

COURSE OUTLINE

Revision: Rodger Squirrell July 14, 2009

DEPARTMENT:	Manufacturing Technology
CURRICULUM:	Welding Fabrication Technology
COURSE TITLE:	Air Carbon Arc Cutting (CAC-A)
COURSE NUMBER:	WFT 122
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	1 Quarter
CREDIT HOURS:	1
LECTURE HOURS:	0
LAB HOURS:	22
CLASS SIZE:	25
PREREQUISITES:	Some experience with hand tools or instructor's permission

COURSE DESCRIPTION:

Mostly assigned laboratory exercises in the popular, safe, and incredibly efficient use of Carbon Arc Cutting with Compressed Air (CAC-A) -- A.K.A. "arccair," "gouging," or "scarfing" -- for weld joint preparation and for efficient disassembly of existing fabricated structures.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Personal Responsibility - Take responsibility for meeting deadlines as assigned. Take pride in demonstrating safe carbon arc cutting with air procedure skills. Take pride in one's own workmanship and tool care and maintenance, per industry standards.

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STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

2. Human Relations - Use social interactive skills to work in groups, as assigned, to complete minimum skill requirements.

GENERAL COURSE OBJECTIVES:

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

1. Demonstrate the setup of in-shop CAC-A stations using any type of appropriate power source as assigned
2. Demonstrate the setup of "field" CAC-A stations using an engine-driven power source and bottled compressed gas (nitrogen or air) as assigned
3. Demonstrate preparation of single-U and single-J butt joints, "back gouging," and weld bead removal per workmanship specs as assigned

TOPICAL OUTLINE	APPROX. HOURS
I. Applications of carbon arc cutting with air (CAC-A)	0.5
II. Equipment for CAC-A	1.0
III. Safety and Principles of CAC-A	1.5
IV. Techniques of CAC-A	<u>19.0</u>
Total	22.0

Detailed Topical Outline is available separately

REVISED BY: John Todd
DATE: January 20, 2003