Wharton County Junior College

Course Information

Course Title	Basic Computer-Aided Drafting
Course Prefix, Num. and Title	DFTG1409: Basic Computer-Aided Drafting
Division	Technology and Business
Department	Engineering Design
Course Type	WECM Course
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.
Pre-Requisites	Must be TSI satisfied.
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours: Lab/Other Hours	4:3:3
Equated Pay Hours	4.5
Lab/Other Hours Breakdown: Lab Hours	3
Lab/Other Hours Breakdown: Clinical Hours	Enter Clinical Hours Here.
Lab/Other Hours Breakdown: Practicum Hours	Enter Practicum Hours Here.
Other Hours Breakdown	List Total Lab/Other Hours Here.

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and 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

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

Identify terminology and basic functions used with CAD software;
Use CAD hardware and software to create, organize, display, and plot/print working drawings;
Use file management techniques.

Methods of Assessment:

Daily Drawings/Lab Work
Study Group/Daily Quizzes
Four to Five Major Exams or Drawings
Comprehensive Final Project
(All drawings evaluated in terms of accuracy of drawing views, use of line types, line quality, dimensioning accuracy and placement and drawing organization.)

Required text(s), optional text(s) and/or materials to be supplied by the student:

An example is AutoCAD 2019 Instructor by Leach, Lockhart, Tilleson, - using layers, coordinate systems, and plot/print to scale.
A flash drive is required for archiving data files
Note book to store notes and drawings.

Suggested Course Maximum:

20

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

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

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%

Based on the above breakdown, grades will be awarded as prescribed 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

Note: A letter grade of "C" or above average must be achieved in all degree specific classes to attain graduation.

Curriculum Checklist:

☐**Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.

☐**Administrative WCJC Core Course**. Attach the Core Curriculum Review Forms

        ☐Critical Thinking

        ☐Communication

        ☐Empirical & Quantitative Skills

        ☐Teamwork

        ☐Social Responsibility

        ☐Personal Responsibility

☒**WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist