

Administrative Master Syllabus

Course Information

Course Title	Introduction to Technical Drawing
Course Prefix, Num. and Title	DFTG1405: Introduction to Technical Drawing
Division	Technology & Business
Department	Engineering Design
Course Type	WECM Course
Course Catalog Description	An introduction to reading, interpreting, and developing technical drawings, including the principles of drafting and computer-aided design.
Pre-Requisites	None
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	4:3:3
Lab/Other Hours	
Equated Pay Hours	4.5
Lab/Other Hours Breakdown: Lab Hours	3
Lab/Other Hours Breakdown: Clinical Hours	0
Lab/Other Hours Breakdown: Practicum Hours	0
Other Hours Breakdown	0

Approval Signatures

Title	Signature	Date
Department Head:	Haydee Ruiz, Engineering Design Program Director	11-16-2023
Division Chair:	David Kucera, Technology & Business Division Chair	11-16-2023
VPI:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and 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

Students in this class may be required to participate in a Field Trip/Outside the Classroom Learning Experience.

Course Learning Outcomes:

Learning Outcomes – Upon successful completion of this course, students will:

Read, interpret, and develop technical sketches and drawings, lettering techniques, annotations, scales, line types, line weights, geometric construction, orthographic projections, pictorial views, sectional views, dimension drawings, calculations, and measurements.

Identify terminology and basic functions used with 2D and 3D computer-aided design software.

Methods of Assessment:

Daily Drawings/Lab Work

Study Group/Daily Quizzes

Four to Five Major Exams or Drawings

Comprehensive Final Project

(All drawings evaluated in terms of accuracy of drawing views, use of line types, line quality, dimensioning accuracy and placement, neatness and lettering skills.)

Required text(s), optional text(s) and/or materials to be supplied by the student:

A text including 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 and a notebook to store notes and drawings.

Suggested Course Maximum:

20

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

Must be able to use hand drafting tools and computer mouse.

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 = 15% to 20%

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

Comprehensive Final Project = 20% to 25%

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%..... = F

Note: A letter grade of "C" or above average must be achieved in all degree specific classes to attain graduation.

Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course** – Attach the Core Curriculum Review Forms
 - Critical Thinking
 - Communication
 - Empirical & Quantitative Skills
 - Teamwork
 - Social Responsibility
 - Personal Responsibility
- WECM Course** – If needed, revise the Program SCANS Matrix and Competencies Checklist