

# PRINT READING & MEASUREMENT

## SCOTT COUNTY SERIES

### COURSE SYLLABUS



Total Time: 18 Hours

Schedule: Six Three-Hour Classes

Textbook: Machine Trades Printreading, 3<sup>rd</sup> Ed, Thomas E. Proctor, J. David Holloway, Jonathan F. Gosse, ISBN 978-0-8269-1881-9 (Required)

Course Description: Print Reading and Measurement Tools will examine various techniques for representing three-dimensional objects in two-dimensional drawings. Included are common components and how each is specified on the print and an overview of dimensioning and tolerancing methods. Also included is a review of the measurement tools technicians frequently encounter and how they are used. ANSI requirements are referenced throughout the material.

Course Learning Outcome: Students will be able to better navigate and interpret mechanical machine drawings and determine specifications of parts displayed on prints using common measurement tools.

Course Learning Objective: Following oral and written instructions, the student will demonstrate an understanding of the following:

- 1) Print Production – Types of Prints
- 2) Print Specifications – Paper Sizes, Basic Formats
- 3) ANSI – Standards and Requirements
- 4) Multiview Drawings – Orthographic Projection, Principal Views, Projection Systems
- 5) Line Conventions – Cutting Lines, Hidden Lines, Arrows, etc.
- 6) Surfaces and Features – Edges, Corners, Holes
- 7) Sectional and Auxiliary Views – Primary and Secondary
- 8) Measurement Systems – Units and Unit Conversion
- 9) Measuring Tools – Precision Measurements
- 10) Dimensioning and Tolerancing – Methods, Feature Characteristics

Evaluation Method: The following evaluation methods will be used in the classroom:

- 1) Attendance
- 2) Participation in classroom activities and homework
- 3) Written evaluations

