syllabus

EAS 585: Seminar on CAD

Instructor: Lindsay Fercho, PLA, ASLA
Contact: nelsonla@umich.edu or 734-642-7590
Remote Office Hours: Monday 12-1p or by appointment

Fall 2020
Tuesdays 6-8p
Online Course

Overview + Objective:

CAD (short for Computer-Aided Design) is extensively used in a wide range of disciplines, ranging from the automotive, shipbuilding, and aerospace industries, filmmaking and graphic design, to industrial and architectural design. CAD software is used to increase the productivity of designers and drafters, improve the quality and accuracy of design, and to improve communications between the designer and the builder or manufacturer.

AutoCAD, created by Autodesk, is a software application for CAD, supporting both 2-D and 3-D formats. This course will focus on using AutoCAD to make 2-D drawings and will also introduce students to SketchUp. Components of construction documents will be introduced, as these technical drawings form the backbone of coursework. This course will be based on the practice of landscape architecture, as it is a first-year requirement for the masters of landscape architecture program. The course is open to students in other disciplines and will be beneficial to students seeking to learn basic principles of AutoCAD and related software to create technical and illustrative computer drawings.

Term Project + Weekly Assignments:

Coursework is structured to reflect a professional office environment, in which there are small interim tasks, leading to larger deadlines. The course will consist of one term project, broken up into smaller weekly assignments with two larger deadlines. The project will require students to create a simple set of construction documents and for a new athletic campus near Ann Arbor. We will work on the project each week, adding to it and making modifications as drafting and graphic skills are gained. Lecture topics and small weekly assignments build upon each other so that students can meet each deadline for the project.

All weekly assignments are due before class on Mondays at 5pm to Canvas. Specific instructions on submission will be included with weekly assignments. Assignments will be returned by the beginning of class on Tuesday. It is expected that all comments will be addressed in the following week's assignment, which builds on the previous week's work. Weekly assignments will be graded primarily on completion, but it is expected all modifications be made for the project deadlines. Late assignments will not be accepted, unless previously arranged with me. Late submission for project deadlines will be deducted five points for every day late.

Grades:

Deadline 1: Site Plan	30 points
Deadline 2: Construction Document Set	30 points
Weekly Assignments (10 assignments @ 3 points each)	30 points
Attendance and Participation	10 points
Total:	100 points

Grading Scale:

A	100% to 93.0%	B-	< 83.0% to 80.0%	D+	< 70.0% to 67.0%
A-	< 93.0% to 90.0%	C+	< 80.0% to 77.0%	D	< 67.0% to 63.0%
B+	< 90.0% to 87.0%	C	< 77.0% to 73.0%	D-	< 63.0% to 61.0%
B	< 87.0% to 83.0%	C-	< 73.0% to 70.0%	F	< 61.0% to 0.0%

Course Format:

I understand an online course format is not ideal, but I expect a relatively smooth transition for this course since it is computer-based. Class will meet weekly via Zoom, which can be accessed through Canvas. **Attendance for each class is mandatory and will be factored into the participation grade.** If you need to miss class, please notify me in advance. Students are required to watch recorded lectures if they miss class and catch up with me afterwards if needed.

Course lectures will be recorded and made available to all students in this course. As part of your participation in this course, you may be recorded. If you do not wish to be recorded, please contact me to discuss alternative arrangements. Otherwise it is assumed you consent to be recorded for the purpose of sharing the recording with your classmates. Students are prohibited from recording and distributing any lecture without written permission, except as necessary as part of approved accommodations for students with disabilities. Any approved recordings may only be used for the student's own private use.

Office Hours:

Office hours will be held remotely on Mondays from 12-1pm or by appointment. Monday office hours will be a group format in Zoom, so students can learn from each others' questions. To join Monday office hours, join my personal Zoom room between noon and 1pm. If you need to meet to discuss sensitive information (such as grades) please contact me to make an appointment.

Access to AutoCAD:

Students will need to access to AutoCAD throughout the term for lectures and to complete assignments, and can do so in two ways:

1. Virtual Sites: Virtual Sites provides access to software on Campus Computing Sites Windows workstations remotely from any Mac or Windows computer with an Internet connection. **If students do not have a Windows computer, access through Virtual Sites is required for lectures.**
2. Educational version of AutoCAD: Students can download a free educational version of AutoCAD for either Mac or PC. Students are welcome to use this during lecture if they have a Windows computer, but note the interface on a Mac is very different and will complicate course learning.

LinkedIn Learning:

There is no required text book for this course, although students are asked to use LinkedIn Learning (with Lynda.com content) if needed to support lecture material. Here you can watch and follow along with video tutorials in AutoCAD and SketchUp, along with other design software used by landscape architects.

2020 Election:

Class is scheduled for Election Day: Tuesday, November 3. Synchronous participation is voluntary on this day, but students are expected to catch up with recorded material if they miss class. For more information on voting, visit: govote.umich.edu.

Students with Disabilities:

If you have a documented disability and anticipate needing accommodations in this course, please meet with me soon so that we can make any necessary arrangements. Please contact Services for Students with Disabilities if you have any questions or concerns.

Academic Integrity:

All work submitted in this course must be your own and originally produced for this course. While students are encouraged to work together and assist one another with course content, each student is expected to complete their own work individually. Information on academic integrity here.

fall 2020

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Date	Topic	Assignment	Due Date
09.01	Course Introduction		
09.08	Basic Drawing	Weekly Assignment 1	09.14
09.15	Modifying Drawings	Weekly Assignment 2	09.21
09.22	Organizing Drawings	Weekly Assignment 3	09.28
09.29	Layout, Paper Space, and Text	Weekly Assignment 4	10.05
10.06	Annotative Text and Leaders	Weekly Assignment 5	10.12
10.13	External References	Weekly Assignment 6	10.19
10.20	Plotting	Deadline 1	10.26
10.27	Introduction to SketchUp	Weekly Assignment 7	11.02
11.03	Blocks and Hatches ELECTION DAY - Synchronous participation optional	Weekly Assignment 8	11.09
11.10	Additional Sheet Set Components	Weekly Assignment 9	11.16
11.17	Details	Weekly Assignment 10	11.30
11.24	Thanksgiving Recess		
12.01	Wrap-up and Workday	Deadline 2	12.08