

Course Objectives/Course Outline
Spokane Community College

Course Title: Blueprint V

Prefix and Course Number: MACH 220

Course Learning Outcomes:

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

- Explain the various types of casting processes
- Identify types of coatings that may be applied to parts and their dimensional effect
- Identify welding symbols on drawings and understand their meaning

Course Outline:

- I. Welding Symbols.
 - A. Bead
 - B. Fillet
 - C. Bevel
 - D. All-around, field weld.

- II. SCREW THREADS.
 - A. Screw Thread Forms.
 - B. Screw Thread Specifications.
 - C. Screw Thread Representation.
 - D. Pipe Threads.
 - E. Threaded Fasteners.

- III. GEARS.
 - A. Spur Gears and Splines.
 - B. Bevel Gears.
 - C. Worm Gears

- IV. CASTING.
 - A. Sand Casting.

- V. PART COATINGS AND PLATINGS.
 - A. Anodization
 - B. Powder coating
 - C. Electroless Nickel
 - D. Chemical Film
 - E. Black Oxide
 - F. Passivation