

Bollman Technical Education Center

CAD I – First Quarter 2009

Instructor: Lynette Havens **Office: 9451 N. Washington Street**
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Periods 1 and 2

Monday thru Friday

7:30 A.M. - 9:15 A.M.

Course Objectives:

The student, upon completion of this course, should be able to demonstrate graphic skills in Basic AutoCAD concepts as well as basic blueprint reading skills.

Texts:

AutoCAD and its Applications by Shumaker/Madsen
(Comprehensive - 2010)

Practical Problems in Mathematics for Drafting and CAD by Dr. John Larkin

Print Reading for Engineering and Manufacturing Technology by Davis A. Madsen

Grading Breakdown

Below you will find the assignments and exams that will be assigned for this quarter. Next to the particular task you will also find the point value for it. This will give you a pretty good idea of how you are doing in the course at any given time.

1) Worksheets, Handouts or Chapter Assignments:

Each assignment is worth 20 Points

2) AutoCAD Assignments:

Each drawing is worth 20 Points

3) 2-D Project:

2-D project is worth 100 Points

4) Quiz (9/10/09) is worth 50 Points

5) Final Exam (10/12/09) is worth 100 Points

Note:

- 1) Assessments and grading standards are applied consistently to students of similarly demonstrated ability.
- 2) Assessments are based solely on demonstrated student progress and on achievement of reasonable and clear standards. (No grades based on behavior)
- 3) Your teacher encourages students to persist in their assignments so that adequate progress and good grades can be achieved.

GRADING SYSTEM:

GRADE

POINTS EARNED

A

100%-90%

B

89%-80%

C

79%-70%

D

69%-60%

F

Less than 60%

CLASS EXPECTATIONS:

- 1) **Be in class every day and ready to work.**
- 2) **BE ON TIME.**
 - a. **Tardy 10 minutes or more is considered an unexcused absence for that period.**

**LEAVING EARLY WILL CARRY THE SAME
CONSEQUENCES AS BEING TARDY.**

- 3) **ABSOLUTELY NO INTERNET OR CELL PHONE USAGE DURING CLASS TIME!!!! YOU ARE EXPECTED TO WORK ON CLASS MATERIAL DURING CLASS TIME.**
- 4) **You are not to leave the classroom for any reason without obtaining permission from me first.**
- 5) **NO FOOD OR DRINKS AT THE COMPUTERS. There are tables set-up at the side of the room that you can eat at during your break.**

COURSE OUTLINE (Tentative)

- Week of 8/20 * Introduction to AutoCAD Features
8/24 Working with Drawings
Introduction to Lines
Introduction to Erase
Point Entry Methods
- Week of 8/31 * Introduction to Print Reading
Reading Lines on a Drawing
Introduction to Scaling Concepts (Architectural)
Introduction to Scaling Concepts (Engineering)
Introduction to Scaling Concepts (Metric)
- Week of 9/8 * Introduction to Osnaps (Object Snaps)
Basic Shape Commands
- Week of 9/14 * Basic Edit Commands
Edit Selection Methods
Basic View Commands
(Quiz #1 - Wednesday, September 10th)
- Week of 9/21 * Continue Editing Commands
Drawing Set-up and Scaling Concepts
Begin Quarter One Project
- Week of 9/28 * Introduction to Layering Concepts
Introduction to Text
Continue Quarter One Project
- Week of 10/5 * Introduction to Dimensioning
Continue with CAD Assignments/Project
Exam Review
- Week of 10/12 * Project Presentations
(Final Exam - Tuesday, October 12th)

ASSIGNMENT SHEET

<u>Task</u>	<u>Assigned</u>	<u>Date Due</u>
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Week One/Two

Weeks 8/20 and 8/24

1) WORKING WITH DRAWINGS (Reading)

<u>Read Chapter 2 (Pages 51-74)</u> <u>AutoCAD and its Applications</u>	8/20	8/28
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*** Working With Drawings (EXERCISES)**

a) Handout (Paper Sizes)	8/21	8/28
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2) INTRODUCTION TO LINES (Reading)

<u>Read Chapter 3 (Page 82)</u> <u>AutoCAD and its Applications</u>	8/21	8/28
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*** Introduction to Lines (EXERCISES)**

a) Handout (Summer)	8/21	8/28
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3) POINT ENTRY METHODS (Reading)

<u>Read Chapter 3 (Pages 87-90)</u> <u>AutoCAD and its Applications</u>	8/24	8/28
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* Point Entry Methods (EXERCISES)

a) Problem #7, Page 101 <u>AutoCAD and its Applications</u>	8/24	8/28
a) Problem #12, Page 103 <u>AutoCAD and its Applications</u>	8/24	8/28
c) Problem #14, Page 104 <u>AutoCAD and its Applications</u>	8/24	8/28

Week Three

Week of 8/31

READING SCALES (Reading)

Read Chapter 3 (Pages 35-38) <u>Print Reading for Engineering And Manufacturing Technology</u>	8/31	9/8
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* Reading Scales (EXERCISES)
Print Reading for Engineering
And Manufacturing Technology

a) Handout #1 (Stations)	8/31	9/8
b) Handout #2 (Stations)	8/31	9/8
c) Problem 3-1, Page 47 (Scale:1"=10')	8/31	9/8
d) Problem 3-2, Page 47 (Scale:1"=20')	8/31	9/8
e) Problem 3-3, Page 47 (Scale:1"=1")	8/31	9/8
f) Problem 3-4, Page 47 (Scale:Metric (mm) Millimeters)	8/31	9/8
g) Problem 3-6, Page 48 (Scale:3/8"=1')	8/31	9/8

h) Problem 3-7, Page 48 8/31 9/8
(Scale:1"=50')

2) Introduction to Print Reading (Reading)

Read Chapter 4 (Pages 52-57) 8/31 9/8
Print Reading for Engineering
And Manufacturing Technology

* Reading Letters and Lines on a Drawing (Exercises)

a) Worksheet(Alphabet of Lines) 8/31 9/8
b) Problem 4-1 (Page 61) 8/31 9/8
(#3-11)
Print Reading for Engineering
And Manufacturing Technology

Week Four

Week of 9/8

1) INTRODUCTION TO OSNAPS (OBJECT SNAPS) (Reading)

Read Chapter 7(Pages 195-206) 9/8
AutoCAD and its Applications

* Osnap (EXERCISES)

a) Problem #4, Page 215 9/8 9/14
AutoCAD and its Applications
b) Problem #10, Page 218 9/8 9/14
AutoCAD and its Applications

2) BASIC SHAPES (Reading)

Read Chapter 4 (Pages 105-125) 9/8
AutoCAD and its Applications

* BASIC SHAPES (EXERCISES)

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|-------------------------------------|-----|-----|
| a) Problem #1, Page 127 | 9/4 | 9/9 |
| <u>AutoCAD and its Applications</u> | | |
| b) Problem #4, Page 129 | 9/4 | 9/9 |
| <u>AutoCAD and its Applications</u> | | |

Week Five

Week of 9/14

1) BASIC EDITING AND VIEW COMMANDS (Reading)

Read Chapter 12 (Pages 327-345) 9/8
AutoCAD and its Applications

Read Chapter 14 (Pages 371-382) 9/8
AutoCAD and its Applications

* BASIC EDITING AND VIEW (EXERCISES)

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|-------------------------------------|-----|------|
| a) Problem #7, Page 348 | 9/8 | 9/15 |
| <u>AutoCAD and its Applications</u> | | |
| b) Problem #12, Page 388 | 9/8 | 9/15 |
| <u>AutoCAD and its Applications</u> | | |
| c) Problem #19, Page 392 | 9/8 | 9/15 |
| <u>AutoCAD and its Applications</u> | | |

2) EDIT SELECTION METHODS

* EDIT SELECTION METHODS (EXERCISES)

a) Handout (Editing Selection Methods) 9/8 9/15

Week Six

Week of 9/21

1) * MORE EDITING - Array (Exercises)

Read Chapter 14 (Pages 378-382) 9/21
AutoCAD and its Applications

a) Wheel - Handout 9/21 9/28

2) DRAWING SET-UP AND SCALING CONCEPTS (Reading)

Read Chapter 2 (Pages 71-74) 9/21
AutoCAD and its Applications

* DRAWING SET-UP AND SCALING (EXERCISES)

a) Problem #1 - Handout 9/21 9/28

b) Problem #2 - Handout 9/21 9/28

c) Problem #3 - Handout 9/21 9/28

3) Begin Quarter One Project

Week Seven

Week of 9/28

1) LAYERING (Reading)

Read Chapter 5 9/28
Pages 142-154
AutoCAD and its Applications

* LAYERING (EXERCISES)

- | | | |
|-------------------------------------|------|------|
| a) Problem #9, page 173 | 9/28 | 10/5 |
| <u>AutoCAD and its Applications</u> | | |
| b) Handout - Layering | 9/28 | 10/5 |

2) INTRODUCTION TO TEXT (Reading)

Read Chapter 9(Pages 245-255) 9/28
AutoCAD and its Applications
Read Chapter 10(Pages 277-290) 9/28
AutoCAD and its Applications

* INTRODUCTION TO TEXT (EXERCISES)

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|-------------------------------------|------|------|
| a) Problem #6, page 282 | 9/28 | 10/5 |
| <u>AutoCAD and its Applications</u> | | |

Week Eight

Week of 10/5

1) INTRODUCTION TO DIMENSIONING (Reading)

Read Chapter 18(Pages 475-488) 10/5
AutoCAD and its Applications

* INTRODUCTION TO DIMENSIONING (EXERCISES)

a) Problem #2, page 489 <u>AutoCAD and its Applications</u>	10/5	10/12
b) Problem #10, page 493 <u>AutoCAD and its Applications</u>	10/5	10/12
c) Problem #12, page 693 <u>AutoCAD and its Applications</u>	10/5	10/12

2) 2-D Project Work

Week Nine

Week of 10/12

1) **PROJECT PRESENTATIONS**

2) **FINAL EXAM**

