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 - Specialized Basic Computer Aided Drafting
Course Prefix and Number – DFTG 1410
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 - A supplemental course to Basic Computer Aided Drafting using an alternative computer-aided drafting (CAD) software to create detail and working drawings

Prerequisites/Co-requisites – Must be TSI satisfied.

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):

Computer work station components
Operating System Basics: Data security, Disk and Folder Navigation, and Data management
Overview of the MicroStation interface
Creating New Drawing Files: Use of Seed Files and Working Units
Basic Drawing Tools
Basic Editing Tools
AccuDraw operations
Selection Tools: Select Element, PowerSelect, Select By Attributes and Fence
Fence Operations
Graphic Groups
Locks
Level Management
Model Management
Text Tools and Operations
Dimensioning Tools and Techniques
Cells and Patterning
Reference Files

II. Course Learning Outcomes

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<thead>
<tr>
<th>Learning Outcomes</th>
<th>Methods of Assessment</th>
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<tr>
<td>Upon successful completion of this course, students will:</td>
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<td>Create, organize, display, and plot/print working drawings using an alternative computer-aided CAD software; and use file management techniques.</td>
<td>Daily Drawings/Lab Work</td>
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<td>Four to Five Major Exams or Drawings</td>
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<td>Comprehensive Final Project</td>
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<td>(All drawings evaluated in terms of accuracy of drawing views, use of line types, line quality, dimensioning accuracy and placement and drawing organization.)</td>
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III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

Required: Text Covering MicroStation Fundamentals such as Harnessing MicroStation V8, by Krishnan & Taylor

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

Daily Drawings/Lab Work/Daily Quizzes to assure comprehension of drafting skills 35%
Four to Five Major Exams or Drawings covering individual topics 35%
Comprehensive Final Project 30%

Comprehensive Final Project will include creating a Title Block with levels, text styles and dimension styles in a specified seed file. Drawing creation will reinforce students ability to use draw, edit and modify commands. Creation and insertion of cells and use of the hatch/pattern command will be included in the project. Drawings will be complete with dimensions placed per ASME standards. All Drawings will be plotted to a given scale. All project work will be submitted as specified by the instructor.

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

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.