

COURSE OUTLINE

Revision: Rodger Squirrell July 14, 2009

DEPARTMENT:	Manufacturing Technology
CURRICULUM:	Welding Fabrication Technology
COURSE TITLE:	Fabrication of Aluminum Weldments
COURSE NUMBER:	WFT 128
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	1 Quarter
CREDIT HOURS:	5
LECTURE HOURS:	33
LAB HOURS:	44
CLASS SIZE:	25
PREREQUISITES:	Experience with at least one arc welding process to include GMAW or GTAW or by instructor permission

COURSE DESCRIPTION:

A project-oriented set of learning activities culminating in lab exercises involving the fabrication of aluminum weldments -- either new fabrications or maintenance operations. Prior experience with steel fabrications is recommended.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Personal Responsibility - Complete reading and written work as assigned.
Demonstrate consistent safe work habits including citizenship.
Demonstrate consistent quality workmanship per industry standards.

WFT 128 Fabrication of Aluminum Weldments

January 20, 2003

STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

2. Communication - Communicate and work in groups to complete assigned projects.
3. Computation - Read prints, estimate, cut & form, tack weld, production weld, and finish as required for each assigned activity.
4. Critical Thinking and Problem Solving - Formulate and communicate a plan of action for assigned maintenance projects.

GENERAL COURSE OBJECTIVES:

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

1. Identify major differences between steel and aluminum fabrications
2. Identify advantages and disadvantages of aluminum fabrications
3. Locate major aluminum fabricators and material vendors in the area
4. Layout, cut & form, fit, tack weld, and production weld aluminum projects of various thickness' involving multiple cutting and welding processes

TOPICAL OUTLINE	APPROX. HOURS
I. General considerations for making aluminum fabrications	5
II. Advantages and liabilities of aluminum fabrications	2
III. Techniques for fabricating with aluminum	65
IV. Aluminum fabricating in the greater Seattle area	5
Total	<u>77</u>

Detailed Topical Outline is available separately

REVISED BY: John Todd

DATE: January 20, 2003