UCONN
UNIVERSITY OF CONNECTICUT

ENVE 2411 - Introduction to Computer Aided Design

Department of Civil & Environmental Engineering

Syllabus – Spring 2019

Syllabus information may be subject to change, including the course schedule. The most up-to-date syllabus is located within the course in HuskyCT, and changes to the course schedule will be announced through HuskyCT.

Program Information

Open to students in the School of Engineering

Course and Instructor Information

Course Title: Introduction to Computer Aided Design
Credits: 1 credit
Format: Online
Professor: Dr. Amy C. Burnicki

Email: amy.burnicki@uconn.edu
Telephone: (860) 486-2340 office: CAST 326
Office Hours/Availability: Monday 3:30-4:30pm or by appt.

Course Materials

There is no required text for this course. Course media and materials are available within HuskyCT.

Course Description

Catalog Description: Introduction to computer-aided design and drawing, emphasizing applications in civil and environmental engineering and landscape design. Introduction to fundamental CAD concepts and techniques, such as drawing commands, dimensioning, layers, editing techniques, and plotting. Related topics include map scale and coordinate geometry.

This course introduces students to the basic operation and application of computer-aided design through hands-on experience operating Bentley's MicroStation Connect program.

Course Objectives

By the end of the semester, students will be able to:

1. Identify and implement basic CAD tools and techniques
2. Create and plot drawings using MicroStation Connect
3. Explain the role of map scale and coordinate geometry in computer-aided drawing

Course Outline and Schedule

This course will be conducted online in a series of sessions. There will be a new session each week. Every session will include a set of required video presentations covering the operation and application of course

software and overviewing related concepts. Every session requires the completion of an exercise, quiz and/or project; i.e., this course will have weekly submission requirements.

Week	Session	Topic	Activity	Due Date
Jan. 22 – Jan. 27	1	Course Introduction MicroStation Introduction	Quiz 0 + Project 0 Exercise 1	Monday, Jan. 28 11:59pm
Jan. 28 – Feb. 3	2	MicroStation Fundamentals Placing Elements, Part 1	Exercise 2	Monday, Feb. 4 11:59pm
Feb. 4 – Feb. 10	3	Placing & Editing Text Map Scale and Printing	Exercise 3	Monday, Feb. 11 11:59pm
Feb. 11 – Feb. 17	4	*Project Work*	Quiz 1 Project 1	Monday, Feb. 18 11:59pm
Feb. 18 – Feb. 24	5	AccuSnap & AccuDraw Coordinate Geometry	Exercise 4	Monday, Feb. 25 11:59pm
Feb. 25 – Mar. 3	6	Placing Elements, Part 2	Exercise 5	Monday, Mar. 4 11:59pm
Mar. 4 – Mar. 10	7	Levels & Element Symbology	Exercise 6	Monday, Mar. 11 11:59pm
Mar. 11 – Mar. 17	8	Dimensioning	Exercise 7	Monday, Mar. 18 11:59pm
Mar. 18 - Mar. 24 Spring Break				
Mar. 25 – Mar. 31	9	*Project Work*	Quiz 2 Project 2	Monday, Apr. 1 11:59pm
Apr. 1 – Apr. 7	10	Modifying Elements Selection Tools	Exercise 8	Monday, Apr. 8 11:59pm
Apr. 8 – Apr. 14	11	Patterning	Exercise 9	Monday, Apr. 15 11:59pm
Apr. 15 – Apr. 21	12	Manipulating Elements Complex Elements	Exercise 10	Monday, Apr. 21 11:59pm
Apr. 22 – Apr. 28	13	SmartLine Measurement	Exercise 11	Monday, Apr. 29 11:59pm
Apr. 29 – May 5	14	*Project Work*	Quiz 3 Project 3	Monday, May 6 11:59pm

Course Requirements and Grading

Your grade will be based on your performance on eleven exercises, three quizzes, and three projects.

Course Components	Weight
Exercises	50%
Quizzes	20%
Projects	30%

Exercises: There will be eleven exercises, each worth 10 points. All exercises are due at the end of day on the Monday following the session; see Course Schedule. Late submissions will be accepted with penalty; see Due Dates and Late Policy.

Quizzes: There will be three quizzes, each worth 15 points. Quizzes must be completed by the specified time; there will be no extensions / late submissions.

Projects: There will be three projects, each worth 25 points. Projects draw from material presented over the course of several modules and offer an opportunity to apply learned skills. All projects are due at the specified time; see Course Schedule. Late submissions will be accepted with penalty; see Due Dates and Late Policy.

Grading Scale:

Grade	Letter Grade	GPA
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

Due Dates and Late Policy

All course due dates are identified in the Course Schedule. Deadlines are based on Eastern Standard Time; if you are in a different time zone, please adjust your submittal times accordingly.

Exercises and projects submitted late will be penalized by a 10% deduction per day up to three day past the due date, unless you have contacted the instructor and made special arrangements. No exercises or projects will be accepted for credit after three days past the due date. Exceptions to this rule require instructor approval and must be made prior to the assignment's due date.

Feedback and Grades

I will make every effort to provide feedback and grades one week after submission. To keep track of your performance in the course, refer to My Grades in HuskyCT.

Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources, which include:

- The Student Code
  - Academic Integrity
  - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Students with Disabilities

Students needing special accommodations should work with the University's Center for Students with Disabilities (CSD). You may contact CSD by calling (860) 486-2020 or by emailing csd@uconn.edu. If your request for accommodation is approved, CSD will send an accommodation letter directly to your instructor(s) so that special arrangements can be made. (Note: Student requests for accommodation must be filed each semester.)

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government." (Retrieved March 24, 2013 from Blackboard's website)

Software Requirements

The technical requirements for this course include:

- Adobe Acrobat Reader
- Reliable internet access

Help

Technical and Academic Help provides a guide to technical and academic assistance.

This course is completely facilitated online using the learning management platform, HuskyCT. If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the Help Center. You also have 24x7 Course Support including access to live chat, phone, and support documents.

Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

University students are expected to demonstrate competency in Computer Technology. Explore the Computer Technology Competencies page for more information.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the Office of Institutional Research and Effectiveness (OIRE).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.