

_____ SOUTH SEATTLE COMMUNITY COLLEGE _____

Technical Education Division

COURSE OUTLINE

Revision: Rodger Squirrell July 14, 2009

DEPARTMENT: Manufacturing Technology

CURRICULUM: Welding Fabrication Technology

COURSE TITLE: Flame Shaping as a Forming Method

COURSE NUMBER: WFT 125

TYPE OF COURSE: Vocational Preparatory

COURSE LENGTH: 1 Quarter

CREDIT HOURS: 3

LECTURE HOURS: 22

LAB HOURS: 22

CLASS SIZE: 25

PREREQUISITES: WFT 121 (Basic Oxyacetylene Cutting and Joining) or instructor's permission

COURSE DESCRIPTION:

Classroom study and lab exercises using the effects of heat upon welded fabrications. Heat effects are treated both as a problem for correction and as a tool used to form material. Various methods to avoid and control distortion are covered and applied in the construction of projects.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Personal Responsibility - Take responsibility for meeting deadlines as assigned. Take pride in demonstrating safe shop practices. Take pride in one's own workmanship and customer etiquette, 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. Predict the effects of heat upon a welded structure
2. Demonstrate techniques and devices for controlling heat effects during welding fabrication
3. Introduce shape to -- or remove shape from -- metal using the heat of a torch flame and/or the expansion and contraction from welding heat

TOPICAL OUTLINE	APPROX. HOURS
I. Dimensional effects of heating metal	2.5
II. Structural effects of heating metal	13.5
III. Role of restraints	7.0
IV. Distortion	5.0
V. Shaping with heat	<u>16.0</u>
Total	44.0

Detailed Topical Outline is available separately

REVISED BY: John Todd
DATE: January 20, 2003