

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Machine Shop Practical III
CODE NO. : MCH259 **SEMESTER:** 3
PROGRAM: Mechanical Programs
AUTHOR: Cam Pucci cam.pucci@saultcollege.ca
DATE: Sept./07 **PREVIOUS OUTLINE DATED:** Sept./06
APPROVED:

DEAN **DATE**
TOTAL CREDITS:
PREREQUISITE(S): MCH143, MCH144, MCH145
HOURS/WEEK:

Copyright ©2007 The Sault College of Applied Arts & Technology
Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited.
For additional information, please contact
School of
(705) 759-2554, Ext.

I. COURSE DESCRIPTION:

This course will continue to build on the study of shop machines, with emphasis on the use of milling machines. Students will be required to plan, design and build projects as approved by the professor using tools, machinery and skills learned previously. Students will be placed into work groups simulating the work environment. Planning and Supervisory skills will be learned and practiced along with team skills to complete the required projects.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Review shop safety policy

Potential Elements of the Performance

- Examine potential new shop safety hazards
- Examine equipment lock-out procedures
- Examine potential safety concerns
- Identify whims labels needed
- Identify other safety issues that arise

This class will help in correcting simple safety hazards by developing Student work groups that focus on needed issues as guided by professor.

2. Set up and operate milling machines.

Potential Elements of the Performance

- Describe how milling machines operate
- Set up and operate horizontal and vertical milling machines
- Perform various cutting, drilling, and boring operations on milling machines
- Make the needed calculations for milling functions
- Point out safety precautions that must be followed

3. Design, develop, draw, and make group projects using machine shop tools, equipment and shop.

Potential Elements of the Performance:

- Form student work groups that simulate the work environment in an actual shop
- Develop a project that can be built in the shop
- Build the project using resources available

This project will be approved by the professor and suitable to be built in the school. Students will form into work groups sharing various responsibilities such as supervisor, planner, designer, tradesman ect.

Students will continue to build confidence in using various shop tools and equipment by using all shop equipment in the work project.

III. TOPICS:

1. Review shop safety policy
2. Milling Machines
3. Develop shop projects

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Machining Fundamentals and work book, calculator, paper, Safety clothing , CSA work boots, safety glasses, work gloves,

Note: Absolutely no jewelry worn in shop.

Long hair must be kept in a safety net

Other safety concerns will be discussed by professor.

V. EVALUATION PROCESS/GRADING SYSTEM:

Tests/final exam: 50%

Projects: 40%

Participation, attendance ,attitude: 10%

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the	

	requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

<include any other special notes appropriate to your course>

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.