

COURSE OUTLINE

Revision: David Weber, August, 2011

DEPARTMENT:	Manufacturing Technology
CURRICULUM:	Welding Fabrication Technology
COURSE TITLE:	Intro to Oxy/acet and Shielded Metal Arc Welding
COURSE NUMBER:	WFT 120
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:

Practical exercise in the safe and efficient use of the oxyacetylene flame for both cutting and joining applications. Perform sound welds using the Shielded Metal Arc Welding process.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Personal Responsibility - Take responsibility for one's own development of skills, observe safety procedures and produce workmanship samples.
2. Critical Thinking and Problem Solving - Diagnose and cure common welding defects
3. Technology - Demonstrate safe operation of oxyacetylene equipment.

WFT 120 Intro to Oxy/acet and Shielded Metal Arc Welding

GENERAL COURSE OBJECTIVES:

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

1. Safely setup and use Oxy/acetylene and Shielded Metal Arc Welding Processes equipment
2. Demonstrate the proper transport, setup and adjustment of oxyacetylene equipment
3. Produce sound welds using the Oxy/acetylene and SMAW
4. Perform laboratory exercises in flame cutting various metal shapes both for parts preparation and to salvage existing fabrications
5. Perform laboratory exercises in oxyacetylene welding, brazing, and SMAW

TOPICAL OUTLINE:

APPROX. HOURS

I.	Safety	4
II.	Principles of cutting and welding with Oxy/acetylene	8
III.	Principles of welding with SMAW	8
IV.	Applications for oxy/acetylene cutting, Welding, and brazing	14
V.	Applications for welding with SMAW	<u>76</u>
	Total	110

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