IVY TECH COMMUNITY COLLEGE DESN 103, CAD FUNDAMENTALS SYLLABUS FALL 2013

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: Summer, 2011 EFFECTIVE DATE OF THIS REVISION: Fall, 2013 Instructor Modified, 8/17/12 Instructor: David Cole dcole35@ivytech.edu Office TC 1101 Hours: M: 1pm - 2pm, W: 10am – 12pm, Th: 4pm – 6pm Dept Head; Erin Salyers 260-480-4203 esalyers@ivytech.edu TC 1123

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

<u>AutoCAD and its Applications</u>. Shumaker, T. et. al. 19th Edition ISBN 9781605255613 Zip (Thumb) drive.

COURSE OUTLINE:

Week

- 1 Introduction
- 2 Templates
- 3 Lines, Offset, Trim Zero Radius Fillet, Snap, Grid, Ch3, 11
- 4 Circles, Arc, Fillet, Chamfer, polygon Ch4, 11
- 5 Layers, Ch5 Plotting, Chapter 6 Test 1 Review
- 6 Object Snap, Chapter 7 TEST 1
- 7 Text Ch9, 10
- 8 Editing Ch12
- 9 TEST 2
- 10 Dimensioning Ch 16, 17 & 18 Start Final Project
- 11 Hatching Ch23
- 12 GD&T Ch19
- 13 Xrefs Ch31
- 14 Catch-Up
- 15 Final Project Due
- 16 Final Exam

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

EVALUATION

40%
20%
25%
15%

 $\begin{array}{l} A = 92\% \ - \ 100\% \\ B = 84\% \ - \ 91\% \\ C = 77\% \ - \ 83\% \\ D = 70\% \ - \ 76\% \end{array}$

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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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