SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ON

COURSE OUTLINE

COURSE TITLE: WELDING

CODE NO: N/A SEMESTER: N/A

PROGRAM: H.D.E. APPRENTICE - ADVANCED

AUTHOR: DENNIS SOCCHIA

DATE: 1991-04-02 PREVIOUS OUTLINE DATED: 1991-01-07

Dean, School of Technical Trades

COURSE NAME: WELDING CODE NO. N/A

TOTAL CREDIT HOURS:

PREREQUISITE(S):

I. PHILOSOPHY/GOALS:

To provide students with a basic level of skill in dealing with common arc welding equipment, practices and procedures. Secondly, it will introduce a variety of techniques for position welding using the F3 and F4 electrodes.

STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course the student will:

- 1. Perform arc welding operations in a safe, well organized manner.
- 2. Produce fillet and groove welds having sufficient quality to pass a typical visual and/or destructive test.
- 3. Develop an appreciation for the time and cost factors involved with welding in the 'out-of-flat' position.

III. TOPICS TO BE COVERED:

- 1. Program Introduction and Orientation
- 2. Course Outline, Guidelines and Grading
- 3. Welder Safety
- 4. Electrode and Amperage Selection
- 5. Flat Welding Exercises using E6011, E7018, E7024
 - single pass fillets
 - multi pass fillets
 - square groove welds c/w backing
- 6. Horizontal Welding Exercises using E6011, E7014, E7018
 - multi pass fillets
 - multi pass groove c/w backing
- 7. Practical Test #1
- 8. Vertical [Down] Welding Exercises using E6011, E6012
 - multi pass fillets on plate
 - single pass fillets on gage metal
- 9. Vertical [Up] Welding Exercises using E6011, E7018
 - pad exercise
 - multi pass fillets
- 10. Practical Test #2

Note: Performance objectives and/or course topics may not always be achieved or covered to the ideal depth owing to circumstances beyond our control (i.e. holidays, weather, sickness, equipment failure, etc.)

COURSE NAME:	CODE NO.

IV. LEARNING ACTIVITIES _____REQUIRED RESOURCES (Optional)

COURSE NAME: WELDING CODE NO.: N/A

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

General Assessment * Final Mark

A = 85 - 100%

B = 75 - 84% Practical Test #1 50%
C = 60 - 74% Practical Test #2 50%
D = 50 - 59% Attendance (** See Attached)

F = 0 - 49% Total......100%

VI. REQUIRED STUDENT RESOURCES

C.S.A. APPROVED SAFETY WORK BOOTS C.S.A. APPROVED SAFETY (IMPACT) GLASSES WORK WEAR

NOTEBOOK, PAPER, PEN

.VII. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY BOOK SECTION:

N/A

VIM. SPECIAL NOTES

- * Student evaluations concerning the 'final mark' are further affected by the conditions set forth in the printed handout, 'Guidelines for Related Welding'. **BE SURE TO OBTAIN A COPY FROM YOUR INSTRUCTOR.**
- ** Special Guidelines for Safety and Class Attendance are included in the above handout.