

Angelina College
Technology and Workforce Division
TECHNICAL DRAFTING SYLLABUS DFTG 1405
Instructional Syllabus

I. BASIC COURSE INFORMATION

- A. Course Description: *(as stated in the bulletin, including necessary pre-requisite courses, credit hours)*
Four hours credit. Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, and auxiliary views, and reproduction processes. Two lecture and four lab hours each week. Lab fee.
- B. Intended Audience:
Freshman
- C. Instructor:
Name: Robert Foley
Office Location: Rm: E 211
Office Hours: As Posted or by prior appointment
Phone: 936-630-4175
E-mail Address: rfoley@lufkinisd.org

II. INTENDED STUDENT OUTCOMES:

- A. **Core Competencies – (Basic Intellectual Competencies)**
- 1. Critical Thinking Skills** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
 - 2. Empirical and Quantitative Skills** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
 - 3. Teamwork** to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
- B. **Course Objectives for all sections –**
1. Create technical sketches, and geometric constructions.
 2. Create geometric constructions, orthographic projections, and pictorial/sectional views.
 3. Create dimension drawings, and apply lettering techniques.
 4. Develop analytic and critical thinking skills relevant to the applied problems studied.
 5. Master the terminology associated with technical drawings.

III. ASSESSMENT MEASURES OF STUDENT LEARNING OUTCOMES:

- A. **Assessments for the Core Intellectual Competencies –**
- 1. Critical Thinking Skills** to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
 - 2. Empirical and Quantitative Skills** to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
 - 3. Teamwork** to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
- B. **Assessments for the Exemplary Objectives–**
Not applicable for courses in the Technology & Workforce Division.
- C. **Assessments for Course Objectives for all sections –**
1. Create technical sketches, and geometric constructions.
 2. Create geometric constructions, orthographic projections, and pictorial/sectional views.
 3. Create dimension drawings, and apply lettering techniques.
 4. Develop analytic and critical thinking skills relevant to the applied problems studied.
 5. Master the terminology associated with technical drawings..
- D. **Assessments for the Course Objectives as determined by the instructor –**
Not applicable for courses in the Technology & Workforce Division.

IV. **INSTRUCTIONAL PROCEDURES:**

- A. **Methodologies common to all sections**
 - B. Lecture - 30 hours
 - C. Guided problem solutions in class - 58 lab hours
 - D. Tests - 8 hours
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- B. **Methodologies determined by the instructor**
 - 1. Overhead projector
 - 2. Film strips
 - 3. Marker Board
 - 4. Models

V. **COURSE REQUIREMENTS AND POLICIES:**

- A. **Required Textbooks, Materials, and Equipment** – Text: "Technical Drawing" by Giesecke
- A. Equipment: Drawing equipment required for this course should be of good quality.
 - 1. 1 Large bow compass
 - 2. 1 8" 45 triangle
 - 3. 1 12" 30-60 triangle
 - 4. 1 Circle template
 - 5. 1 Lettering guide
 - 6. 1 Lead holder (.5 mm, .7 mm)
 - 7. 1 Erasing shield
 - 8. 1 Engineers scale
 - 9. 1 Architects scale
- B. Supplies: Supplies will need to be replaced periodically.
 - 1. Drawing leads F, H, 2H, 3H
 - 2. Eraser- plastic
 - 3. Drafting tape
 - 4. Pounce bag
 - 5. Drafting paper(as assigned)
- B. **Assignments** – *(Appropriate due dates, schedules, deadlines)*
 - 1. Unit assignments - 24
 - 2. Unit tests - 4
 - 3. Final exam
- C. **Course Policies – (This course conforms to the policies of Angelina College as stated in the Angelina College Handbook.)**

Educational Accommodations – If you have a disability (as cited in Section 504 of the Rehabilitation Act of 1973 or Title II of the Americans with Disabilities Act of 1990) that may affect your participation in this class, you may fill out the Educational Accommodations application within your AC Portal, under the "Student Services" tab. A Student Success team member will contact you once the application is received. At a post-secondary institution, you must self-identify as a person with a disability in order to receive services; for questions regarding the application process you can visit the Office of Student Success and Inclusion in the Student Center (205A); text 936.463.8078; or email access@angelina.edu. To report any complaints of discrimination related to a disability, you should contact Mr. Steve Hudman, Dean of Student Affairs, in Room 101 of the Student Center. You may also contact Dean Hudman by calling (936) 633-5292 or by emailing shudman@angelina.edu.

Attendance –Attendance is required as per Angelina College Policy and will be recorded every day. Any student with three (3) consecutive absences or four (4) cumulative absences may be dropped from the class, this does not include absences for college-authorized activities, but it does include absences for illness. Attendance records will be turned in to the College Records Office at the end of the semester. Do not assume that non-attendance in class will always result in an instructor drop. You must officially drop a class or risk receiving an F. This is official Angelina College Policy.

Student's Responsibility For Attendance-(This is official Angelina College Student Handbook Policy)

1. It is the responsibility of the student to attend all classes and a record of attendance will be kept for all classes by the instructor.
2. It is the responsibility of the student to withdraw officially in the College Records Office from a class the student no longer desires to attend. Failure to do so may result in a failing grade.
3. Excessive absences are defined as three or more consecutive absences or four or more cumulative absences. Absences in online courses are based on an equivalent participation formula.
4. Students will not be dropped and will be allowed to make up work for absences because of college authorized and sponsored activities. It is the student's responsibility to arrange for make-up work with the instructor and to complete it within a reasonable time.
5. A student dropped because of excessive absences will be directed to seek the approval of the instructor to be reinstated.
6. All make-up work is at the discretion of the instructor and is defined in the course syllabus.

Additional Policies Established by the Individual Instructor –

Assignments are due on the date specified. Assignments turned in late will not receive full credit.

Test must be taken on the scheduled date. Special arrangements must be made before the day of the test for exceptions covered in the college catalog.

VI. COURSE CONTENT:

A. Required Content/ Topics – *(common to all sections)*

Emphasis will be on developing a quality drafting and lettering technique during the completion of guided problem solutions.

B. Additional Content *(as required by the individual Instructor)*

A. Unit assignments will be evaluated on:

1. Accuracy
2. Neatness
3. Form

B. Unit test:

1. Each unit test has a value of 100%.
2. Partial credit for problems may be awarded.

C. Final exam:

1. The final will cover material since the first unit test.
2. The final will be comprehensive only with regard to concepts and terms which form a basis for the subject matter.

VII. EVALUATION AND GRADING:

A. Grading Criteria *(percents, extra credit, etc.)*

1. Lab problems - 50%
2. Unit tests - 40%
3. Final exam - 10%

To receive credit for unit tests and final exams, they must be taken at the designated location and in the presence of the instructor

B. Determination of Grade *(assignment of letter grades)*

- | | | |
|-------------|---|---|
| 1. 90 - 100 | - | A |
| 2. 80 - 89 | - | B |
| 3. 70 - 79 | - | C |
| 4. 60 - 69 | - | D |
| 5. Below 60 | - | F |

VIII. SYLLABUS MODIFICATION:

The instructor may modify the provisions of the syllabus to meet individual class needs by informing the class in advance as to the changes being made.

- IX.** As a student enrolled in a Technology & Workforce program, you will encounter certain risks while you are in a classroom, laboratory experience, or in a clinical or practicum setting. In the event that you sustain an injury and/or require any medical testing or care, all resulting medical expenses (hospital, ambulance, or physician fees), are your financial responsibility and not the responsibility of Angelina College or the clinical/practicum site.

ATTACHMENT A

COURSE: Technical Drafting - DFTG 1405

COMPETENCIES AND TASKS:

- 1 Letter freehand to latest ANSI standards
 - 1.1 Letter vertical uppercase letters
 - 1.2 Letter the numbers 0-9
 - 1.3 Letter common fractions

2. Geometric Construction Draw
 - 2.1 Draw Straight Lines
 - 2.2 Draw Angles
 - 2.3 Draw Circles
 - 2.4 Draw Tangencies
 - 2.5 Draw Shapes

3. Sketch orthographic drawings
 - 3.1 Sketch one-view drawings
 - 3.2 Sketch two-view drawings
 - 3.3 Sketch three-view drawings
 - 3.4 Sketch six-view drawings

4. Construct orthographic projection drawing using tools
 - 4.1 Draw one-view drawings
 - 4.2 Draw two-view drawings
 - 4.3 Draw six-view drawings

5. Construct auxiliary views
 - 5.1 Construct primary auxiliary views
 - 5.2 Construct secondary auxiliary views

6. Axonometric projection
 - 6.1 Draw isometrics

7. Dimensioning/Notes
 - 7.1 Dimension with proper techniques
 - 7.2 Dimension with proper conventions

8. Construct section views
 - 8.1 Interpret and apply section symbols
 - 8.2 Draw section drawings

ATTACHMENT B

COURSE: Technical Drafting - DFTG 1405

COURSE CONTENT:

- 1 Lettering
 - 1.1 Uppercase
 - 1.2 Numbers
 - 1.3 Fractions

2. Geometric Construction
 - 2.1 Straight lines
 - 2.2 Angles
 - 2.3 Circles
 - 2.4 Tangencies
 - 2.5 Shapes

3. Orthographic sketching
 - 3.1 One-view
 - 3.2 Two-view
 - 3.3 Three-view
 - 3.4 Six-view

4. Orthographic projection drawings
 - 4.1 One-view
 - 4.2 Three-view
 - 4.3 Six-view

5. Auxiliary views
 - 5.1 Primary
 - 5.2 Secondary

6. Axonometric projection
 - 6.1 Isometric

7. Dimensioning/Notes
 - 7.1 Techniques
 - 7.2 Conventions

8. Section views
 - 8.1 Conventions
 - 8.2 Drawings

COURSE NUMBER/NAME: DFTG 1405 TECHNICAL DRAFTING

WEEK	TOPICS	READING ASSIGNMENTS	PROBLEM ASSIGNMENT
1	Introduction/Lettering/Tools	as assigned	as assigned
2	Introduction/Lettering/Tools	as assigned	as assigned
3	Introduction/Lettering/Tools	as assigned	as assigned
4	Unit Test 1	N/A	N/A
5	Orthographic projection - Tools	as assigned	as assigned
6	Orthographic projection - Tools	as assigned	as assigned
7	Orthographic projection - Tools	as assigned	as assigned
8	Unit Test 2	N/A	N/A
9	Axonometric projection	as assigned	as assigned
10	Axonometric projection	as assigned	as assigned
11	Axonometric projection	as assigned	as assigned
12	Unit Test 3	N/A	N/A
13	Dimensioning/Notes	as assigned	as assigned
14	Dimensioning/Notes	as assigned	as assigned
15	Sections	as assigned	as assigned
16	Final Exam	N/A	N/A