

**Course Objectives/Course Outline**  
**Spokane Community College**

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**Course Title:** Blueprint Reading

**Prefix and Course Number:** MACH 106

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**Course Learning Outcomes:**

**By the end of this course, a student should be able to:**

- Interpret blueprints and sketches
- Interpret symbols and dimensions
- Identify the types of lines common to the alphabet of lines
- Interpret pictorial view according to ANSI standards
- Identify pictorial views as to specific dimensions or part sizes
- Identify the classifications of tolerances and their applicability
- Determine dimensions and tolerances
- Identify and interpret external screw thread specifications
- Calculate specified measurements
- Identify the tolerances for different classes of fits
- Utilize the SI metric system
- Interpret ANSI and ISO symbols
- Identify the type, characteristics and symbols used in geometric dimensioning and tolerancing

**Course Outline:**

- I. Lines
  - A The Alphabet of Lines
  - B Hidden Lines and Center Lines
  - C Projections Lines, Other Lines and Line Combinations
- II. Views
  - A Three View Drawings
  - B Arrangement of Views
  - C Two View Drawings
  - D One View Drawings
  - E Auxiliary Views
- III. Dimension and Notes
  - A Size and Location Dimensions
  - B Dimensioning Tolerances
- IV. Trade specific symbols
  - A Basic Welding symbols
  - B Basic Electrical symbols
  - C Basic HPAT symbols
  - D Basic HVAC symbols