

**HURON SCHOOL DISTRICT
HURON HIGH SCHOOL
32044 HURON RIVER DR
NEW BOSTON, MI 48164
734-782-1436**

Course Name: MACHINE TRADES
Course Number: 06248
Course Credit: 3 HRS
School Year: 2009/2010
Instructor: Gerald (CHIP) Greene II

Course Description: MACHINE TRADES/MANUFACTURING TECHNOLOGY

Course Objectives: Career Pathways to Manufacturing and the Machining Industries

Introduction to and operation of machines commonly found in entry level Machine Shops

All aspects of shop safety

Mathematic concepts found in industry and application to projects

Project completion

Measurement and layout techniques and application to projects

Blueprint reading and formulation of a manufacturing order to completion

Maintenance and care of equipment

Tool and cutter identification

Calculation of feeds and speeds for proper machine operation

Student Competencies:

Lathe operation and setup

Mill operation and setup

Drill press operation and setup

Layout and design parts

Conversion of fractions to decimals

Read and interpret dial calipers and micrometers and drawings

Safety inspections

Safety concepts

Required Text: Machine Tool Technology Repp/McCarthy

References & Other Resources: Machinery Handbook, classroom **and** reference Library

Course Advisory Committee:

Mark Lewkowitz, Landis Machine
Jerry Devola, AAI
Steve March, AAI
Ted Szendorn, AAI
Len Puch, Speed Cult Industries
Robert Kulick, Kulick Enterprises
Larry Franzel, Future Tool
Nick Reid, Mrs. Reid
Justin Scheffler, Mrs. Scheffler
Travis Tuma, Mrs. Tuma

Class Assignments: Mill Project 1, 2, 3, Lathe Project 1, 2, 3, Layout techniques and assembly of finished projects

Final Exam: Competency based exam in measurement and production. 20% of final grade

Class Policies:

Safety attitude and actions
No speaking out of turn
No turning in work not of your own making
Proper attire at all times

Evaluation & Grading:

Grades are entered as projects and competencies are completed
Grades are given for work in progress as required (WIP)
Grade will be given for shop maintenance and clean-up
Grading Scale:
100-98 A+
97-93 A
92-90 A-

89-87 B+
86-83 B
82-80 B-
79-77 C+
76-73 C
72-70 C-
69-67 D+
66-63 D
62-60 D-
59- E

Course Outline: Introduction: class rules, safety concepts and safety test.
Careers and Career Cruising/aptitude.
Machine Demonstrations, Tooling I.D. and projects.
Completion, Layout, Measurement and tests.
On going projects and skills testing for retention.

Articulation Agreements:
Henry Ford Community College
Monroe County Community College
Wayne County Community College