



Course Information

Course Title	Introduction to Flux Cored Arc Welding
Course Prefix, Num. and Title	WLDG 1412
Division	Vocational Science: Welding Technology
Department	Welding Technology
Course Type	WECM Course
Course Catalog Description	An overview of terminology, safety procedures and equipment set-up. Practice in performing T-joints, lap joints, and butt joints using Flux Cored Arc Welding (FCAW) equipment.
Pre-Requisites	none
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 Flux Cored 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:

- Demonstrate equipment safety checks
- Identify FCAW equipment parts
- Demonstrate the procedures for running a continuous bead in the flat position.
- Demonstrate the procedures for welding a butt joint, T-joint, a lap joint and an outside corner joint in the flat, horizontal, and overhead positions.
- Demonstrate the procedures for making an open butt v-groove weld.

Methods of Assessment:

- Periodic Written Examinations.
- Periodic Written Examinations.
- Perform welds per AWS D1.1 code acceptance criteria.
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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