

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.

CELL PHONES MUST NOT BE USED IN THE SHOP**V. EVALUATION PROCESS/GRADING SYSTEM:**

<i>Projects:</i>	<i>70%</i>
<i>Participation, Cooperation</i>	<i>20%</i>
<i>Attendance 90%</i>	<i>10%</i>
Total	100%

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.

VII. PRIOR LEARNING ASSESSMENT:

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

VIII. ADVANCE CREDIT TRANSFER:

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.