



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 - Introduction to Pipe Welding

Course Prefix and Number - WLDG1435

Department - Welding Technology

Division – Vocational Science

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 - An introduction to welding of pipe using the shielded metal arc welding process (SMAW), including electrode selection, equipment setup, and safe shop practices. Emphasis on weld positions 1G and 2G using various electrodes.

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

Prerequisites/Co requisites – WLDG 1428 or consent of Division Chair

Prepared by Roy Jones

Date 10-19-11

Reviewed by department head Roy Jones

Date 10-19-11

Accuracy verified by Division Chair Terry David Lynch

Date 3/27/2012

**Approved by Dean of Vocational Instruction or
Vice President of Instruction** Lac

Date 11-9-12



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):

Safety procedures in welding environments, use and application of welding equipment, use and application of blueprints in welding, performing math commonly used in welding, and create parts using information provided in blueprints for the given specifications.

II. Course Learning Outcomes

Course Learning Outcome	Method of Assessment
1. Explain shop safety rules, safety rules for tools and equipment, and personal safety rules 2. Explain importance of a Material Safety Data Sheet (MSDS) 3. Describe equipment and required pipe preparation 4. Perform 1G and 2G welds using various electrodes 5. Demonstrate how to write a report using a word processor, saving it to a disk, and printing a final copy	1. Obtain score of 70 or above on written examinations. 2. Obtain score of 70 or above on safety tests. 3. Obtain score of 70 or above on skills examinations, including: cutting, grinding and placing in position

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

Modern Welding Technology

IV. Suggested Course Maximum - 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%
Total	100%

100-90 = A

89-80 = B

79-70 = C

69-60 = D

Below 60 = F

I = Incomplete (to be used for 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.