

## Course Syllabus

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# DDT 183 Fundamentals of Computer Aided Drafting (CAD)

## 3 Credit Hours

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45 50-min. periods of Lecture

30 50-min. periods of Open Lab

*per semester*

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### Course Description:

An introduction to CAD graphic commands and applying the basic applications in producing drawings. Fundamentals in using the drawing, editing, and dimensioning commands for two-dimensional drawings.

### Requisites:

None

### Course Objectives:

Upon completion of this course, students will be able to:

- Initiate and save drawings correctly on the AutoCAD system
- Set-up and use appropriately the layers, line types, and colors available in a single drawing.
- Develop two dimensional engineering drawing with dimensions, using to best advantage the various methods of entering commands in AutoCAD.
- Modify and edit drawings using the selection tools to best advantage.
- Utilize the proper sequence necessary to print or plot drawings using AutoCAD.

### DDT 183 Fundamentals of Computer Aided Drafting (CAD)

*Course Section:* 70

*Course Days/Time:* M-F

1:00 – 1:56 p.m.

*Course Location:* NTC 232

*Course Length/Dates:* 16 WEEKS – Fall 2008

#### **Instructor: Aaron Kliethermes**

*Office Hours:* MTWRF 11:00 – 12:00 p.m.

*Office Building & Room Number:* NILGES BLDG. – ROOM 235

*Office Telephone:* 573.897.5113

*Office E-mail:* aaron.kliethermes@linnstate.edu

### Required Books, Tools, and Other Materials:

AutoCAD and its Applications, Basic. Release 2010. Shumaker-Madsen. Goodheart-Willcox Company.

### Optional/Recommended Books and Other Materials:

Recommended: 3 ring notebook.

### Grading System:

#### **AJA@™LSTC:**

The Job Readiness Score and Attendance Percentage portions of the AJA@™LSTC system do not apply to this class. Only an Academic Grade will be issued and recorded on your transcript.

Academic Grade: The following academic grading scale is used for all Linn State Technical College letter graded credit classes:

Grading Scale	A	B	C	D	F
	90 to 100%	80 to 89.9%	70 to 79.9%	60 to 69.9%	59.9% and below

Higher grading percentages than the above grading scale take precedence with approval by the Dean of Academic and Student Affairs if the need is supported by program accreditation or certification requirements.

There are approximately 500 points in this course with 1/4 of the points being in tests and quizzes, and 3/4 of the points being for CAD drawings. The final drawing will be worth 50 points and is used for assessment of essential skills used in CAD.

Since this course is designed to help students improve their knowledge, skill, and personal characteristics, all three will be used in evaluation. There will be several announced written examinations. At the option of the instructor, performance examinations may be given to assess the student's CAD competency level under controlled conditions. Along with pop quizzes, which will be given as needed, these examinations and evaluations of a student's knowledge make up about half of the student's course grade. A considerable number of computer laboratory drawing experiences are planned for this course. This laboratory experience's evaluation of the student's skill development will also comprise about half of the course grade.

Points may be added to a student's final grade with up to 3% of the course grade being determined by the student's personal characteristics, such as (1) ability to work with and/or lead others, and (2) dependability, as evidenced by attendance, punctuality, and ability to meet deadlines. This consideration of points is left to the instructor's discretion and should be used only in cases where the student's personal characteristics are exemplary.

Students who must be absent from a regularly scheduled mastery test for good reason may arrange with the instructor to take the test off-schedule if arrangements are made **PRIOR** to the scheduled test period. The makeup exam may be a different form of the exam given to the class. However, there will be no test retakes.

A student may file a request for an incomplete grade, before the end of the semester, if the student has completed at least 60% of the required class work and has a passing grade. This request will be given consideration by the instructor on an individual basis and granted according to the reason given for need. However, no grade will be changed after it has been submitted to the registrar's office at the end of the semester.

### **ACADEMIC HONESTY POLICY**

Normally, individuals or groups found to be plagiarizing written materials, cheating on examinations, or making use of the work of other students in completing laboratory assignments should expect to receive grades of zero on such work and should expect to receive a failing course grade.

### **Library Resource Center Requirements:**

Students will be required to submit a one page report discussing recent advancements in computer hardware or software. This information must be documented from the Linn State Technical College library, giving the source and a copy of this source. The report and the documentation must be turned into the instructor by the assigned due date.

**Attendance Requirements:**

It is the responsibility of students to notify the Receptionist (1-800-743-8324 or 897-5000) when absent, tardy, or leaving early. The Receptionist will notify the instructor(s), the Counselors, and the Dean of Students.

After 6 absences, 1% per day will be deducted from the total percent average at the end of the semester. Students are expected to attend every scheduled class period and be punctual. Arrangements must be made with the instructor, after class, to make up work or receive lecture information that was missed due to tardiness. The student must take the initiative to make up any missed assignments or tests. In addition, it is expected that students will spend additional time as needed to complete assignments.

**Special Class or Laboratory Procedures:**

A penalty is assessed on past due assignments. All drawing assignments are to be completed in the computer laboratory. We will use a seating arrangement of assigned computer workstations. The instructor will have posted office hours, and appointments are preferred to allow scheduling of time to serve more students.

**Plan of Instruction:**

The AutoCAD Design package is a general purpose computer aided design drafting package. AutoCAD topics presented in DDT 183 include:

1. Basic CAD drafting concepts, including hardware setup with testing of vocabulary -1 week  
Library Assignment with written report covering the recent advancements in computer hardware or software.
2. Getting started in AutoCAD -1 week
  - A. Accessing the system
  - B. Starting new drawing files
  - C. Saving drawing files
  - D. Exiting the system
3. Create/drawing options- 5 weeks
4. Editing Commands -4 weeks
5. Layer, Linetype, and Color Setup -2 weeks
6. Dimensions -2 weeks
7. Plotting and Printing -1 week

A Minimum of 15 exercises/drawings will be assigned. Tests and pop quizzes will be given through out the semester with an emphasis on vocabulary used in the profession concerning computer hardware and software.

Course structure and assignments may be changed at the discretion of the instructor, or according to the needs of the student.