



Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title - Basic Computer-Aided Drafting

Course Prefix and Number – DFTG 1409

Department - Engineering Design

Division - Technology/Business

Course Type: (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours #: Lecture Hours #: Lab/Other Hours #: 4:3:3

Equated Pay hours for course – 4.5

Course Catalog Description - An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinate systems, and plot/print to scale.

Prerequisites/Co-requisites - Must be TSI satisfied.

List Lab/ Other Hours
Lab Hours 3
Clinical Hours
Practicum Hours
Other (list)

Prepared by Jo Ann Shimek

Date 06/11/15

Reviewed by Department Head Jo Ann Shimek

Date 06/11/15

Accuracy verified by Division Chair: David Kucera

Date: 07/20/15

Approved by Dean or Vice President of Instruction: Leigh Ann Collins

Date: 12-18-15



I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

- Overview of computer work station components and introduction to system capabilities
- Coordinate system as it relates to a CAD environment
- Drawing "set-up" commands
- Drawing basic entities
- Edit, Modify, and Manipulate Commands
- Element selection methods
- Osnap and Snap Commands
- Polar Tracking/Direct Distance
- Block & Insert Commands
- Dimension Commands
- Inquiry Commands
- Plot Commands

II. Course Learning Outcomes

Learning Outcomes	Methods of Assessment
<p>Upon successful completion of this course, students will:</p> <p>Identify terminology and basic functions used with CAD software;</p> <p>Use CAD hardware and software to create, organize, display, and plot/print working drawings;</p> <p>Use file management techniques.</p>	<p>Daily Drawings/Lab Work Study Group/Daily Quizzes Four to Five Major Exams or Drawings Comprehensive Final Project</p> <p>(All drawings evaluated in terms of accuracy of drawing views, use of line types, line quality, dimensioning accuracy and placement and drawing organization.)</p>

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

Required: AutoCAD Tutor for Engineering Graphics by Kalameja/Lang

A flash drive is required for archiving data files

Note book to store notes and drawings.

IV. Suggested Course Maximum - 20

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

Computer work stations, plotters/printers, data projection system and appropriate software

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course

Daily Drawings/Lab Work to assure comprehension of drafting skills 30%

Study Group/Daily Quizzes covering daily reading assignments 10%

Four to Five Major Exams or Drawings covering individual topics 40%

Comprehensive Final Project 20%

Comprehensive Final Project will include creating a Title Block with layers, text styles and dimension styles and saving the drawing as a Template file. Use of the template file in the creation of multiple drawings evaluating students ability to use draw, edit and modify commands. Creation and insertion of blocks. Use of the hatch command. Accessing the drafting network to retrieve drawings. Completing accessed drawings by placing dimensions per ASME standards and using AutoCAD inquiry commands to answer specific questions. Plotting all drawings to a given scale. Submitting all project work as specified by the instructor.

Based on the above breakdown, grades will be awarded as perscribed by Wharton County Junior College Standards.

90% to 100% = A

80% to 89% = B

70% to 79% = C

60% to 69% = D

Below 60% = F

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed

- **Academic WCJC Core Course**
Attach the Core Curriculum Checklist, including the following:

- Basic Intellectual Competencies
- Perspectives
- Exemplary Educational Objectives

- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.