# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY SAULT STE. MARIE, ON

#### **COURSE OUTLINE**

WELDING

**COURSE TITLE:** 

CODE NO. MVM700 SEMESTER: N/A

**PROGRAM:** MOTIVE VEHICLE MECHANIC - PHASE I

**AUTHOR:** D SOCCHIA

**DATE:** June 1996 **PREVIOUS OUTLINE DATED:** Oct 1995

APPROVED: Z / \an \an \bar DATE

TOTAL CREDITS N/A

**PREREQUISITE(S):** An apprenticeship in the trade of Motor Vehicle Mechanic plus the

successful completion of the in-school training at the Common Core

MPC600 level.

LENGTH OF COURSE: 2 Hours / Week for 4 Weeks

**TOTAL CREDIT HOURS:** 8 Hours

MVMPhI CODE NO.

## II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE (Continued)

- perform a routine inspection of assigned workstations to determine the condition of power supply, wire feeder, cables, torch body, hoses and regulators
- correct deficiencies prior to the commencement of work
- explain basic of GMAW joint designs and base metal edge / surface preparation
- describe procedures for cylinder handling
- describe procedures for pressurizing and purging with a GMAW shielding gas
- describe procedures for setting gas flow rate, voltage, wire feed speed and visible (electrode) stick-out distance
- describe techniques for arc ignition, setting gun angle and travel speeds
- produce trial beads to identify possible defects and verify initial settings
- re-adjust settings to produce sound welds
- 3) Communicate clearly and correctly in the written form as well as demonstrate by means of practical shop assignments a sound working knowledge of how to perform GMA Wprocedures and diagnose/correct defects.

Potential Elements of the Performance.

- describe potential fire, fume and explosion hazards associated to GMAW
- demonstrate proper welding techniques
- perform appropriate adjustments to GMAW equipment specific to the demands of variable welding exercises
- describe and diagnose defective welds
- identify and explain the service requirements of the wire drive rolls, contact tip, gas nozzle and gun liner
- 4. Demonstrate by means of regular attendance, punctuality, respect for fellow students as well as lab/shop equipment, a willingness to assume the responsibilities of employment

Potential Elements of the Performance:

- be pr? cnt ror ail scheduled classes
- be in the lab/shop or classroom within 5 minutes of the scheduled starting time
- be present for the taking of attendance
- provide a satisfactory reason to the professor for having to leave class early

### MOTIVE VEHICLE MECHANIC - PHASE I COURSE NAME

MVMPhl CODE NO.

#### **Course Grading Scheme**

Final Mark c «\* hem s 3 under special Notes)

$\mathbf{A}$	85 - 100%	<b>Shop Assignments</b>	15%
В	75 - 84%	Theory Test	70%
$\mathbf{C}$	60 - 74%	<b>Employment Readiness</b>	15%
D	50 - 59%		
$\mathbf{F}$	0 - 49%		

#### VI. SPECIAL NOTES:

#### Special Needs

If you are a student with special needs (eg. physical limitations, visual impairments, hearing impairments, learning disabilities), you are encouraged to discuss required accommodations with the instructor and/or contact the Special Needs Office, Room El204, Ext. 493, 717,491 so that support services can be arranged for you.

#### 2. 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 post-secondary institutions.

- 3. Student evaluations concerning the 'Final **Mark'** are further affected by the conditions set forth in the printed handout, 'Welding Department Guidelines'. Be sure that you receive a copy of these guidelines.
- 4. Course materials that are discussed and / or explained during any and all lab or shop demonstrations are subject to evaluation. Students are therefore responsible for the content of all lab / shop demonstrations.
- 5. Your Professor reserves the right to modify the course as he/she deems necessary to meet the needs of students
- 6. Substitute Course Information is available at the Registrar's Office.
- 7. Any person cai'yht cheating or substituting another person" work in place of their ow¹ for the pi- r>ose of grp.diog or evaluation \. i'! autorvn ally fail the said assignment or test College policy\* also dictates that such persons may be subject to immediate dismissal