

COURSE INFORMATION

COURSE PREFIX/NO: **EGT 114**
COURSE TITLE: **Welding Print Basics**
LEC HRS/WEEK: 2.0
LAB HRS/WK: 0.0
CREDIT HRS/SEMESTER: 2.0

DL ATTENDANCE/VA STATEMENT
TEXTBOOK INFORMATION

COURSE DESCRIPTION:

An introduction to basic blueprint reading, including layout, projection and dimensioning. The student should be able to make sketches of certain geometric shapes and be able to orthographically project these shapes. He should be able to read and interpret shop drawings for application in his field of study.

COURSE COMPETENCIES:

Upon successful completion of this course, the student should be competent to perform the following tasks:

- Identify lines, symbols, views, dimensions, and tolerances
- Translate title block information
- Apply mathematics to determine lengths, widths, heights, differences, products, and sums
- Make freehand sketches and orthographic drawings of objects showing necessary views

MINIMAL STANDARDS/PERFORMANCE OBJECTIVES:

- Given a technical drawing, the student will identify lines and orthographic views, via oral or written tests, with 70% accuracy.
- Given a technical drawing of an object, the student will identify views, via oral or written tests, with 70% accuracy.
- Given a technical drawing of an object, the student will identify the uses of unilateral and bilateral dimensions, via oral or written tests, with 70% accuracy.
- Given a technical drawing of an object, the student will identify size and location dimensions and the symbols which are associated with dimensioning, via oral or written test, with 70% accuracy.
- Given a technical drawing of an object, the student will apply tolerances to all dimensions with 70% accuracy.
- Given a technical drawing of an object, the student will identify elements of a thread specification and the symbols associated with these, via oral or written tests, with 70% accuracy.
- Given assigned exercises, the student will convert dimensions given in U.S. customary units to the metric system, via oral or written tests, with 70% accuracy.

- Given a technical drawing of an object, the student will identify various types of section views, via oral or written tests, with 70% accuracy.
- Given an object, the student will make freehand orthographic, oblique, and isometric sketches with 70% accuracy.

COURSE REQUIREMENTS:

Students are responsible for attaining competencies through completion of the following course requirements:

ATTENDANCE

Students will be bound by the policies stated in the York Technical College Student Handbook. Students must attend 80% of the hours assigned the class for a semester to receive credit for the course.

In case a student does miss a class, the student is responsible for obtaining the material that was covered during the absence.

If a student is aware that a class will be missed, then the student should notify the instructor at the earliest possible date.

If a student misses a test because of illness or urgent emergency, it is the responsibility of the student:

Notify the instructor prior to the class period, or at the earliest possible date. At that time a new date for a make up test can be scheduled.

Students with unexcused absences during tests will be allowed to take a make up test at the discretion of the instructor.

The student has the burden to be sure that some arrangement was made with the instructor for taking a make up test.

PARTICIPATION IN CLASS DISCUSSIONS:

COMPLETING ASSIGNED HOMEWORK, DRAWINGS AND TESTS

ACADEMIC HONESTY:

"York Technical College adheres to the South Carolina TECH Student Code, approved by the State Board for Technical and Comprehensive Education on March 13, 1974 (revised last April 25, 1984). Copies of this code are available in the Library and from Student Services. ...Any student caught cheating or involved in any other academic dishonesty will be given a grade of zero and will be subject to further disciplinary action."

EVALUATION CRITERIA/GRADING:

The grading scale as follows:

Grade Points

A 90 - 100

B 80 - 89

C 70 - 79

D 60 - 69

F 0 - 59

Evaluation Method:

Tests (minimum of 3) 100%

ENTRY LEVEL SKILLS:

It is recommended that the student entering this course have an appropriate understanding of shop math. Mechanical aptitude and an interest in industrial mechanics is desirable.

PREREQUISITES:

None

CO-REQUISITES:

None

TOPIC/CONTENT OUTLINE:

- A. Interpretation of Blueprints
- B. Lines and Views
- C. Dimensions, Tolerances, and Notes
- D. Metric System
- E. Sections
- F. Welding Drawings
- G. Numerical Control Drawing Fundamentals
- H. Computer Graphics
- I. Sketching and Lettering

METHODS OF INSTRUCTION:

The instructor will discuss the principles introduced in each chapter. The instructor will demonstrate progressive skills of blueprint reading and sketching to the student using chalkboard, examples, and slides shown on a screen.