



FUNDAMENTALS OF AUTOCAD

COURSE NUMBER MA172

INSTRUCTOR: Mr. Mark Pierce

MEETING TIME AND PLACE: Tuesday and Thursday 5:30pm to 8:00pm, at BHS room F-2

CONTACT INFORMATION: Phone 608-9013 Email: pad@mchsi.com

OFFICE: By appointment

COURSE SYLLABUS

I. COURSE OBJECTIVES: To provide the student with an appreciation of the capabilities and limitations of the AutoCAD program. Course topics include basic AutoCAD Level I and some Level II commands and functions, as well as practical applications.

Course Competencies

- Starting computer and opening AutoCAD
- 3D Home Architect
- Use and constructions for drawing in AutoCAD
- Save, edit and start new drawings
- Manage drawing using layers, color and linetypes
- Make basic Geometric shapes
- Complete Basic CAD drawings, with borders, text and dimensions
- Use Paper Space, and Model space
- Use and edit TEXT and TEXT styles
- Edit drawings with ERASE, COPY, EXTEND, TRIM, MIRROR, UNDO, REDO and MOVE commands
- USE Array, Modify and Hatch
- Use Grips, GRID, OSNAP, and Functions keys
- Plot drawings in A, B, C, and D sizes to correct scales
- Insert Blocks, Files and Raster images into drawings
- Create Blocks, Bitmaps and Wblocks
- Use Break, Chamfer, Fillet, Rotate, Scale, Trim, Extend, and Explode commands
- Create, Edit and use Attributes

II. PREREQUISITES: None.

III. TEXT: Engineering Drawing And Design

by David A. Madsen

Publisher: Thomson Delmar Learning; 4 edition (July 7, 2006)

ISBN-10: 1418029874

ISBN-13: 978-1418029876

OR

Alan Jefferis; David A Madsen Publisher: Thomson Delmar Learning;
4edition (©2005)

ISBN.13: 9781401867157

ISBN 10: 1401867154

IV. ATTENDANCE: Since a large portion of the material covered in the course is not in the referenced text, it is essential that students attend class regularly.

V. EVALUATION: Students will be evaluated and grades assigned based on their demonstrated knowledge of the subject matter and their ability to apply that knowledge to the solution of assigned problems. Mid-term exams will be scheduled at mid-term of the course and there will be class assignments. There will also be a comprehensive final exam. All notes and assignments will be assembled in a graded notebook.

The grading weight is as follows:

MID TERM	20%
FINAL EXAM	20%
NOTEBOOK	10%
DRAWING PROJECTS	50%
TOTAL	100%

Numerical scoring system and grade translation:

10 20 30 40 50 60 70 80 90 100

F D C B A A

VI. COURSE ORGANIZATION: Timeline is approximate and will be adjusted to meet the needs of the class.

WEEK	ASSIGNMENTS AND TOPICS
1-2	<input type="checkbox"/> Introduction to AutoCAD 2007 <input type="checkbox"/> Drawing Name TBD <input type="checkbox"/> Drawing Name TBD <input type="checkbox"/> Drawing Name TBD <input type="checkbox"/> Drawing Name TBD <input type="checkbox"/> File Saving <input type="checkbox"/> Back-up
3-4	<input type="checkbox"/> Draw Floor plan (3D Home Architect) <input type="checkbox"/> Text <input type="checkbox"/> Line Weight <input type="checkbox"/> Linetypes
5-6	<input type="checkbox"/> DXF and File Transfer <input type="checkbox"/> Draw Border and Title Block <input type="checkbox"/> Import Drawing to AutoCAD <input type="checkbox"/> Layers <input type="checkbox"/> Editing Commands <input type="checkbox"/> Mirror command
7-8	<input type="checkbox"/> Mid-Term 20% <input type="checkbox"/> Edit floor plan <input type="checkbox"/> Dimensioning <input type="checkbox"/> Begin Foundation Plan
9-10	<input type="checkbox"/> Array Commands <input type="checkbox"/> Query for area <input type="checkbox"/> Design Center (Blocks) <input type="checkbox"/> Edit floor plan and foundation plan <input type="checkbox"/> Dimension, Labels

- 11-12 **Section views**
- Offset
- Copy
- Projection
- Detailing section views**
- 13-14 **Section Drawing/ Exterior Elevation**
- Materials
- 15-16 **Complete Final Sheets of Architectural Drawing 50%**
- Notebook 10%**
- Cumulative Final 20%**

VII. COURSE CONTENTS: It is the student's responsibility to maintain and save all work produced in the class. A flash drive is a great investment.