

\_\_\_\_\_ SOUTH SEATTLE COMMUNITY COLLEGE \_\_\_\_\_  
Technical Education Division

COURSE OUTLINE

Revision: Rodger Squirrell July 14, 2009

DEPARTMENT: Manufacturing Technology  
CURRICULUM: Welding Fabrication Technology  
COURSE TITLE: Fabrication Estimating & Layout  
COURSE NUMBER: WFT 108  
TYPE OF COURSE: Vocational Preparatory  
COURSE LENGTH: 1 Quarter  
CREDIT HOURS: 3  
LECTURE HOURS: 22  
LAB HOURS: 22  
CLASS SIZE: 25  
PREREQUISITES: Basic math skills or instructor's permission

COURSE DESCRIPTION:

Practical uses of basic math skills for estimating and layout in fabrication of welded products. Includes use of a calculator, data books, tables, and model construction.

STUDENT LEARNING OUTCOMES ADDRESSED:

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

WFT 108 Fabrication Estimating & Layout  
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STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

2. Personal Responsibilities - Demonstrate safe shop practices as required for assigned activities. Demonstrate consistent quality workmanship & courtesy --including telephone etiquette, and production per industry standards. Complete reading and written work as assigned

GENERAL COURSE OBJECTIVES:

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

1. Estimate the type & quantity of materials required from the information contained on a blueprint
2. Estimate the weight of a welded fabrication
3. Estimate the main costs of materials, welding consumables, labor, and overhead
4. Construct a realistic test model to obtain useful estimating data

TOPICAL OUTLINE

APPROX. 46 HOURS

I.	The basic bill of materials	2
II.	Calculate per spec	14
III.	Work-up bill of materials from blueprint takeoffs	7
IV.	Estimate product weights & measures from blueprints	5
V.	Model construction	<u>16</u>
	Total	44

Detailed Topical Outline is available separately

REVISED BY: John Todd  
DATE: January 20, 2003