

\_\_\_\_\_SOUTH SEATTLE COMMUNITY COLLEGE\_\_\_\_\_

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Technical Education Division

COURSE OUTLINE  
Revision: D. Weber, August, 2011

DEPARTMENT:	Manufacturing Technology
CURRICULUM:	Welding Fabrication Technology
COURSE TITLE:	Flux Core Arc Welding
COURSE NUMBER:	WFT 125
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	1 Quarter
CREDIT HOURS:	6
LECTURE HOURS:	22
LAB HOURS:	88
CLASS SIZE:	25
PREREQUISITES:	WFT: 100, 120, 121

COURSE DESCRIPTION:

A set of lab competencies that will introduce practical exercises which convey knowledge of equipment as well as multiple positions and application of FCAW uses (Inner shield/Dual Shield). This will combine previously learned: weld theory, operation of OXY–Acetylene, and Shielded Metal Arc Welding (SMAW) processes. Mild steel, low alloy, and stainless steel are commonly welded with these processes in a variety of industrial applications.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication - Communicate and work in groups to complete minimum skills activities

## WFT 125 Gas Metal Arc Welding

## STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

2. Complete reading and written work as assigned. Tack, weld, and finish all required assigned activities. Demonstrate consistent safe work habits including citizenship. Demonstrate consistent quality workmanship per industry standards.
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 the Flux Core Arc Welding equipment.
2. Explain FCAW principles of operation.
3. Safely transport, assemble, adjust, and maintain a FCAW equipment.
4. Perform assigned laboratory exercises using FCAW.

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

Detailed Topical Outline is available separately

REVISED BY: David Weber

DATE: August, 2011