



**WELDING FOR ADVANCED MARINE & SMALL ENGINES**

Course Name

Course Number

**PHILOSOPHY/GOALS:**

This course is intended to provide basic instruction in the safe use of arc welding equipment.

**METHODS OF ASSESSMENT (GRADING METHOD)**

MARKING SYSTEM	1 Theory Test	-	30%
	Skill Evaluation	-	70%
A - 85%+			
B - 75% - 84%			
C - 60% - 74%			
D - 50% - 59%			
F - Repeat			
	TOTAL	-	100%

Instructors should provide marks in percentages. 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 practical exercises will be used for grading.

**TEXTBOOK(S):**

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

**OBJECTIVES:**

The objectives are to provide the student with a basic knowledge of arc welding equipment, how to use it safely and how to make fillet welds in the flat, horizontal and vertical positions.

The instructor must ensure that those apprentices who had been excused from taking the Basic course, learn the essentials of the material previously covered.

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

**SUMMARY - MARINE &. SMALL ENGINES - ADVANCED**

<b>TOPIC NO.</b>	<b>PERIODS</b>	<b>TOPIC DESCRIPTION</b>	<b>REFERENCE</b>
	T-THEORY L-LAB		
1a		Introduction to program. Scope of SMAW.	
b	1/2T	Personal and shop safety.  Maintenance of shop and accessories.	SMAW I.A.S.#1
2a	1/2T	Types of welding machines.	SMAW
b		Current adjustments.	I.A.S.#2 Demo
3	1/2T	Electrical principles.	SMAW I.A.S.#3
4	16L	Welding practices.	SMAW I.A.S.#4 Demo
5	1/2T	Selection of filler metals.	SMAW I.A.S.#5
6		Welding terms and definitions.	SMAW I.A.S.#6
7	1/2T	Weld faults.	SMAW I.A.S.#7
8	2 L	Introduction GMAW	GMAW I.A.S. #1
9	1/2T	Written test.	
<b>TOTAL HRS.</b>	<b>3T, 13L</b>	<b>- 10 WEEKS</b>	