

Master Course Syllabus

Department: Engineering Technology **Course Prefix/Number:** IT 105

Official Course Title: Principals of Drafting

Master Syllabus Approved by Department on: 05 / 11 / 05
month date year

I. **Catalog Description:**

An introduction to mechanical drafting involving geometrical constructions, orthographic projection, dimensioning techniques, sectional views, auxiliary views, isometric views, and other topics related to manufacturing and other areas of drafting. Lab fee \$10.

II. **Prerequisites:** None

III. **Expanded Course Description**

This course serves as the one of the foundations courses for the engineering technology department. Emphasis will be placed on lab experience using a cad system to create geometrical constructions, orthographic projection, dimensioning techniques, sectional views, auxiliary views, isometric views.

IV. **Intended Student Learning Outcomes:** Upon completion of the course, students will be able to:

1. Describe differences between mechanical drawing and sketching
2. Describe the role of the engineer on a design team
3. Explain features most common in cad software.
4. Create proportional freehand sketching using correct sketching techniques
5. Apply basic principles of geometric construction to create necessary geometry.
6. Draw the six standard views of an object
7. Draw any three views of an object using proper conventions, placement, and alignment.
8. Describe and apply first and third angle projection
9. Transfer height, width, and depth between orthographic views.
10. Understand the meaning and properly apply section and cutting plane lines.
11. Create auxiliary view from standard orthographic views.
12. Construct partial auxiliary views
13. Identify and discuss current and future manufacturing processes
14. Use conventional dimensioning techniques to describe size and shape accurately on an engineering drawing.

V. Unless otherwise stipulated in this master syllabus by the department, the following items are subject to faculty discretion as described in each faculty member's individual course outline/syllabus:

- a) Course Requirements? (grading/evaluation procedures; class attendance policy;

term papers, projects, field assignments; examinations; class participation, etc.)

b) Required Text(s)?

c) Bibliography?

- VI. Academic Honesty: Cheating, plagiarism (submitting another person's materials or ideas as one's own), or doing work for another person who will receive academic credit are all-impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were the student's own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.
- VII. Students With Disabilities Policy: It is the policy of Tarleton State University to comply with the Americans with Disabilities Act (ADA) and other federal, state, and local laws relative to the provision of disability services. Students with disabilities attending Tarleton State University may contact the Office of Disability Services at (254) 968-9478 to request appropriate accommodation. Furthermore, formal accommodation requests cannot be made until the student has been officially admitted to Tarleton State University.

Department Head Signature/Date:

Signature

_____/_____/_____
Date