# CAD for COMPUTER AIDED DRAFTING CONSTRUCTION

INSTRUCTOR: Matt Jorgensen GRADUATE EMPLOYEE: Sierra McComas

AutoCAD is the industry standard for technical drawing in many offices. Competency in CAD (Computer Aided Drafting) software is critical for most entry level designers and communication with consultants in engineering, architecture, planning and the arts. Proficiency in CAD also aids in learning programs such as Rhino, Solidworks, and Revit which are gaining popularity in landscape practice.

CAD for Construction will focus on developing a working competency in AutoCAD in preparation for the Winter Tech Studio, as well as professional practice.

TENTATIVE Schedule:

Weeks 1-5

SKILLS BUILDING: In-class demos, online tutorials, guizzes and exercises

#### **GRADING BREAKDOWN**

Undergraduates:

| 10% |
|-----|
| 25% |
| 35% |
| 30% |
|     |

LA 417/517 Winter 2019 T Th 8-9:50 AM SSIL Lab: McKenzie 442

Weeks 6-9

#### CONSTRUCTION DOCS

In-class work sessions & troubleshooting to assist in the completion of Construction Document assignments

Graduates:

| Attendance             | 10% |
|------------------------|-----|
| 5 quizzes              | 25% |
| Exercises              | 25% |
| Additional req's (TBD) | 10% |
| Final Project          | 30% |

This course is Pass/No Pass only. Undergraduates must score a minimum of a C-to pass the course (70%). Graduates must score a minimum of a B- (80%).

# LEARNING OBJECTIVES

This course gives students an introductory understanding of how to draft a design, scaled, into AutoCAD, modify the linework representing the design, add textual and numerical information to help describe it, and compile and plot it as part of a set of construction documents. Three key skills you will gain as part of this course are:

#### BASIC DRAFTING COMPETENCY IN AUTOCAD

You will hone your ability to represent your design at a correct scale in AutoCAD using the various selecting, drafting and modifying commands. You will also learn how to add textual and numerical information to a drawing that will help to describe it and how it should be constructed.

#### SCALING & PLOTTING IN AUTOCAD

You will learn to plot at various scales in AutoCAD and use plot presets to ensure a consistent appearance of your linework across all drawings.

#### COMPILING A CONSTRUCTION DOCUMENT SET

You will master the use of AutoCAD's "Layouts" to print multiple sheets pertaining to the same design, each one modified to show only relevant information and add relevant notation of reference drawings to one another.

## **EXPECTATIONS**

TIMELY AND COMPLETE WORK

- Complete all in-class and supplementary exercises
- NO LATE WORK will be accepted without verifiable personal emergency

#### PARTICIPATION:

- Come to every class prepared
- Participate in the class demo and discussions with attentiveness and professionalism
- Actively take notes in class during demonstrations (trust me, it is difficult to remember all the steps)

• Ask questions. Answer questions for others. Work in groups. Learn in collectives. Use Lynda.com, YouTube, Google and your peers to work through obstacles. You can almost always find an answer to your question with a simple online search.

#### PROFESSIONALISM:

• Be supportive and respectful of your peers.

• Work with integrity - You are encouraged to work together, but the products of that collaboration must be YOURS ALONE. Cases where it seems work was shared, borrowed or stolen will be investigated seriously, and may compromise your ability to pass the class.

## NOTE

• Any student has the right to request that only the faculty member overseeing the course grades their work.

• The ultimate responsibility for determining, entering and assigning grades rests with the faculty instructor.

• If any conflicts of interest or possible conflicts of interest exist between the GTF and students in the course, the faculty instructor, who is supervising the GTF, will take sole responsibility for all evaluation of the student(s) affected by this conflict or potential conflict.

## UNIVERSITY RESOURCES AND POLICIES

#### ACADEMIC MISCONDUCT

The University Student Conduct Code (available at conduct.uoregon.edu) defines academic misconduct. Students are prohibited from committing or attempting to commit any act that constitutes academic misconduct. By way of example, students should not give or receive (or attempt to give or receive) unauthorized help on assignments or examinations without express permission from the instructor. Students should properly acknowledge and document all sources of information (e.g. quotations, paraphrases, ideas) and use only the sources and resources authorized by the instructor. If there is any question about whether an act constitutes academic misconduct, it is the students' obligation to clarify the question with the instructor before committing or attempting to commit the act. Additional information about a common form of academic misconduct, plagiarism, is available at researchguides.uoregon.edu/citing-plagiarism.

#### STUDENTS WITH DISABILITIES

The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center in 164 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

#### NOTE REGARDING GRADUATE LEVEL COURSE

The University dictates that grad students must complete additional requirements relative to undergraduate students for a given course. This will primarily take the form of added tasks on assignments and the final project. Graduate students will be expected to assume leadership roles as necessary.