SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE:	Work Practices & Procedures		
CODE NO. :	MSE220 and MSE716	**SEMESTER:**	TWO
PROGRAM:	Motive Power Fundamentals – Small Engine Repair (5084) Small Engine Mechanic – Level 2 Apprenticeship (6091)		
AUTHOR:	Gord Strachan		
DATE:	January 2014	**PREVIOUS OUTLINE DATED:**	January 2013

APPROVED:

"Corey Meunier"

CHAIR **DATE**

TOTAL CREDITS: TWO

PREREQUISITE(S):

HOURS/WEEK:

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

I. COURSE DESCRIPTION:

Upon successful completion of the reportable subject, the student is able to interpret and prepare drawings and schematics and perform welding procedures in accordance with government regulations, approved Industry standards and equipment manufactures'' recommendations.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Interpret Drawing and Schematics Fundamentals.

Potential Elements of the Performance:

- Create freehand sketches using isometric and orthographic protection techniques.
- Perform operations in order to calculate linear and angular measurements.
- Use mechanical technology and practices to interpret mechanical working drawings.

2. Perform Welding Procedures.

Potential Elements of the Performance:

- Define the essential information and set up and safety procedures for the SMAW, TIG and MIG welding equipment.
- Describe the function and construction features of SMAW (ARC), TIG and MIG welding equipment.
- Explain the safe principles of operation of SMAW (ARC), TIG and MIG welding equipment.
- Perform SMAW (ARC), TIG and MIG welding procedures.
- Describe the manufacturers' system maintenance procedures of ARC, TIG and MIG welding equipment and perform assigned operations.

III. TOPICS:

1. Drawing and Schematic Fundamentals
2. Welding

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Title: Understanding the Outboard Motor
Edition: 3rd
Author: Stagner
Publisher: Pearson Education

Title: Boat-owner's Mechanical and Electrical Manual
Edition: 3rd
Author: Calder
Publisher: McGraw Hill

Title: Small Gas Engines
Edition: 10th
Author: Roth
Publisher: Goodheart-Willcox

Title: Small Gas Engines (workbook)
Edition: 10th
Author: Roth
Publisher: Goodheart-Willcox

CSA Certified 6 inch Leather Safety Boots
CSA Certified & Impact Resistant Safety Glasses
Coveralls (non-flammable material - i.e. cotton)
Welding Gloves
Shop Coat (optional)

V. *EVALUATION PROCESS/GRADING SYSTEM:*

Theory	35%
Application Experiences	35%
Final Assessment	30%

The following semester grades will be assigned to students:

Grade	Definition	*Grade Point Equivalent*
A+	90 – 100%	4.00
A	80 – 89%	
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:

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.

Attendance is mandatory except with a valid excuse. If late you will marked absent for the whole hour. For every unexcused absence you will be deducted 1% per class period. Previous notification or a call the day of absence is required for excusal.

If you miss a test with an unexcused absence you will not be allowed to write that test.

If a class is missed or going to be missed it is your responsibility to notify your instructor and make arrangements for handouts and noted taken while you were away.

CSA approved safety glasses and safety boots must be worn in the shop at all times. Please have safety boots and safety glasses available because you may not have a lot of warning when going into the shop.

CELL PHONES OR PAGERS MUST BE TURNED OFF IN ANY CLASS.

VII. COURSE OUTLINE ADDENDUM:

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