

COURSE OUTLINE

Revision: Rodger Squirrell July 14, 2009

DEPARTMENT:	Manufacturing Technology
CURRICULUM:	Welding Fabrication Technology
COURSE TITLE:	Advanced Layout
COURSE NUMBER:	WFT 107
TYPE OF COURSE:	Vocational Preparatory
COURSE LENGTH:	1 Quarter
CREDIT HOURS:	2
LECTURE HOURS:	11
LAB HOURS:	22
CLASS SIZE:	25
PREREQUISITES:	WFT 106 (Basic Layouts Skills), basic math skills, ability to read blueprints, or instructor's permission

COURSE DESCRIPTION:

Classroom study and lab exercises using parallel, round, and radial development methods as well as triangulation. Scaling up and scaling down from models and construction of production locating and forming jigs are covered. "Field trip" to on-campus or local industry CAD station advisable.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Personal Responsibility - Take responsibility for meeting deadlines as assigned. Take pride in demonstrating safe advanced layout skills. Take pride in one's own workmanship and tool care and maintenance per industry standards.

WFT 107 Advanced Layout
January 20, 2003

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. Layout and fabricate projects involving round, parallel and radial development and triangulation
2. Demonstrate how to scale up or down from a blueprint or model
3. Fabricate working examples of production locating and forming jigs
4. Explain the advantages and disadvantages of CAD

OUTLINE OF COURSE TOPICS	APPROX. HOURS
I. Advanced parallel layout constructions	8
II. Advanced radial layouts	1
III. Use of triangulation	6
IV. Scale modeling	10
V. Locating jigs	3
VI. Forming jigs	3
VII. Computer aided design	<u>2</u>
Total	33

Detailed Topical Outline is available separately

REVISED BY: John Todd
DATE: January 20, 2003