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**COURSE PREFIX/NO:** EGT 212  
**COURSE TITLE:** Machine Tool Print Topics  
**LEC HRS/WEEK:** 2.0  
**LAB HRS/WEEK:** 0.0  
**CREDIT HRS/SEMESTER:** 2.0

[Distance Learning Attendance/VA Statement](#)  
[Textbook Information](#)

### **COURSE DESCRIPTION**

This course covers print reading related to machine tool specialization with emphasis on sketching and interpreting appropriate symbols, notes, and codes.

### **COURSE COMPETENCIES**

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

- Interpret views
- Identify dimensions and surfaces
- Identify and interpret the specifications of drilling
- Compute the unknown dimensions of the male and female dove tail machine surfaces
- Interpret the representation of screw threads and terminology
- Interpret the point-to-point dimensioning method
- Interpret the Datum Dimensionary method

### **MINIMAL STANDARDS/PERFORMANCE OBJECTIVES**

- Given a blueprint of the "Slide Value", the student will interpret the sectional views and identify dimensions and surfaces with a 70% accuracy. The student will also complete the question set provided with a minimum of 70% accuracy.
- Given a blueprint of the "Index Pedestal", the student will interpret the arrangement of different views and complete the question set provided with a minimum of 70% accuracy.
- Given a blueprint of the "Spider", the student will interpret the A-A, B-B, C-C and the D-D section and complete the question set provided with a minimum of 70% accuracy. The student will also identify the section where the "Spider" is assembled together with 100% accuracy.
- Given a blueprint of the "Raise Block", the student will locate and interpret the partial section and the cutting planes and complete the question set provided with a minimum of 70% accuracy.
- Given a blueprint of the "Spark Adjuster", the student will interpret the blueprint and complete the question set provided with a minimum of 70% accuracy.
- Given a blueprint of the "Yoke", the student will interpret the three views of the Yoke, make a free hand sketch of Section A-A and complete the question set provided with a minimum of 70% accuracy.
- Given a blueprint of the "Spindle Bearing", the student will indicate which cutting plane line that each view is taken from and complete the question set provided with a minimum of 70% accuracy.

- Given a blueprint of the "Case Cover", the student will interpret the representation of screw threads and terminology and complete the question set provided with a minimum of 70% accuracy.
- Given a blueprint of the "Separator Bracket", the student will identify and interpret the specification of drilling, boring and spot facing by completing the question set provided with a minimum of 70% accuracy.
- Given a blueprint of the "Shuttle", the student will compute the unknown dimensions of the male and female dove tail machine surfaces and complete the question set provided with a minimum of 70% accuracy.
- Given a blueprint of the "Trip Box", the student will complete the question set provided with a minimum of 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 90% of the hours assigned the class for a semester to receive credit for the course.

In case a student misses a class, the student is responsible for obtaining the material that was covered during the absence. If a student is aware that he/she will miss class, then the student should notify the instructor at the earliest possible date. If a student misses a test because of illness or urgent emergency, then he/she should do the following:

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 will be scheduled. Students with unexcused absences during test time will be allowed to take a make-up test at the instructor's discretion. The student has the burden of making sure that some arrangement was made with the instructor to take 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 of Technical and Comprehensive Education on March 13, 1974 (revised 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."

### **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.

**EVALUATION CRITERIA/GRADING:**

The grading scale is 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 showing interest in industrial mechanics is desirable.

**PREREQUISITE:** EGT 128

**CO-REQUISITES:** None

**Disability Statement:** Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Office (SRO) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.

**TOPIC/CONTENT OUTLINE:**

- A. Principles of Projection
- B. Relative Position of Views
- C. Symbols Representing Finished Surfaces
- D. Views of Objects with Multiple Parts
- E. Types of Section Drawings
- F. Untrue Projection
- G. Distorted Views
- H. Baseline Dimensioning
- I. Point-to-Point Dimensioning
- J. Auxiliary Views