# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# **SAULT STE. MARIE, ONTARIO**



# **COURSE OUTLINE**

COURSE TITLE: MACHINE OPERATIONS

SEMESTER: CODE NO.: MTF133 TWO

PROGRAM: METAL FABRICATION TECHNICIAN

& WELDING TECHNIQUES

AUTHOR: Steve Witty

INSTRUCTOR: George Corcoran

DATE: January PREVIOUS OUTLINE January

2017 DATED: 2016

APPROVED: "Corey Meunier"

Jan 2016

**DATE** 

TOTAL CREDITS: TWO

PREREQUISITE(S): NIL

HOURS/WEEK: **TWO** 

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For additional information, please contact Corey Meunier, Chair School of Technology & Skilled Trades

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#### I. COURSE DESCRIPTION:

Use fabrication equipment for forming plate and structural shapes in accordance with government safety regulations, manufacturer's recommendations and approved industry standards.

#### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

# 1. Describe operation and maintenance of common fabrication equipment.

- Plate shears
- Iron worker
- Drills
- Band saws
- Benders
- Chop Saw

# 2. Select and demonstrate functions of common fabrication machinery and their safety systems.

- Plate shears
- Drill presses
- Band saws
- Safe retrieval of drops and marking piece/part number
- Safety systems
- Applicable codes and manufacturer's recomendations

### III. TOPICS:

- 1. MACHINE OPERATION AND MAINTENANCE
- 2. MACHINE FUNCTIONS AND SAFETY

#### IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- Impact Resistant Safety Glasses (CSA Approved)
- High Cut ( 6 inch min ) Safety Work Boot ( CSA Approved)
- Weld Gloves (CSA Approved)
- IPT Metal Trades Handbook

#### V. EVALUATION PROCESS/GRADING SYSTEM:

### **NOTES:**

- 1. Late hand in penalties will be 10% per day. Assignments will not be accepted past one week late unless there are extenuating and legitimate circumstances.
- 2. If a student misses a test/lab he/she must have a valid reason (i.e. medical or family emergency documentation shall be required). In addition, the instructor MUST be notified PRIOR to the test or lab sitting. If this procedure is not followed the student will receive a mark of zero on the test/lab with no make-up option.
- 3. Re-writes are NOT allowed for any written assignment, quiz or test.
- 4. Repeats are NOT allowed for any shop test.
- 5. Course attendance is mandatory. One percent (1 %) per hour will be deducted from the final course grade for unexcused\* absence.

#### Valid reasons would include:

- Doctor's note
- Family Death or Serious Illness supported by a written note.

## Part 2 Final Course Grades:

The final course grade will be determined by means of the following list of weighted factors:

Factor	Value
Shop Assignments	100%
Drill Press	16%
Band Saw	16%
Plate Shear	16%
Chop Saw	16%
Iron Worker	36%
Attendance	-1% per Unexcused Hour
Late	-1% per Late
Shop Clean-up	-1% per Incident

The following semester grades will be assigned to students:

		Grade Point
Grade	<u>Definition</u>	Equivalent
A+	90 – 100%	4.00
Α	80 – 89%	4.00
В	70 - 79%	3.00
С	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.	
Χ	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:

Cell phones not permitted in lab areas.

# 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.

#### VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.