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

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

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**Faculty Profile:**

**Office Hours:** Tues. 9-12, Wed. 9-10, Th. 9-12/ 406 Nedderman Hall

**Section, Time, and Place Information:** CE 1105-002 Mondays, 1:00 – 3:50 p.m., NH 112

CE 1105-001 Tuesdays, 1:00 – 3:50 p.m., SWCA 109

CE 1105-003 Wednesdays, 1:00 – 3:50 p.m., NH 112

**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:**

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| --- | --- |
| **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.

**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 (6)

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**: At The University of Texas at Arlington, taking attendance is not required. Rather, each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I expect that you will attend classes. Students will not be allowed to make up in-class assignments. Class attendance is required. In the event of an absence, it is the **student’s responsibility** to obtain class notes, assignments, etc.

**Expectations for Out-of-Class Study**: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 2-3 hours per week of their own time in course-related activities, including completing assignments, preparing for exams, etc.

**Tentative Course Schedule:**

|  |  |  |
| --- | --- | --- |
| **Week of…** | **Topic** | **Special Notes/Due Dates** |
| **Aug. 25** | Syllabus  Intro to the CE Profession  Introductions  CE Handbook & Other Academic Policies | ***CE Handbook In-Class Assignment (1)*** |
| **Sept. 1** | Effective Written Communication  Library and Writing Center Resources | ***Written Communication In-Class Assignment (2)***  Assign Abstract |
| **Sept. 8** | Licensure and Ethical Decision-Making | ***Ethics In-Class Assignment (3)*** |
| **Sept. 15** | Delivering Effective Oral Presentations  Oral Presentation Planning | ***Abstract due***  Assign Group Presentations |
| **Sept. 22** | Critical Thinking and Decision Making | ***Critical Thinking In-class Assignment (4)***  Assign Homework 1 – Critical Thinking |
| **Sept. 29** | Engineering Design and Creativity | ***Homework 1 Due***  ***Engineering Design & Creativity In-class Assignment (5)***  Assign Homework 2 – Sustainability |
| **Oct. 6** | Engineering Design and Sustainability | ***Homework 2 Due***  ***Sustainability In-class Assignment (6)***  Assign Homework 2 – Sustainability |
| **Oct. 13** | ***Quiz 1:***  ***Licensure & Ethical Decision-Making, Critical Thinking & Decision Making, Engineering Design & Creativity, Engineering Design & Sustainability*** |  |
| **Oct. 20** | Presentations:  Construction and Transportation | **All PowerPoint Files for Presentations Due** |
| **Oct. 27** | Presentations:  Environmental and Water Resources |  |
| **Nov. 3** | Presentations:  Structures and Geotechnical |  |
| **Nov. 10** | ***Quiz 2 – CE Subdisciplines***  Intro to Excel – Part I | Assign Homework 3 – Excel |
| **Nov. 17** | 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. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao/).

**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 or by calling the Office for Students with Disabilities at (817) 272-3364.

**Title IX**: The University of Texas at Arlington is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit www.uta.edu/titleIX.

**Academic Integrity**: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents’ Rule 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**Electronic Communication**: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

**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 class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**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 individuals with disabilities.

**Student Support Services**: UT 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. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

**Writing Center:** The Writing Center, 411 Central Library, offers individual 40 minute sessions to review assignments, *Quick Hits* (5-10 minute quick answers to questions), and workshops on grammar and specific writing projects. Visit https://uta.mywconline.com/ to register and make appointments. For hours, information about the writing workshops we offer, scheduling a classroom visit, and descriptions of the services we offer undergraduates, graduate students, and faculty members, please visit our website at [www.uta.edu/owl/](http://www.uta.edu/owl/).

**Librarian to Contact:**

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

**Emergency Phone Numbers**: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911.