

CENTER FOR INNOVATIVE TECHNOLOGIES
MASTER COURSE DOCUMENT

WLD 115 GMAW and FCAW Welding

Course Description: A course on welding techniques associated with Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW). Topics include: theory, operating principles, equipment, and accessories; GMAW spray transfer techniques; and FCAW-G/GM (dual shielded) and FCAW-S (self-shielded) operations.

Prerequisites(s): WLD 100

Corequisite(s): No corequisite

Lecture Hours: 2	Lab Hours: 6	Credit Hours: 4
Lab Fee: \$300	Supplemental Fee: \$50	Purpose: Raw Materials
<input type="checkbox"/> Transfer Assurance Guide Course (TAG)	<input type="checkbox"/> Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: <input type="checkbox"/> Web	<input type="checkbox"/> Hybrid	x Classroom
Semesters Offered: x Fall	x Spring	x Summer

Course Primary Text:

Title: Welding Principles and Applications	Edition: 9th
Author(s): Jeffus	
Publisher: Delmar	

Supplemental Materials:

Instructor supplied

Course Outcomes:

1	Students will have understand and use safety practices in all welding techniques
2	Students will have the ability to create structurally sound and visually correct welds using the GMAW process
3	Students will have the ability to create structurally sound and visually correct welds using the FCAW process

Course Topics:

Week	Chapter	Topic	Lab/Project
1	10	Gas Metal Arc Equipment, Setup, and Operation	Lab #1
2	10	Gas Metal Arc Equipment, Setup, and Operation	Lab #2
3	10	Gas Metal Arc Equipment, Setup, and Operation	Lab #3
4	10	Gas Metal Arc Equipment, Setup, and Operation	Lab #4

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5	11	Gas Metal Arc Welding of Plate	<i>Lab #5</i>
6	11	Gas Metal Arc Welding of Plate	<i>Lab #6</i>
7	11	Gas Metal Arc Welding of Plate	<i>Lab #7</i>
8	12	Flux Cored Arc Welding Equipment, Setup, and Operations	<i>Lab #8</i>
9	12	Flux Cored Arc Welding Equipment, Setup, and Operations	<i>Lab #9</i>
10	13	Flux Cored Arc Welding or Plate	<i>Lab #10</i>
11	13	Flux Cored Arc Welding of Plate	<i>Lab #11</i>
12	13	Flux Cored Arc Welding of Plate	<i>Lab #12</i>
13		Projects	
14		Projects	
15		Projects	

Methods of Evaluation/Assessment

Grading:

AWS Written Exams – 20%

Chapter Written Exams – 20%

Lab Assignments – 60%

Course Keeper: Mark Willis

Date Completed: 12/15/18