

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 Engineering Technician

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DATE: June 2009 **PREVIOUS OUTLINE DATED:** Sept 2008

APPROVED:

<i>“Corey Meunier”</i>	_____
CHAIR	DATE

TOTAL CREDITS: 3

PREREQUISITE(S): MCH143, MCH144, MCH145

HOURS/WEEK:

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For additional information, please contact Corey Meunier, Chair
School of Natural Environment, Technology & Skilled Trades
(705) 759-2554, Ext. 2610

I. **COURSE DESCRIPTION:**

This course will continue to build on the study of shop machines, with emphasis on the use of all the machines in the shop. 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

- Identify and correct any shop safety hazards
- Practice equipment lock-out procedures
- Identify and apply 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 all machines used in the shop.***

Potential Elements of the Performance

- Safely operate all milling machines
- Safely operate all lathes
- Safely operate horizontal grinder
- Safely operate all drilling machines

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 etc. 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. Set up and operate all machines used in the shop.
3. Develop shop projects

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- **Machining Fundamentals textbook and workbook**
- **Scientific calculator**
- **High Cut (8") Safety Boots (CSA approved)**
- **Impact Resistant Safety Glasses (CSA approved)**
- **Coveralls or Shop Coat (not mandatory, but recommended to protect clothing)**
- **Hair net required when hair is below collar length (hair may also be put up underneath a ball cap)**

Please Note:

Students are expected to wear safety equipment in the shop; failure to do so will result in denial to work in the shop on that occasion. While working in the shop do not wear rings, exposed jewelry or shorts.

No Cell Phones are Permitted in The Classroom or Shops

V. EVALUATION PROCESS/GRADING SYSTEM:

<i>Projects:</i>	<i>80%</i>
<i>Participation, Housekeeping</i>	<i>20%</i>
<i>Attendance</i>	<u>-1%</u> (per Unexcused Hour) (late = 1 hour)
<i>Total</i>	<i>100%</i>

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	
A	80 – 89%	4.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
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:

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.

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.

Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

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

Disability Services:

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

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*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade “C”, (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. 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.

Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations, in addition to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to <https://my.saultcollege.ca>.

Electronic Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.