



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 - Computer-Aided Drafting Programming

Course Prefix and Number – DFTG 2436

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 - $3 + (3 \cdot .5) = 4.5$

Course Catalog Description - Use of programming language to enhance CAD software

Prerequisites/Co-requisites - DFTG 2419

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

Prepared by Jo Ann Shimek

Date 06/12/13

Reviewed by Department Head Jo Ann Shimek

Date 06/12/13

Accuracy verified by Division Chair David Kucera

Date 09/18/13

Approved by Dean or Vice President of Instruction Amy LaPan

Date 1/22/2014



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):

- Introduction to programming
- Introduction to AutoLISP syntax and rules
- Math operations
- Program documentation
- Program organization & logic
- Debugging tools and techniques
- Branching structures
- Looping structures
- Parsing techniques
- Accessing & manipulating the AutoCAD commands
- Modifying existing AutoCAD entities with AutoLISP

II. Course Learning Outcomes

Learning Outcomes	Methods of Assessment
<p>Upon successful completion of this course, students will:</p> <p>Write programs to enhance capabilities of the CAD system; and design and access databases to enhance the production of drawings.</p> <p>The student will demonstrate the mastery of AutoLISP fundamentals and programming conventions by successfully completing assigned projects</p> <p>The student will demonstrate the mastery of AutoLISP fundamentals by successfully writing programs that will enhance AutoCAD productivity by successfully completing assigned projects.</p>	<p>Four to Five Major Exams/Programs 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.

Text Book Not Required

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

Four to Five Major Exams/Programs

Final Project

Tests and Final Project all equally weighted - 100%

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.