Technical Drafting (DFTG 1305)

Credit: 3 semester credit hours (2 hours lecture, 4 hours lab)

Prerequisite/Co-requisite: None

Course Description

An introduction to the principles of drafting to include terminology and fundamentals, size and shape descriptions, projection methods, geometric construction, sections and auxiliary views.

Required textbook and materials

1. *Technical Drawing* by Giesecke, Mitchell, Spencer, Hill, Dygdon & Novak, Pearson Prentice Hall
    a. ISBN number is 13:978-0-13513527-3
2. Drafting kit and paper
3. Notebook and paper

Course Objectives

Upon completion of this course, the student will be able to:

1. Demonstrate an understanding of geometric construction and various view selections
2. Principles of working drawings
3. Competency in drafting principles in plane geometry
4. Technical sketching
5. Orthographic projection theory and practice
6. Auxiliary views
7. Competency in sectioning, dimensioning and tolerancing

Course outline

1. Introduction
    a. Introduction of faculty and staff
    b. Review syllabus
    c. Review class policies
    d. Review lab assignment
2. Equipment, lettering and scales
    a. Equipment and scales
    b. Lettering
3. Geometric construction
    a. Basic geometric construction exercises
4. Basic single view drawing
    a. Create single view drawings

5. Sketching
    a. Sketching techniques
6. Three view drawing
    a. Multi-view projections
    b. Dimensioning techniques
7. Isometric, Auxiliary and section
    a. Create isometric views
    b. Create auxiliary views
    c. Create section views
8. Final project
    a. Comprehensive project
    b. Sketching three views with dimensions
    c. Draw details
    d. Draw isometric drawing
    e. Draw pictorial drawing

Grade Scale

90-100	A
80-89	B
70-79	C
60-69	D
0-59	F

Course Evaluation

Final grades will be calculated according to the following criteria:

Activity	Percentage
Assignments	20%
Drawings	30%
Participation	10%
Test and notebook	20%
Final	20%
Total	**100%**

Late penalties will be assessed on all work turned in late, 5 points per day.

Course requirements

1. Read chapters and complete reviews
2. Study handouts
3. Complete drawings
4. Attend class and take notes from lectures

Attendance Policy (all work during absence must be made up)

1. 5 absences allowed – 4 tardies are equivalent to 1 absence
2. 2 points per absence off final grade after 5 initial absences

Course Policies

1. No food, drinks or use of tobacco products in class.
2. No foul or harsh language will be tolerated.
3. Turn off all cell phones during lectures.
4. Headphones may be worn only upon instructor approval.
5. Do not bring children to class.
6. No cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result in expulsion from LIT.
7. If you wish to drop a course, the student is responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course you will earn an "F" in the course.
8. Backups
    a. It is the student's responsibility to make back-up copies of their work. Do not rely on the server to be there 100% of the time. I cannot help you if you lose your work. Remember that in order for your work to be graded it must be turned in.
9. Internet usage
   Classroom computers have access to the internet.
    1. Student usage of the internet will be monitored.
    2. Proper usage of the internet will be allowed to be used for classroom research or as directed.
    3. Any unauthorized use of the internet will not be tolerated.
    4. Improper usage of the internet, such as profanity, pornography, gambling, etc. will result in disciplinary action not limited to expulsion from LIT.

Disabilities Statement

The Americans with Disabilities Act of 1992 and section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services in the Cecil Beeson Building.

Course Schedule

Week	Topic	Reference
1	Course introduction and policies a. Lecture b. Lab: equipment practice	Handouts
2	Equipment and lettering a. Lecture b. Lab: lettering technique c. Project: as assigned	Chapters 1, 2 Handouts
3/4	Geometric construction a. Lecture	Chapters 3, 4 Handouts

	b. Lab: construct shapes to make drawing c. Project: as assigned	
5/6/7	Single view drawing a. Lecture b. Lab: chapter exercises c. Project: as assigned	Chapters 5, 6, 7 Handouts
8/9	Sketching a. Lecture b. Lab: chapter exercises c. Project: as assigned	Chapters 8, 9, 10 Handouts
10/11	Three view drawing a. Lecture b. Lab: chapter exercises c. Project: as assigned	Chapters 11, 12 Handouts
12/13	Dimension a. Lecture b. Lab: chapter exercises c. Project: as assigned	Chapters 13, 14 Handouts
14/15	Pictorial a. Lecture b. Lab: as assigned	Chapters 15, 16 Handouts
16	Final project a. Lecture b. Lab: chapter exercises c. Project: as assigned	

Contact information

Contact info varies per instructor

Refer to Calendar for important dates and course schedules!