



**COGNITIVE DOMAIN:** Knowledge; what graduates will know.

*Knowledge and Comprehension*

- ◆ Accurately identify methodologies about the multiple machining systems and explain the purpose regarding the exercise
- ◆ Exhibit an understanding of hammers, pliers, wrenches, punches and measuring tools like rulers, calipers and dial indicators
- ◆ Comprehend shop math regarding whole numbers, fractions, decimals, tolerances, angles, and trigonometry
- ◆ Understand metrology and metallurgy

*Application*

- ◆ Effectively interpret drawings to build mechanical parts, components of mechanical systems, and mechanisms
- ◆ Exhibit machine shop processes, as well as basic and advanced material design

*Analysis, Synthesis & Evaluation*

- ◆ Assess the proper dimensioning and tolerance techniques of machined components and techniques
- ◆ Use critical thinking that will assist in fabrication, and research and development for the service industry
- ◆ Illustrate blue print reading, and set up of manual and CNC machine operation

**AFFECTIVE DOMAIN:** Attitude; growth in feelings or emotional areas

- ◆ Attracted to the machining discipline
- ◆ Creative tendency
- ◆ Inquisitive nature
- ◆ Self-motivated
- ◆ Ability to meet deadlines
- ◆ Capable of making decisions without constant supervision
- ◆ Be a lifetime student (keep up-to-date with technology)

**PSYCHOMOTOR DOMAIN:** Skills; manual or physical

- ◆ Produce finished machined parts that meet specifications
- ◆ Assemble prototype models of mechanical components before making it in math production
- ◆ Use measuring instruments to assess and evaluate performance in designing prototype devices used in mechanical equipment or used as a tool
- ◆ Program and set up CNC milling and lathe machines for designed product production