



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 - Orbital Tube Welding
Course Prefix and Number - WLDG 2450
Department - Welding Technology

Division - VOCS

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

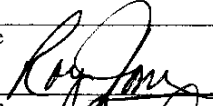

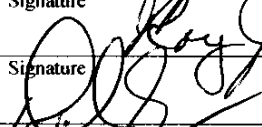
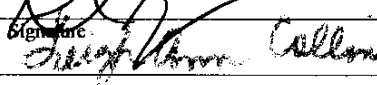
Equated Pay hours for course - 5

Course Catalog Description - Orbital tube welding in various industries. Special emphasis on the disciplines of orbital tube welding, including cutting, facing, and development of weld procedures.

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

Prerequisites/Co requisites - WLDG 1434, WLDG 1435, WLDG 1457,
or consent of Department Head

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

Prepared by Roy 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 1/14/11



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):

Required safety equipment: safety glasses, gloves, safety shoes, pipe cutting equipment, measuring tape, soap stone, and pipe fitters blue book. Classroom lecture in TIG welding, metallurgy, heat effect on metal.

II. Course Learning Outcomes

Course Learning Outcome	Method of Assessment
The learner will describe the fitting, tubing, and tungsten used in the orbital tube welding process; and demonstrate skill in orbital tube welding, cutting, and facing.	Bend tests, visual examination, and written tests. Student must maintain 70% average.

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

T.I.G Welding by G. Weaks and Gas Tungsten Arc Welding Handbook by William H. Minnick

IV. Suggested Course Maximum - 30

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

Standard welding equipment includes: Metal Arc Welding Machines, 100% duty cycle, 275 AMP rated.

PowerPoint capability and Internet connectivity

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

Unit Exams: 30%

Laboratory Practicals: 50%

Final Exam: 20%

- 100-90: A
- 89-80: B
- 79-70: C
- 69-60: D
- Below 60: F

VII. Curriculum Checklist

Administrative-Master Syllabus
form approved June/2006
revised Nov. 2009

- **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.