



Course Information

Course Title	Introduction to Gas Tungsten Arc Welding
Course Prefix, Num. and Title	WLDG 1434
Division	Vocational Science: Welding Technology
Department	Welding Technology
Course Type	WECM Course
Course Catalog Description	Principles of Gas Tungsten Arc Welding (GTAW), including setup of GTAW equipment. Instruction in various positions and joint designs.
Pre-Requisites	WLDG 1428
Co-Requisites	none

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	4:3:4
Lab/Other Hours	
Equated Pay Hours	5
Lab/Other Hours Breakdown: Lab Hours	4
Lab/Other Hours Breakdown: Clinical Hours	Enter Clinical Hours Here.
Lab/Other Hours Breakdown: Practicum Hours	Enter Practicum Hours Here.
Other Hours Breakdown	List Total Lab/Other Hours Here.

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

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

The use of Gas Tungsten Arc Welding process in various Fillet positions: 1F (Flat Fillet), 2F(Horizontal Fillet), 3F (Vertical Fillet) and 4F (Overhead Fillet); including lap-joints and butt-joints. Student will be proficient in all positions. All welds will be assessed by visual inspection.

Course Learning Outcomes:

- 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

Methods of Assessment:

- A visual test
- A bend test
- Weekly laboratory assignments
- Periodic examinations

Required text(s), optional text(s) and/or materials to be supplied by the student:

Welding Fundamentals

Suggested Course Maximum:

20

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

none

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

AWS Assignments 40%
Laboratory Assignments 40%
Final Exam 20%
Total 100%

Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
 - Critical Thinking
 - Communication
 - Empirical & Quantitative Skills
 - Teamwork
 - Social Responsibility
 - Personal Responsibility
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist