

LABETTE COMMUNITY COLLEGE BRIEF SYLLABUS

SPECIAL NOTE:

This brief syllabus is not intended to be a legal contract. A full syllabus will be distributed to students at the first class session.

TEXT AND SUPPLEMENTARY MATERIALS USED IN THE COURSE (if any):

Please check with the LCC bookstore <http://www.labette.edu/bookstore> for the required texts for this class.

<u>COURSE NUMBER:</u>	DRAF 105
<u>COURSE TITLE:</u>	COMPUTER AIDED DRAFTING I (AutoCAD 2008)
<u>SEMESTER CREDIT HOURS:</u>	3
<u>DEPARTMENT:</u>	Drafting
<u>DIVISION:</u>	Workforce Education/Community Services
<u>PREREQUISITE:</u>	COMP 110 Computer Concepts and Applications or equal computer experience

COURSE DESCRIPTION:

This course will teach the student how to prepare engineering drawings using CAD software. The software is AutoCAD for Windows. The student will learn to be proficient in the use of the software, be able to take a picture on paper and convert it to an electronic copy. The student will be expected to develop acceptable skills in the use of CAD software. Some of the areas covered will be – use of software and hardware, drawing and object lines, editing commands, placing text on a drawing, drawing multiple entities, use of layers and line types, dimensioning, text editing and copying files to and from the computer.

COURSE OUTCOMES AND COMPETENCIES:

Students who successfully complete this course will be able to:

1. Learn AutoCAD commands.

- Understand the evolution of drafting from manual to computer aided drafting (CAD).
- Learn to use and understand the hardware utilized in CAD.
- Learn to draft using the commands found in AutoCAD software.
- Understand the User coordinate system.
- Use basic and advanced editing commands required for creating CAD drawings.
- Learn placement of views.
- Create and edit Layers, Linetypes and Colors.
- Apply and edit text in a drawing.
- Apply dimensions to a simple object.

2. Draw objects in electronic format.

- Learn to utilize the drafting commands to develop an electronic drawing of an object.
- Utilize absolute, relative and polar coordinate systems.
- Draw lines and arcs to draft objects in electronic format.
- Learn editing commands to modify objects.

3. Apply dimensions.

- Learn to apply dimensions to drawings utilizing the software.
- Understand the dimensioning commands.
- Learn baseline, ordinate, and chain dimensioning.
- Learn the components of dimensions.
- Learn basic dimension variables.
- Apply dimensions as recommended by the American National Standards Institute.
- Learn Multiview layout and plotting.

4. Apply text.

- Learn text commands to add annotations to the drawings.
- Create various text styles utilizing the Style command.

5. Learn AutoCAD advanced features.

- Learn the Layer creation and editing commands.
- Create Layer names.
- Associate linotypes to layers.
- Apply colors to layers.
- Manipulate layers to objects using a standard naming scheme.

6. Apply symbols.

- Learn to group objects.
- Learn to create symbols.
- Learn to insert and manipulate symbols in the form of blocks.

7. Create external references.

- Learn how to access Web sources.
- Learn Internet file handling.
- Learn how to use hyperlinks.
- Learn to publish to the Web.

8. Manage files.

- Learn how to remove unused data from a drawing.
- Understand the principles of file management.
- Learn how to use AutoCAD in a network environment.
- Learn how to exchange information between AutoCAD and other applications.
- Learn how to use object linking and embedding.

9. Learn Multiview layout and plotting.

- Learn multiview drawing layouts.
- Learn to layout drawing templates.
- Learn to use viewports.
- Learn plotting commands.
- Learn about model viewports.

10. Understand the evolution and hardware used in CAD.

- Develop an understanding of the evolution of CAD from manual drafting to computer-aided drafting.
- Understand the hardware needed to create CAD drawings.