

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ON

COURSE OUTLINE

COURSE TITLE: WELDING

CODE NO: IRN 704 SEMESTER: N/A

PROGRAM: IRONWORKER - INTERMEDIATE

AUTHOR: D. SOCCHIA

DATE: 3an 1994 PREVIOUS OUTLINE DATED:

APPROVED: *O. ?rf' Courm* '74*a/- <?6
Dean, School of Technical Trades Date

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TOTAL CREDIT HOURS: 32 (8 x 4hrs)

PREREQUISITE(S) Ironworker apprenticeship plus the successful completion of the basic level of training.

I. PHILOSOPHY/GOALS:

To provide apprentices with an appropriate combination of theory and 'hands-on' practical skill so as to perform typical job-related fitting and welding operations. The major emphasis will be placed upon the requirements of C.S.A. Specifications W59 1 and W47.1

II. STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will:

- 1) Identify, select and operate typical arc welding, gouging and flame cutting equipment in a safe, well organized manner.
- 2) Perform typical job-related welding and fitting operations in accordance with C.S.A. standards.
- 3) Integrate theory with the day to day shop activity.

III. TOPICS TO BE COVERED:

1. Course Introduction and Orientation.	1 hr.
2. Review Safety in Arc Welding.	1
3. Review Electrode Selection, Electrode Storage and Exposure Times as well as Electrode Coatings.	2
Review Assignment // 1.	Homework
THEORY TEST // 1 and REVIEW	2
4. Review Basic Weld and Welding Symbols	1
5. Residual Stress, Distortion, and Preheat	2
Review Assignment // 2.	Homework
THEORY TEST // 2 and REVIEW	2
6. Practical Shop Work and Weld Testing	21

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EVALUATION METHODS: (INCLUDES ASSIGNMENTS, ATTENDANCE
REQUIREMENTS ETC.)

General Assessment	Final Mark
A = 85 to 100 %	Theory Tests and Homework = 35 %
B - 75 to 84 %	Shop Welds and Weld Tests = 65 %
C = 60 to 74 %	Total = 100 %
D = 50 to 59 %	
F = 0 to 49 %	

REQUIRED STUDENT RESOURCES

Impact Resistant Safety Glasses (C.S.A. Approved)
High-cut Safety Work Boots (C.S.A. Approved)
Welding Shield
Welding Gloves
3 Pens - (1 blue, 1 black, 1 red)
Binder c/w Paper
Welding Text (see your Welding Instructor)

SPECIAL NOTES

Attendance to all classes is mandatory and will be recorded on an hour by hour basis using the 'Record of Attendance' form.
The Instructor reserved the right to modify and / or change course objectives and topics in order to better serve the needs of the class.