# SAULT COLLEGE OF APPLIED ARTS ic TECHNOLOGY SAULT STE. MARIE, ONTARIO

WELDING

Course Title:

(ViSH'S;i:L Code No.:

ADVANCED MARINE & SMALL ENGINES APPRENTICESHIP

Program:

91W

Semester:

G. Thom

Author:

Date: 1991 01 04 Previous Outline Dated: 1989 05 19

APPROVED:

DEAN, SCHOOL OF TECHNICAL TRADES

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| WELDING - |  |
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Course Name

Course Number

#### PHILOSOPHY/GOALS:

This course will introduce the student to position welding with F3 and F4 electrodes.

Furthermore, the student is given an insight into weldability of common metals and alloys.

### METHODS QE ASSESSMENT (GRADING METHOD):

MARKING SYSTEM 1 Theory Test - 30%

Skill Evaluation - 70%

A - 85%+

B - 75% - 84%

TOTAL - 100%

C - 60% - 74%

D - 50% - 59%

F - Repeat

Instructors should provide marks in percentage. A mark of "D" must be balanced with a "B" (in another subject if necessary) to obtain a passing grade of "C" - average.

Instructors should try for a class average of between 70 - 75%,

The instructor will determine which practrical exercises will be used for grading.

## TEXTBOOK(S);

Instruction aid sheets and notes taken by students. Students should be given a copy of the course outline.

#### **OBJECTIVES:**

The basic objectives are to teach the student proper techniques in position welding. Time does not permit to concentrate on actual weld quality.

The student should realize that all objectives may not necessarily be met due to time constraints.

### SUMMARY - MARINE ic SMALL ENGINE - ADVANCED

| TOPIC NO.   | PERIODS           | TOPIC DESCRIPTION   | REFERENCE |
|-------------|-------------------|---|-----------|
|             | T-THEORY<br>L-LAB |   |           |
|             | 1/2T              | Introduction to program safety; personal, shop - maintenance of shop  |           |
|             | 1/2T              | Welding Machines - types - adjustments - rating   |           |
|             | 1/2T              | Electrodes - classification - characteristics - use - storage - special electrodes  |           |
| 4 a         | 12L               | Welding Practices - flat position, pad and fillets - horizontal position, pad and fillets - vertical up position, fillets |           |
|             | 1/2T              | - weld faults   |           |
|             |                   | Test  |           |
| Total Hours | 2 T<br>12 L       |   |           |