Prerequisites: MAC 131
Corequisites: None

This course covers the interpretation of intermediate blueprints. Topics include a review of Geometric Dimensioning and tolerances, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret intermediate blueprints. Course Hours per Week: Class, 1. Lab, 2. Semester Hours Credit, 2.

b. Interpret dimensioning standards.

c.

A. Terminology
B. Surface Texture Symbols
C. Lay Symbols
D. Measuring Surface Texture

V. Violations of True Projection
A. Rotated or Aligned Projection
B. Untrue Projection
C. Untrue Projection of Sections

VI. Special Views
A. Partial Views
B. Distorted Views
C. Bottom Views
D. Phantom Lines and Views

VII. Positional Dimensioning
A. Point to Point Dimensioning
B. Datum Dimensioning

VIII. Geometric Tolerances: Datums and Modifiers
A. Terminology
B. Basic Dimensions
C. Datums
D. Datum Plane
E. Datum Cylinder
F. Datum Axis
G. Datum Targets
H. Datum Identification Symbol
I. Feature Control Symbols
J. Feature Control Frame

IX. Geometric Tolerances: Form, Orientation, Profile, Runout, and Location
A. Modifiers
B. Form, Profile, and Orientation Tolerances
C.

D.

F. Machine Bolts
G. Nuts
H. Stud Bolts
I. Washers
J. Threaded Fastener Size
K. Screw and Bolt Specification

XII. Pipe Threads

A. American National Standard Pipe Threads
B. Tapered Pipe Threads
C. Straight Pipe Threads
D. Representation of Pipe Threads
E. Specification of Pipe Threads

XIII. Identifying Steels

A. AISI and SAE Systems

XIV. Dovetails

A. Description of Dovetails
B. Measuring Dovetails

XV. Casting

A. Sand Molding
B. Flat Back Patterns
C. Coring

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A standard calculator is REQUIRED for this course.