #2** Due date - 9-7-16
Read Chapter #2. On page 53-54, answer questions 1, 2, 3, 5, 6, 8, 9.
You may attempt question #4 on page 53 as a bonus question. For your calculations assume the pipe is only one (1) foot in length. **For the first person to answer question #4 correctly, I will give you five (5) Additional bonus points for your final exam. Once I grade a paper with the correct answer all others will not be considered. In other words, whoever gets it to me first gets the credit.**
Week 3 - Assignment #3 Due date - 9-14-16 Read Chapter #2. On page 53-54, answer questions 7, 15, 18, (more). For 7a - Plot only the gradation curve and state weather the gradation is uniform, well graded, or gap graded. Turn in the gradation curve with your assignment.

Week 4 - Exam #1 9-21-16

Week 5 – Assignment #4 Due date - 9-28-16
Read Chapter #3. On page 86-87, answer questions 1, 2, 3, 4, 6, 8, 9.

Week 6 - Assignment #5 Due date - 10-5-16
Read Chapter #3. On page 86-87, answer questions 10, 11, 14, 15, 17, 21, 22, 25.

Week 7 - Exam #2 10-12-16

Week 8 – Assignment #6 Due date 10-19-16
Read Chapter #4. On page 137-138, answer questions 1, 2, 3, 5, 6, 7, 9.

Week 9 – Concrete Lab - Due date 10-26-16
We will be making concrete cylinders in groups in the lab on this date in lieu of class.

Week 10 – Assignment #7 Due date 11-2-16

Week 11 – Exam 3

Week 12 – Assignment #8 Due date - 11-10-16 Read Chapter #5. On page 161, answer questions 1, 4, 5, 7, 8*, 9, 13, 15. *These improvements must be explained, not simply listed.

Week 13 – No assignment due

Week 14 – Optional Review

Week 15 – Final exam

Pop quizzes may occur at random if I do not feel students are adequately paying attention.

ENGINEERING TECHNOLOGY DEPT: Goals for Student Learning
Technology (Engineering Technology, Graphic Communication, and Construction Management) is a field of study designed to prepare technical, technical management, and technical entrepreneurial professionals for employment in business, industry, education, and government.

By graduation, Technology students should be able to:

1. Think critically and creatively;
2. Understand the theoretical principles of the profession;
3. Understand and apply relevant technology in the solution of technical problems;
4. Develop an appreciation for ethical and professional practices;
5. Develop and refine oral, written, and visual communication skills; and
6. Demonstrate an overall competency in the program objectives.

To help with writing skills:

"The University Writing Center is available to assist you with general and specific questions on writing assigned in any discipline and at any academic level. The one-on-one assistance available at the Writing Center is valuable for generating ideas, talking about global-level issues such as organization, and even working through grammatical problems. The University Writing Center is located in Simpkins Hall 341. Call for an appointment (298-2815) and be sure to bring a copy of your assignment."

**CSTM Program Objectives & Goals**

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<td>1</td>
<td>Understand how to organize, manage, and maintain projects;</td>
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<td>2</td>
<td>Understand the theoretical principles involved in soil mechanics, foundations and structural forces, electrical and mechanical systems and how these systems affect building design;</td>
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<td>3</td>
<td>Be familiar with construction methods and materials composition, properties, terminology, standard designations, building codes and standards, and green/sustainable options;</td>
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<td>4</td>
<td>Be able to create computer drawings, read and interpret working drawings and construction documentation;</td>
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<td>5</td>
<td>Be familiar with plane surveying equipment and techniques for construction for site layout, organization and development;</td>
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<td>6</td>
<td>Be able to do basic quantity take-off, estimating and knowledge of bidding preparation;</td>
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<td>7</td>
<td>General knowledge of accounting, bidding and procurement practices, records and reporting, and economics;</td>
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<td>8</td>
<td>General knowledge of the Construction Industry- types of construction etc.;</td>
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<td>9</td>
<td>Legal knowledge of construction contracts, roles and responsibilities, regulatory environment and licensing, lien laws, labor laws and construction administrative procedures to avoid disputes; professional ethics;</td>
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<td>10</td>
<td>Knowledge of OSHA, Construction Safety and Health rules &amp; regulations;</td>
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<td>11</td>
<td>Knowledge of Construction Project Management concepts, roles and responsibilities, administrative systems and procedures, cost control procedures, job site documentation, quality control procedures and computer applications.</td>
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**ACADEMIC INTEGRITY:**

**Preamble**

Western Illinois University, like all communities, functions best when its members treat one another with honesty, fairness, respect, and trust. Students have rights and responsibilities (http://www.wiu.edu/provost/students/) and students should realize that deception for individual gain is an offense against the members of the entire community, and it is the student's responsibility to be informed and to abide by all University regulations and policies on Academic Integrity.

Plagiarism, cheating, and other forms of academic dishonesty constitute a serious violation of University conduct regulations. Students who engage in dishonesty in any form shall be charged with academic dishonesty.
It is a duty of faculty members to take measures to preserve and transmit the values of the academic community in the learning environment that they create for their students and in their own academic pursuits. To this end, they are expected to instill in their students a respect for integrity and a desire to behave honestly. They are also expected to take measures to discourage student academic dishonesty, to adjust grades appropriately if academic dishonesty is encountered, and, when warranted, to recommend that additional administrative sanctions be considered. Grading policies are the exclusive prerogative of the faculty; administrative sanctions are under the authority of the Director of Student Judicial Programs. This document provides policies and procedures to be followed when academic dishonesty is encountered.

**Definitions of Academic Dishonesty**

The following definitions and examples are not meant to be exhaustive. The University reserves the right to determine, in a given instance, what action constitutes a violation of academic integrity. (See [www.wiu.edu/policies/acintegrity.php](http://www.wiu.edu/policies/acintegrity.php) for complete descriptions of the following topics:

1. **Plagiarism**
2. **Fabrication and Falsification**
3. **Cheating**
4. **Complicity in Academic Dishonesty**
5. **Abuse of Academic Materials**
6. **Multiple Submissions**

**Reporting Academic Dishonesty**

All members of the University community share the responsibility and authority to challenge and make known acts of apparent academic dishonesty. Any student, faculty member, or staff person who has witnessed an apparent act of student academic dishonesty, or has information that reasonably leads to the conclusion that such an act has occurred or has been attempted, has an ethical responsibility for reporting said act(s). Confronting and reporting academic dishonesty can be done in a variety of ways, and people should choose the manner most appropriate for the circumstances. Acts of apparent academic dishonesty that occur in the classroom should be reported directly to the course instructor, and/or the course instructor's Department Chair, and/or the instructor's College Dean. The Council on Admission, Graduation, and Academic Standards (CAGAS) or the Graduate Council will not accept or act upon anonymous reports, but will hold in strict confidence the identity of any person reporting a suspected instance of academic dishonesty, unless that person consents to having his/her identity revealed.

**Student access, disability services & disputes:**

“In accordance with University policy and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. For the instructor to provide the proper accommodation(s) you must obtain documentation of the need for an accommodation through Disability Resource Center (DRC) and provide it to the instructor. It is imperative that you take the initiative to bring such needs to the instructor's attention, as he/she is not legally permitted to inquire about such
particular needs of students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should contact the instructor as to the most appropriate procedures to follow in such an emergency. Contact Disability Resource Center (DRC) at 298-2512 for additional services."

If you have emergency medical information to share with me, if you need special arrangements in case the building must be evacuated, or if you need accommodations in this course because of a disability, please make an appointment with me as soon as possible. My office location and hours are at the top of this syllabus. If you plan to request disability accommodations, you are expected to register with the Disability Resource Center (DRC) at 298-2512.

In accordance with University values and disability law, students with disabilities may request academic accommodations where there are aspects of a course that result in barriers to inclusion or accurate assessment of achievement. To file an official request for disability-related accommodations, please contact the Disability Resource Center at 309-298-2512, disability@wiu.edu or in 143 Memorial Hall. Please notify the instructor as soon as possible to ensure that this course is accessible to you in a timely manner.

Title IX

University values, Title IX, and other federal and state laws prohibit sex discrimination, including sexual assault/misconduct, dating/domestic violence, and stalking. If you, or someone you know, has been the victim of any of these offenses, we encourage you to report this to the Title IX Coordinator at 309-298-1977 or anonymously online at:

If you disclose an incident to a faculty member, the faculty member must notify the Title IX Coordinator.

The complete Title IX policy is available at: http://www.wiu.edu/ypas/policies/titleIX.php.