Technical Drafting (DFTG 1305)

Prerequisite/Co-requisite: None

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



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 with Engineering Graphics by Giesecke, Lockhart, Goodman, Johnson Pearson Prentice Hall
 - a. ISBN number is 13:978-0-134306414
- 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

- A. Introduction
 - 1. Introduction of faculty and staff
 - 2. Review syllabus
 - 3. Review class policies
 - 4. Review lab assignment
- B. Equipment, lettering and scales
 - 1. Equipment and scales
 - 2. Lettering
- C. Geometric construction
 - 1. Basic geometric construction exercises
- D. Basic single view drawing
 - 1. Create single view drawings
- E. Sketching
 - 1. Sketching techniques

- F. Three view drawing
 - 1. Multi-view projections
 - 2. Dimensioning techniques
- G. Isometric, Auxiliary and section
 - 1. Create isometric views
 - 2. Create auxiliary views
 - 3. Create section views
- H. Final project
 - 1. Comprehensive project
 - 2. Sketching three views with dimensions
 - 3. Draw details
 - 4. Draw isometric drawing
 - 5. Draw pictorial drawing

Course Evaluation

Varies per instructor

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)

Varies per instructor

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. Back-ups

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

- a. Classroom computers have access to the internet.
- b. Student usage of the internet will be monitored.
- c. Proper usage of the internet will be allowed to be used for classroom research or as directed.
- d. Any unauthorized use of the internet will not be tolerated.
- e. 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 online resource:

http://www.lit.edu/depts/stuserv/special/defaults.aspx

Student Code of Conduct Statement

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu or obtained in print upon request at the Student Services Office.

Supplemental Instruction

Supplemental Instruction (SI) consists of group tutoring sessions conducted once a week for 50 minutes for selected subjects. The SI Leader is a peer who helps students learn difficult content in those specific courses. The SI Leader attends the class with the students to keep up with the course content and engage students in interactive learning strategies at the 50 minute sessions. For this course, the supplemental instruction session will be held on "day" at "time" in "bldg/room".

Starfish

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.



Contact information

Contact info varies per instructor

Refer to Calendar for important dates and course schedules!