

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ON

COURSE OUTLINE

WELDING

COURSE TITLE:

CODE NO. MVM700 **SEMESTER:** X / A

PROGRAM: MOTIVE VEHICLE MECHANIC - PHASE I

AUTHOR: D SOCCHIA

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

APPROVED: (V; (? *[Signature]*
DEAN *[Signature]* Aug 9/96
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 Week>

TOTAL CREDIT HOURS: 8 Hours

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 GMAW procedures 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 present for all scheduled class-s
- 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
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Course Grading Scheme		Final Mark (*see item s 3 under special Notes)	
A	85 - 100%	Shop Assignments	15%
B	75 - 84%	Theory Test	70%
C	60 - 74%	Employment Readiness	15%
D	50 - 59%		
F	0 - 49%		

VI. SPECIAL NOTES:

1. 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 E1204, 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 caught cheating or substituting another person's work in place of their own for the purpose of grade evaluation will automatically fail the said assignment or test. College policy* also dictates that such persons may be subject to immediate dismissal.