Course Objectives/Course Outline
Spokane Community College

Course Title: Manufacturing Processes & Precision Measuring
Prefix and Course Number: CAD 246

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

- Have a thorough understanding of such manufacturing techniques as:
  - Casting processes
  - Hot and cold working
  - Powder metallurgy
  - Machining methods
  - Joining processes

- Demonstrate knowledge and application of both manual and electronic precision measuring tools

Course Outline:
I. Primary Manufacturing Processes
   a. Casting Processes
   b. Hot and Cold Working
   c. Machining Methods
   d. Joining Processes
   e. Fabrication/Jigs & Fixture

II. Secondary Manufacturing Processes
   a. Powder Metallurgy
   b. Plastics
   c. Corrosion and Protection

III. Dimensions, Tolerance, and Precision
   a. Reading Engineering Drawings for Dimensions and Tolerances
   b. Determine Measuring Tools and Units Required for Fabrication Methods

IV. Instrument Reading
   a. Non-Precision Measuring Instruments
   b. Precision Measuring Instruments and gages
   c. Electronic/Digital Measuring Equipment