



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 Gas Tungsten Arc Welding (GTAW)

Course Prefix and Number - Welding 1434

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 - Principles of gas tungsten arc welding (GTAW), including setup, GTAW equipment. Instruction in various positions and joint designs.

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

Prerequisites/Co requisites - None

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 to the given specifications.

II. Course Learning Outcomes

Course Learning Outcome	Method of Assessment
-Correctly make a groove weld using the TIG process -Describe safety rules and equipment -Explain importance of a Material Safety Data Sheet (MSDS) -Describe various joint designs -Describe the effects of welding parameters in GTAW -Weld various structural materials	A visual test and bend test Weekly laboratory assignments Periodic examinations

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

Welding Skills and Practices

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 in case of emergencies or illness)
W = Student withdrawal (either by student or by 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.