

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.

COURSE NUMBER: DRAF 106

COURSE TITLE: Computer Aided Drafting II

SEMESTER CREDIT HOURS: 3

DEPARTMENT: Drafting

DIVISION: Workforce Education/Career Training/Personal Enrichment

PREREQUISITE: DRAF 105 Computer Aided Drafting I

COURSE DESCRIPTION:

This course will teach the student how to prepare engineering drawings using CAD software. It is a continuation of Computer Aided Drafting I. The software utilized will be AutoCAD for Windows. Basic AutoCAD commands will be reviewed. Advanced commands will be stressed. The course is designed for the person who has been exposed to a CAD system. More advanced methods will be utilized for the following functions; drawing lines, drawing objects, editing commands, text, layers, line types, dimensioning, and file management.

This course will provide them with exposure to most current version of AutoCAD software.

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 advanced 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 advanced 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 and be able to format them.
- 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 linetypes 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. 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.