

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

WELDING

MET82 2-3

STEAMFITTING APPRENTICE - ADVANCED

1987 07 09

GUNTER THOM

New:

Revision: XX

G. Krut
Chairperson

July 20/87
Date

Course Name

Course Number

W PHILOSOPHY/GOALS s

The welding practices in this course should enable the student to become competent in tack welding and welding of fillets in position.

All exercises are designed so that the student learns to appreciate the need for a good pipe fit required by the pipe welder.

METHODS OF ASSESSMENT (GRADING METHOD):

| | | | |
|----------------|---------------------|---|------|
| MARKING SYSTEM | 1 Theory Test | - | 30% |
| | Skill Evaluation | - | 60% |
| A - 85% | Attendance/Attitude | - | 10% |
| B - 75% - 84% | TOTAL | - | 100% |
| C - 60% - 74% | | | |
| D - 50% - 59% | | | |
| F - Repeat | | | |

Instructors should provide marks in percentage. A mark of ^WD^H 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 practical exercises will be used for grading.

TEXTBOOK(S);

I.A.S. (Instruction Aid Sheets) and notes.
Students should be given a copy of fche course outline.

OBJECTIVES;

The basic objectives are to teach the student the techniques required by the pressure welder. No claim is made to achieve competence in pressure welding.

Gas tungsten arc welding principles will be introduced.

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

| TOPIC NO. | PERIODS | TOPIC DESCRIPTION | REFERENCE |
|------------|-------------------|---|---|
| | T-THEORY L-LAB | | |
| | 1/2T | Introduction to program. Safety: personal, shop Maintenance of shop accessories. | Review from Intermediate I.A.S.#1 |
| 2a b | 1/2T | Welding generator-OCV adjustment - investigation of volt/ampere characteristics | I.A.S.#2 Demo |
| | 4L | Welding practices. - outside corners - F, H.V.O. F3 - F4 rods | I.A.S.#3 Demo |
| | 6L | - 2F; 1/8 E7018; 1/8 E6011; cross - 3F; 1/8 E7018; 1/8 E6011? cross - 4F; 1/8 E7018; 1/8 E6011; cross | |
| | 5L | Butt joint 3/8 PL; F.H.V.O. | I.A.S.#4 Demo |
| 5 | 1/2T,4L | Pipeweld; 6" dia.; 5G | I.A.S.#5 |
| 6 | 1/2T | Weldability of LAHS steels, stainless steels. | I.A.S.#6 |
| 7a b | 1/2T | Boiler & Pressure Vessel Code CWB Class T; Class "S" | I.A.S.#7 |
| 8 | 1L | Introduction to GTAW | I.A.S.#8 Demo |
| 9 | 1/2T | Written test. ; | |
| TOTAL HRS. | 3T, 21L | - 8 WEEKS | |