



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 - Technical Drafting

Course Prefix and Number – DFTG 1405

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 – 4.5

Course Catalog Description - Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections and auxiliary views.

Prerequisites/Co-requisites - DFTG1409; Must be TSI satisfied.

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

Prepared by Jo Ann Shimek

Date 06/11/15

Reviewed by Department Head Jo Ann Shimek

Date 06/11/15

Accuracy verified by Division Chair: David Kucera

Date: 07/20/15

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):

- Freehand lettering for technical sketches
- Freehand sketching
- Drafting Terms Recognition/Identification
- Orthographic projection: manual and CAD
- Isometric projection: manual and CAD
- Section views: manual and CAD
- Auxiliary views: manual and CAD
- Dimensioning Techniques: manual sketches and CAD drawing conventions

II. Course Learning Outcomes

Learning Outcomes	Methods of Assessment
<p>Upon successful completion of this course, students will:</p> <p>Create technical sketches, geometric constructions, orthographic projections, pictorial/sectional views, dimension drawings and apply lettering techniques.</p>	<p>Daily Drawings/Lab Work Study Group/Daily Quizzes Four to Five Major Exams or Drawings Comprehensive Final Project</p> <p>(All drawings evaluated in terms of accuracy of drawing views, use of line types, line quality, dimensioning accuracy and placement, neatness and lettering skills.)</p>

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

Required: A text covering the technical material covered in this course. An example would be, Technical Drafting by Frederick E. Giesecke et al..

Manual drafting equipment.

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.

Manual drafting table. Mechanical drafting arm or Tee square. 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

Daily Drawings/Lab Work to assure comprehension of drafting skills 15% to 20%

Study Group/Daily Quizzes covering daily reading assignments 25%

Four to Five Major Exams or Drawings covering individual topics 35% to 45%

Comprehensive Final Project 20% to 25%

Comprehensive Final Project will include measuring to scale, drawing in proper orthographic and isometric projections, completing a section view and placing dimensions per ASME standards.

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% = B

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.