

# IVY TECH COMMUNITY COLLEGE

## DESN 103, CAD FUNDAMENTALS

### SYLLABUS FALL 2013 (modified for remaining 8 weeks)

COURSE TITLE: CAD Fundamentals

COURSE NUMBER: DESN 103

PREREQUISITES: None

SCHOOL: Technology

PROGRAM: Design Technology

CREDIT HOURS: 3

CONTACT HOURS: Lecture: 2 Lab: 2

DATE OF LAST REVISION: Fall, 2013

Instructor: Richard Washburn Phone: (260) 480-4239 [rwashburn1@ivytech.edu](mailto:rwashburn1@ivytech.edu)

Office TC 1104 Hours: As Posted on office door

**CATALOG DESCRIPTION:** The purpose of this introductory course is to provide students with a basic understanding of the features and considerations associated with the operation of a computer-aided design (CAD) system. Students will gain valuable hands on experience using CAD software. They will be expected to complete several projects (increasing in difficulty) relating to command topics covered on a weekly basis.

**MAJOR COURSE LEARNING OBJECTIVES:** Upon successful completion of this course the student will be expected to:

1. Identify by name CAD hardware and software components.
2. Do commands for file management including format, copy, and delete.
3. Identify and use multiple input methods to select commands on the CAD system.
4. Retrieve and use help commands.
5. Create working 2D drawings.
6. Modify drawing elements using editing commands.
7. Retrieve and place multiple text styles.
8. Dimension a drawing using current drafting standards.

**COURSE CONTENT:** Topical areas of study include –

Objects	Layers
Setup	Styles
Formatting	Object modification
View characteristics	Printing/Plotting
Exporting	

### RECOMMENDED TEXT AND CURRICULUM MATERIALS

AutoCAD and its Applications. Shumaker, T. et. al. 19<sup>th</sup> Edition ISBN 9781605255613

Zip (Thumb) drive.

## **COURSE OUTLINE:**

### Week

- 9 Chapter 15
- 10 Multi-view drawings using projection lines, auxiliary views, template creation
- 11 Dimensioning Ch 16, 17 & 18. Multi-view drawings to include section views
- 12 GD&T Ch19, More multi-view drawings, Introduction of final project
- 13 Test 2, continue with Final Project
- 14 Final Project work
- 15 Final Project work
- 16 Final Project Due and Final Exam (which will include a drawing assignment)

Exact order of topics covered each week are at the discretion of the instructor.

## **EVALUATION**

In-Class Exercises	40%
Tests	20%
Final Project	25%
Final Exam	15%

A = 90% - 100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

#### HOW TO ACCESS THE IVY TECH COMMUNITY COLLEGE LIBRARY:

The Ivy Tech Library is available to students' on- and off-campus, offering full text journals and books and other resources essential for course assignments. Go to <http://www.ivytech.edu/library/> and choose the link for your campus.

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Students wishing to graduate from either the School of Applied Science and Engineering or the School of Technology, from Ivy Tech Community College Northeast must complete at least 12 semester hours of Management and/or Technical training. This requirement is concurrent with the college requirement that each student must complete 15 semester hours at this institution.

Students transferring to Ivy Tech Community College Northeast and entering the School of Applied Science and Engineering or the School of Technology must also meet the 12 semester hours of Management and/or Technical training. Credits considered for transfer may be from another Ivy Tech ATMAE accredited campus or obtained from an ATMAE accredited institution.