**CE 1105: Introduction to Civil Engineering – Spring 2014**

**Instructor:** Dr. Melanie Sattler, PE

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**Faculty Profile:** <https://www.uta.edu/mentis/public/#profile/profile/view/id/972>

**Office Hours:** Mon. 1-3, Tues. 9:15-11:45, Th. 9:15-11:45/ 406 Nedderman Hall

**Section, Time, and Place Information:** CE 1105-001 Tuesdays, 1:00 – 3:50 p.m., SH 129

CE 1105-002 Wednesdays, 1:00 – 3:50 p.m., NH 108

**Description of Course Content:**

Introduction to basic civil engineering practice. There are several writing assignments and an oral presentation. Use of spreadsheet and word processor software in solving civil engineering problems and presenting solutions. Professional engineering licensure and the various specializations within civil engineering are covered. Prerequisite: Grade of C or better in CE 1104 or concurrent enrollment.

**Student Outcomes:**

|  |  |
| --- | --- |
| **Outcomes** | **Extent of Coverage\*** |
| (a) Apply knowledge of mathematics, science and engineering | CE |
| (f) Understanding of professional and ethical responsibility | CE |
| (g) Effective communication\*\* | TE |
| (h) Understanding of the impact of engineering solutions in a global and societal context | CE |
| (i) Understanding the need for lifelong learning | CE |
| (j) Knowledge of contemporary civil engineering issues | CE |
| (k) Use the techniques, skills and modern engineering tools necessary for engineering practice | CE |

\*Notes:

Covered Explicitly (**CE**): The outcome is explicitly covered

Tested Explicitly (**TE**): The outcome is explicitly assessed for by one or more means

\*\*Key outcomes. These outcomes will be tested explicitly as described below.

**Tested Explicitly (TE) Component:**

The Civil Engineering Department’s ABET procedure includes assessing the achievement of various departmental student learning outcomes (<http://www.uta.edu/ce/accreditation.php>). The procedure includes explicit testing (TE) of the achievement of the departmental student learning outcomes. CE 1105, Introduction to Civil Engineering, is designated as one of the TE courses and will have explicit testing of outcome (g) in the course. This will be achieved through the following means:

* Each student must prepare a written abstract of an assigned article. A minimum grade of 70% will be deemed to signify that a student has passed this TE component.
* Each student must deliver a minimum 5-minute oral presentation to the class as a part of a team presentation of an assigned CE subdiscipline. A minimum grade of 70% will be deemed to signify that a student has passed this TE component.

**Techniques, Skills and Modern Engineering Tools Used in this Course:**

Student will use Microsoft Excel to solve problems with civil engineering applications.

**Requirements:**

Students may be required to complete work in a reserved computer laboratory during normal class time. The professor will announce in advance those days, times and locations.

**Required Textbooks and Other Course Materials:**

There is no required text for this course; however students may refer to the website <http://www.baycongroup.com/index.htm> to access free online tutorials for the software that will be used in class.

**Major Assignments:**

* Abstract
  + Each student must submit a written abstract of an assigned article. Guidelines for this assignment will be provided after the presentation by the librarian.
* Presentation
  + The class will be divided into groups. Each group will be required to research a civil engineering subdiscipline and deliver a presentation, using PowerPoint as one of the visual aids, discussing the nature of work as well as contemporary issues associated with that subdiscipline.
* In-class Assignments
  + In-class assignments will be given regularly.
* Homework
  + Homework will be assigned throughout the semester and must be **submitted via Blackboard** **at the beginning of class** on the due date.
  + Homework must be submitted **in the format stipulated (e.g. Word, Excel, pdf, etc.)** at the time the assignment is given; otherwise, you will not receive credit for the assignment.
* Quizzes
  + 3 announced quizzes will be given this semester.
  + Late in-class assignments, homework assignments, or abstracts **will not be accepted, or make-up quizzes or presentations given,** except for medical or other similar hardships where valid, written documentation is presented (e.g. medical emergency with a doctor’s note provided) **immediately upon return** to school so that the make-up work may be submitted/completed as close to the original date as possible. A student may have **no more than 1 in-class assignment and 1 homework assignment** excused in this manner; additional missed assignments will result in a grade of zero. Other than circumstances described above, **failure to turn in-class assignments or homework assignments at the scheduled time will constitute a grade of zero on the assignment.**

**Grading Policy**:

15% Abstract

15% Presentation

15% In-class Assignments (4)

25% Homework Assignments (5)

30% Quizzes (10% per Quiz)

89.45 – 100 A

79.45 – 89.44 B

69.45 – 79.44 C

59.45 – 69.44 D

< 59.45 F

**Blackboard:**

Blackboard (<http://www.uta.edu/blackboard/>) will be used in this course for submitting homework assignments, posting handouts and otherwise as needed. An overview of Blackboard will be presented on the first day of class.

**Attendance Policy:**

Class attendance is required. In the event of an absence, it is the **student’s responsibility** to obtain class notes, assignments, etc.

**Tentative Course Schedule:**

|  |  |  |
| --- | --- | --- |
| **Week of…** | **Topic** | **Special Notes/Due Dates** |
| **Jan. 13** | Syllabus  Intro to the CE Profession  Introductions  CE Handbook and Other Academic Policies  Blackboard |  |
| **Jan. 20** | Effective Written Communication  Library and Writing Center Resources | ***Written Communication In-Class Assignment***  Assign Abstract |
| **Jan. 27** | Licensure and Ethics | ***Ethics In-Class Assignment*** |
| **Feb. 3** | Delivering Effective Oral Presentations | ***Abstract due***  Assign Group Presentations |
| **Feb. 10** | Critical Thinking and Decision Making | ***Critical Thinking In-class Assignment***  Assign Homework 1 – Critical Thinking |
| **Feb. 17** | Sustainability | ***Homework 1 Due***  ***Sustainability In-class Assignment***  Assign Homework 2 – Sustainability |
| **Feb. 24** | Group presentation preparation | ***Homework 2 Due*** |
| **March 3** | ***Quiz 1 – Licensure & Ethics, Critical Thinking & Decision Making, Sustainability*** |  |
| **March 17** | Presentations:  Construction and Transportation | **All PowerPoint Files for Presentations Due** |
| **March 24** | Presentations:  Environmental and Water Resources |  |
| **March 31** | Presentations:  Structures and Geotechnical |  |
| **April 7** | ***Quiz 2 – CE Subdisciplines***  Intro to Excel – Part I | Assign Homework 3 – Excel |
| **April 14** | Intro to Excel – Part II | ***Homework 3 Due***  Assign Homework 4 – Excel |
| **April 21** | Intro to Excel – Part III | ***Homework 4 Due***  Assign Homework 5 – Excel |
| **April 28** | ***Quiz 3 – Excel Homework 5 Due*** | |
| **May 5** | **THERE IS NO FINAL EXAM IN THIS COURSE** | |

As the instructor, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. – Dr. Sattler

**Drop Policy:**

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. Contact the Financial Aid Office for more information.

**Americans with Disabilities Act:**

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity:**

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. According to the UT System Regents’ Rule 50101, §2.2, "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts."

**Student Support Services Available**:

The University of Texas at Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit [www.uta.edu/resources](http://www.uta.edu/resources) for more information.

**Electronic Communication Policy:**

The University of Texas at Arlington has adopted the University “MavMail” address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All students are assigned a MavMail account. ***Students are responsible for checking their MavMail regularly.*** Information about activating and using MavMail is available at <http://www.uta.edu/oit/email/>. There is no additional charge to students for using this account, and it remains active even after they graduate from UT Arlington.

To obtain your NetID or for logon assistance, visit <https://webapps.uta.edu/oit/selfservice/>. If you are unable to resolve your issue from the Self-Service website, contact the Helpdesk at helpdesk@uta.edu.

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

**Final Review Week:**

A period of five university class days prior to the first day of final examinations is designated as Final Review Week. During this week, no new assignments will be given; however, previously assigned work may have a completion date during this week. In addition, no portion of the final examination shall be

administered during the Final Review Week, except in the case of laboratory exams. Classes are held as scheduled during this week and materials covered in lectures during this week may be included in the final examination.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**Librarian to Contact:**

Sylvia George-Williams, Science and Engineering Library (Basement, Nedderman Hall)

**Grade Grievance Policy:**

Grade grievances will be handled according to the policy described in the College of Engineering portion of the Catalog.