

## COURSE OUTLINE

Revision: Rodger Squirrell July 14, 2009

DEPARTMENT:	Manufacturing Technology
CURRICULUM:	Welding Fabrication Technology
COURSE TITLE:	Basic Oxyacetylene Cutting and Joining
COURSE NUMBER:	WFT 121
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	1 quarter
CREDIT HOURS:	5
LECTURE HOURS:	33
LAB HOURS:	44
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. Flame cutting with hand and machine assists, welding, brazing, braze welding, hardfacing, and soldering are covered.

## 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 121 Basic Oxyacetylene Cutting and Joining  
January 20, 2003

GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

1. Demonstrate the proper transport, setup and adjustment of oxyacetylene equipment
2. Recognize situations for the effective use of oxyacetylene cutting and joining processes
3. Perform laboratory exercises in flame cutting various metal shapes both for parts preparation and to salvage existing fabrications
4. Perform laboratory exercises in oxyacetylene welding, brazing, braze welding, hardfacing and soldering

TOPICAL OUTLINE:

APPROX. HOURS

I.	History of oxyacetylene cutting and joining	2
II.	Principles of cutting and joining	5
III.	Oxyacetylene cutting and welding equipment	8
IV.	Applications for oxyacetylene cutting and joining	29
V.	Techniques for cutting and joining with oxyacetylene	33
	Total	77

REVISED BY: John Todd  
DATE: January 20, 2003