

Administrative Master Syllabus

Course Information

Course Title	Advanced Computer-Aided Drafting
Course Prefix, Num. and Title	DFTG 2432 Advanced Computer-Aided Drafting
Division	Technology and Business
Department	Engineering Design
Course Type	WECM Course
Course Catalog Description	Application of advanced CAD techniques. This will include database management, advanced skills in viewports and reference files, sheet sets, customized line types and hatch patterns and Autodesk Inventor.
Pre-Requisites	DFTG 2319
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	4:3:3
Lab/Other Hours	
Equated Pay Hours	4.5
Lab/Other Hours Breakdown: Lab Hours	3
Lab/Other Hours Breakdown: Clinical Hours	0
Lab/Other Hours Breakdown: Practicum Hours	0
Other Hours Breakdown	0

Approval Signatures

Title	Signature	Date
Division Chair:	David Kucera, Technology & Business Division Chair	09-22-2022



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).

- Customize Toolbars & Create Macros
- Advanced Skills in Viewports, Template Files and Reference Files
- Sheet Sets and Page Set-up
- Customized Linetypes and Hatch Patterns
- Database Design; dbConnect; SQL Basics
- Technical writing skills
- 3D modeling and output using Autodesk Inventor

Course Learning Outcomes:

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

- Utilize advanced technologies in computer-aided design; including animation, rendering, and 3D modeling and output.
- Use a customized CAD system to create documents and/or solid models;
- Use OLE with external software.
- Demonstrate use of AutoCAD sheets sets in multi-page set of drawings

Methods of Assessment:

Daily Drawings/Lab Work/Daily Quizzes

Four to Five Major Exams or Drawings

Class Discussion/Participation

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:

Required: Using Advanced AutoCAD (select author)

A flash drive is required for archiving data files

Notebook 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 workstations, plotters/printers, data projection system, and appropriate software



Wharton County Junior College

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/Daily Quizzes.. 25%
- Four to Five Major Exams or Drawings 35%
- Class Discussion/Participation 10%
- Final Project 30%

Final Project requires research into varied topics with team participation to produce drawings and documents on the individual team's topic. Emphasis is placed on individuals' ability to work within a group.

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