



**Purpose:** It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

**Course Title -** Intro to Layout and Fabrication

**Course Prefix and Number -** WLDG 1417

**Department -** Welding Technology

**Division -** Continuing

**Course Type:** (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y  or N )

**Semester Credit Hours # : Lecture hours# : Lab/other hours #**      4:3:4

**Equated Pay hours for course -** 5

**Course Catalog Description -** A fundamental course in layout and fabrication related to the welding industry. Major emphasis on structural shapes and use in construction.

Identify welding symbols; identify and select measuring instruments and tools for fabricating projects; recognize correct layout and fabrication terminology; and identify structural shapes and materials.

List Lab/ Other Hours
Lab Hours 4
Clinical Hours
Practicum Hours
Other (list)

**Prerequisites/Co requisites -** None

**Approvals – the contents of this document have been reviewed and are found to be accurate.**

Prepared by: Roy R Jones	Signature 	Date 7/14/10
Department Head Roy R. Jones	Signature 	Date 7/14/10
Division Chair David Clayton	Signature 	Date 7/13/10
Vice President of Instruction or Dean of Vocational Instruction Leigh Ann Collins	Signature 	Date 7/14/11



**I. Topical Outline** – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

A study of Layout and Fabrication. Emphasis placed on terminology, symbols, graphic description, and welding processes. Includes systems of measurement and industry standards. Also, includes interpretation of plans and drawings used by industry to facilitate field application and production.

Define terms and abbreviations, and identify and explain object views, lines, and dimensions. Identify, explain, and interpret weld symbols, identify structural shapes, demonstrate the proper used measuring devices, read and interpret Layout and Fabrication, read welding detail drawings, and calculate dimensions and material.

**II. Course Learning Outcomes**

<b>Course Learning Outcome</b>	<b>Method of Assessment</b>
<p>Upon successful completion of Layout and Fabrication the student should be able to:</p> <ol style="list-style-type: none"> <li>1. Explain shop safety rules, safety rules for tools and equipment, and personal safety rules. Describe required tools, for fabrication.</li> <li>2. Layout a job from shop drawing.</li> <li>3. Read welding symbols and locate the welds correctly</li> </ol>	<p>Upon successful completion of Layout and Fabrication the student should be able to:</p> <ol style="list-style-type: none"> <li>1. Written test</li> <li>2. Visual Exams</li> <li>3. View practical work each week.</li> <li>4. Inspect all measurements and cuts.</li> </ol>

**III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.**

“Welding Projects” by Ruck

**IV. Suggested Course Maximum** - The maximum hours for this class is 160 hours and the maximum number of students for this class is 15.

**V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.**

None

**VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course**

Department Assignments	30%
Laboratory Assignments	50%
Final Exam	20%
	100%

100-90 = A

89-80 = B

79-70 = C

69-60 = D

Below 60 = F

I = Incomplete (to be used in case of emergencies or illness)

W = Student Withdrawal (either by student or instructor)

## VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)  
No additional documentation needed

- **Academic WCJC Core Course**  
Attach the Core Curriculum Checklist, including the following:

- Basic Intellectual Competencies
- Perspectives
- Exemplary Educational Objectives

- **WECM Courses**  
If needed, revise the Program SCANS Matrix & Competencies Checklist.