

COURSE OUTLINE

Revision: David Weber, August, 2011

DEPARTMENT:	Manufacturing Technology
CURRICULUM:	Welding Fabrication Technology
COURSE TITLE:	Shielded Metal Arc Welding
COURSE NUMBER:	WFT 121
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	1 Quarter
CREDIT HOURS:	6
LECTURE HOURS:	22
LAB HOURS:	88
CLASS SIZE:	25
PREREQUISITES:	None

COURSE DESCRIPTION:

Students will learn advance configurations and position for welding with the Shielded Metal Arc Welding process including vertical and overhead. This course will prepare students for the WABO certification testing procedure.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication - Communicate and work in groups to complete minimum skills activities.
2. Personal Responsibility - Tack, production weld, and finish as required for assigned activities. Demonstrate consistent safe work habits including citizenship. Demonstrate consistent quality workmanship per industry standards.

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STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

3. Critical Thinking and Problem Solving - Formulate and communicate a plan of action for assigned fabrication and maintenance projects.

GENERAL COURSE OBJECTIVES:

At the end of the course the student will be able to:

1. Identify components of a Shielded Metal Arc Welding equipment
2. Explain SMAW principles of operation
3. Safely transport, assemble, adjust, and maintain a SMAW equipment
4. Perform assigned laboratory exercises using SMAW

TOPICAL OUTLINE	APPROX. HOURS
I. Components of a SMAW system	2
II. Operating principles of SMAW	2
III. Setup & use of SMAW systems	2
IV. Techniques for using SMAW	<u>104</u>
Total	110

Detailed Topical Outline is available separately

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