Sinclair Community College
444 E. Third St.
Dayton, OH 45402

Master Syllabus

CAM 1141 - Shop Floor Calculations I

Division: Science, Mathematics and Engineering

Department:

Credit Hour Total: 3.0 **Lecture Hrs:** 2.0 **Lab Hrs:** 2.0

Prerequisite(s): DEV 0022 OR DEV 0072

Date Revised: October 2013

Course Description:

This course applies the principles of arithmetic, algebra and geometry to situations encountered in the machining industry. Two classroom, two lab hours per week.

General Education Outcomes:

- Critical Thinking/Problem Solving

Course Outcomes:

Calculations
Apply the principles of arithmetic, algebra, and geometry to correctly solve problems encountered in the machining industry.

Assessment Method: Locally developed exams
Performance Criteria: 70% of students will earn 70% or higher on exams.

Measuring Instruments
Demonstrate the ability to correctly use the measuring instruments of the machining industry.

Assessment Method: Locally developed exams
Performance Criteria: 70% of students will earn 70% or higher on exams.

Geometric Construction
Demonstrate the ability to correctly use the geometric construction fundamentals to correctly layout a workpiece for machining.

Assessment Method: Locally developed exams
Performance Criteria: 70% of students will earn 70% or higher on exams.

Outline:

Basic computing with a scientific calculator
English and metric units of measure
Tolerance, clearance, and interference
Use of measuring instruments; steel rules, micrometers, calipers, height gages, gage blocks, etc.
Direct and indirect proportion
Fundamental geometric constructions