



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 - Final Project- Advanced Drafting

Course Prefix and Number – DFTG 2338

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 # **3:1:4**

Equated Pay hours for course - 3

Course Catalog Description - A drafting course in which students participate in a comprehensive project from conception to conclusion.

The course is focused on learning experiences based on actual industry projects in selected fields, completed independently or with teams, and in consultation with the instructor. This is the capstone course for the Associate of Applied Science Degree in Engineering Design.

Prerequisites/Co-requisites – DFTG 2319 and approval of Program Director

List Lab/ Other Hours
Lab Hours 4
Clinical Hours
Practicum Hours
Other (list)

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Date 06/11/15

Reviewed by Department Head Jo Ann Shimek

Date 06/11/15

Accuracy verified by Division Chair: David Kucera

Date: 07/15/15

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):

The purpose of this course is to provide in-depth opportunities for students to work with each other and the instructor allowing students the opportunity to complete real-world drafting projects that includes a wide range of experience in the selected drafting field.

Initial focus will be on:

- Development of job search techniques
- Resume' writing
- Creation of a professional portfolio

Additional career related areas of study will integrate problem solving and related drafting technologies to provide students with specialized learning experiences. Group dynamics will also be explored.

Possible topics covered but not limited to:

Advanced areas of study in:

- Civil Design
 - GIS
 - Mapping
 - Sewage/water system
 - Soil Analysis
 - Surveying
- Architectural Concepts
 - 3D Architectural projects
 - Landscape design including pool layout
- Piping Design
 - Petroleum production Process
 - Instrumentation
- Manufacturing applications
 - Measuring
 - GDT
 - Design concept to submit for patent
- Technical writing
 - Bidding Documents
 - Contract Writing
 - Ordering supplies and material
- Project Management
 - Group/Teamwork Tactics
- Rivit
- Structural Design
- Environmental affects on design and materials

The goal of the course is to simulate the work environment so lab for DFTG2338 will be self or group paced. The instructor will provide new material and tools with students required to complete assignments per instructor deadlines. This setting will provide opportunities for students to work with each other in a cooperative manner.

II. Course Learning Outcomes

Learning Outcomes	Methods of Assessment
<p>Upon successful completion of this course, students will:</p> <p>Conceptualize, design and present a complete project in a prescribed discipline. Integrate problem solving and related technologies to identify solutions; use discipline specific industry standards, and produce documentation.</p>	<p>Three or Four Drawing/Research Type Projects One Research Project Class Discussion/Participation</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.

Optional; text books used in previous drafting classes as reference.

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

All projects weighted equally - 90%
 Class Discussion/Participation - 10%

One (1) multi-page written research paper.
 Research into varied topics generated by class discussions.

Multiple drawing/research/investigation projects that include documentation done independently or with team participation.

Individual Projects: Emphasis will be on quality and completeness of work and meeting submission dead lines.

Team Projects: Emphasis will be on quality and completeness of work and meeting submission dead lines, as well as ability to work within a group to produce drawings and data.

Field trips may be required as part of the investigation projects.

Group participation will be required on BlackBoard or in-person.

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.