PIKES PEAK STATE COLLEGE
Machining Technology

Master Course Syllabus
MAC 1021: Intermediate Milling Machine

Purpose of Document
This document contains important information about this course's objectives. It may be helpful for you to retain a copy for your records, along with the class specific syllabus. This document will be especially helpful if you decide to later change your course of study.

Pikes Peak State College and the Colorado Department of Higher Education have determined that graduates should have a broad range of learning skills as well as discipline related skills. Both types of skills are detailed below.

Course Description
Prepares students to determine hole locations by coordinates and degrees, use a rotary table, use a jig bore to drill holes by the coordinate method, and work within plus or minus .001 inch tolerance.
Credit Hours: 3
Contact Hours: 67.5 (Lecture/Lab Combination)

Required Course Learning Outcomes
I. Demonstrate the use of the rotary table for laying out a hole Pattern (r-q Coordinate System).
II. Explain and demonstrate the use of the x/y coordinate system for laying out a hole pattern on a vertical mill and a jig borer.
III. Demonstrate boring on the vertical mill to a tolerance of .001 inch on location and size.
IV. Demonstrate boring on the jig borer to a tolerance of .001 inch on location and size.
V. Demonstrate use of a digital readout in the English and metric systems.
VI. Explain the use of the zero function on a digital readout.
VII. Use a digital readout in drilling, tapping, reaming, and boring.

Required Topical Outline
I. Hole location: Hole location using x/y and r/q coordinate systems
II. Boring: Boring on the vertical mill and jig borer
III. Digital readouts: digital readouts as used in milling, drilling, and boring