North Seattle Community College

TDR 174  Introduction to AutoCAD for Architects and Engineers  Winter 2007

Instructor:  Norman Carlstrom  
Class Day:  Wed. 6:00 – 9:50 PM

Phone:  425-778-1399  
Credits:  4

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Text:  ACAD 2007 No Experience Required  
By Frey  
Publisher:  Sybex

Required Supplies:  min. (4) 3 ½" High Density floppy disks (1.44 meg) & case(s). (You may use USB drive(s) in place of one or more floppies – Encouraged as it is much faster.)

Course Description:

Through this course you will learn to draw 2D plans and details with the use of the basic AutoCAD draw and edit commands. Emphasis will be placed on drawing accurately. The use of scale factors to determine drawing limits for any size drawing will be discussed. Also covered will be text and dimensioning. Once these are mastered, methods of output for drawings will be covered.

Course Objectives:

Upon completion of this course the students, with their background knowledge in Architecture or Engineering, shall be able to:

• Setup a new drawing so it can be output on a specific size paper at a given scale.
• Control the AutoCAD environment using the options in the Format Menu.
• Accurately create 2D plans and details.
• Use edit commands to create and revise drawings.
• Use blocks to speed up the drawing process.
• Control groups of entities in drawings by manipulating layers.
• Place text in drawings using different Styles with Fonts.
• Create a dimension Style and use AutoCAD dimensions.
• Plot drawings accurately.

Learning is NOT a spectator sport. One learns by doing. Whether something is an assignment (graded), or a practice (not graded): the purpose is the same, learning. Even when you “know” the topic, there are always new tricks to learn that will increase facility, speed, & understanding.
Grading: There will be three drawing exercises worth 20 (1st)/40 (2nd)/80 (3rd) points, preliminary submittal of final project worth 60 points, and the final project worth 200 points. The exercises will be small plans and/or details that will be given to you to reproduce to practice the commands you have learned. The final project will be one of your own choosing, field in which you plan to use AutoCAD, approved by the instructor. Grades will be computed as the number of points you’ve earned divided 100. Any student who stops attending without notifying the instructor will receive a grade of 0.

Drawing exercises are due at the beginning of the class period on the date shown as noted on the exercise when assigned. Late projects will be downgraded 5 points per class session unless prior arrangements have been made.

Asking questions of one another about procedures is encouraged during working times in class and labs. Do not copy, you are responsible for creating your own drawings. Projects are to be turned in on 3 ½" high density disk. Be sure it is formatted for PC’s before copying your files. Make backup copies of all your work, it is cheap insurance. Before turning in work make copies for yourself as the disk(s) you submit at the end of the quarter will not be returned.

AutoCAD skills are currently required in a wide variety of technical fields. CAD operators or technicians who can produce a high quantity, of high quality drawings, are in demand. North Seattle Community College offers three levels of AutoCAD training (Introduction, Intermediate, Advanced). Successful completion of these classes should provide you with the skills to be a technician of high value. After successfully completing the Intermediate class you should have the knowledge of the program necessary for an entry level CAD job. This does not mean you will have mastered the speed of use that is required. This only comes from practice, practice, practice & more practice.

Items to be included in your exercises and project will be covered before they are due. Talk to and help each other. This is the way it is in most offices using CAD. No one person knows it all, if you find a neat trick share it with your neighbor. Although the instructor will try to get to everyone on an equal basis, these can be large classes so it is your responsibility to ask when you need help.

Note: Topics missed due to absence are your responsibility to learn from the text. There is not enough time to make multiple presentations of the same material to the class, nor can individual time be spent doing such at the expense of the students who were in class.

Lab Hours: TBA

Our room 1845C – when we have volunteer or work study lab monitors