



**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** - DFTG1409

**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** -  $(3 + (3 * .5)) = 4.5$

**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.

List Lab/ Other Hours
Lab Hours <b>3</b>
Clinical Hours
Practicum Hours
Other (list)

**Prerequisites/Co requisites** - THEA reading requirement met or READ 0307

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**Date** 9-22-11

**Reviewed by department head** Jo Ann Lurker

**Date** 9-22-11

**Accuracy verified by Division Chair** David Kucera

**Date** 10-28-11

**Approved by Dean of Vocational Instruction or Vice President of Instruction** Lac

**Date** 11-9-12



**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
- Disk architecture and care
- Coordinate system as it relates to a CAD Workstation
- Introduction to the system capabilities
- Drawing "setup" commands
- Drawing basic entities
- Editing commands
- Element selection methods
- Osnap and Snap commands
- Positioning filters .X and .Y
- Zoom & Pan commands
- Transparent commands
- Manipulating commands
- Modify commands
- Block & Insert commands
- Dimension commands
- Inquiry commands
- Plot command

**II. Course Learning Outcomes**

Course Learning Outcome	Method of Assessment
Identify terminology and basic functions used with CAD software; use CAD hardware and software to create, display, and plot/print working drawings	A semester project will be assessed using the departmental rubric. Eighty percent of the students will earn a minimum of 70% of the points defined by the rubric.

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

Required - like AutoCAD Tutor for Engineering Graphics by Alan J. Kalameja; current AutoCAD version

A flash drive is required for archiving data files.

**IV. Suggested Course Maximum - 20**

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

Computer workstations, 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**

90% to 100%	= A
80% to 89%	= B
70% to 79%	= C
60% to 69%	= D
Below 60%	= F

The grade is based on the average of : written examinations, drawing projects and daily work as specified on course syllabus.

**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.