



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 - Solid Modeling/Design

Course Prefix and Number - DFTG 2440

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 - $(3 + (3 * .5)) = 4.5$

Course Catalog Description - A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work.

Prerequisites/Co requisites - DFTG2419

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

Prepared by Jo Ann Lurker

Date 10-20-11

Reviewed by department head Jo Ann Lurker

Date 10-20-11

Accuracy verified by Division Chair David Kucera

Date 10-28-11

Approved by Dean of Vocational Instruction or Vice President of Instruction Lac

Date 11-9-12



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):

- An overview of the software interface
- 3D coordinates
- 3D View Control
- Sketches
- 3D Modeling Tools
- Annotating & Dimensioning
- Assemblies

II. Course Learning Outcomes

Course Learning Outcome	Method of Assessment
Create three-dimensional solid model objects; and generate pictorial and orthographic drawings.	A semester project will be assessed using the departmental rubric.

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

A textbook, such as Autodesk Inventor 2012 Essentials Plus by Daniel T. Banach et al.

Flash drive for archiving data files

IV. Suggested Course Maximum - 20

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

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

- 90% to 100% = A
- 80% to 89% = B
- 70% to 79% = C
- 60% to 69% = D
- Below 60% = F

The grade is based on the average of : drawing projects, tests on factual data and daily work as specified in the course rubric.

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.