WLDG-1430-223C3
Introduction to Gas Metal Arc Welding
FALL 2025
Mon/Wed - 6:00pm -9:20pm

Instructor: Victor Woods, vwoods@com.edu , 409-933-8380 or 409 933-8321

Student hours and location: Mon-Wed 7:30am-8:00am and Th 8:00Am-9:30AM Welding Technology Office

Required Textbook:

Welding Principles and Applications (Larry Jeffus)
(ISBN-13: 978-0-3573-7765-9)
(ISBN-13: 978-0-357-37769-9)
The Hard back and Lab book are required.

Course Description: A study of the production of various fillets and groove welds. Preparation of specimens for testing in various positions

Course requirements:

Lab Assignments WLDG 1430	Performance Rating	Date Completed	Instructor =s Initials	Trainee=s Initials
1. Make a 2F fillet weld on 3/16" carbon steel plate				
2. Make a 3F fillet weld on 3/16" carbon steel plate				
3. Make a 4F fillet weld on 3/16" carbon steel plate				
4. Make a 1G groove weld on 3/8" carbon steel plate				
5. Make a 3G groove weld on 3/8" carbon steel plate				
6. Make a 2G groove weld on 6" carbon steel pipe				
7. Make a 5G groove weld on 6" carbon steel pipe				

Determination of Course Grade/Detailed Grading Formula

1. The student must meet AWS standards on all workmanship qualifications.
2. 25% of the grade is homework, all homework must be completed to take the exam or it is a 0 on exam, 25% written exams, and 50% is skills test
3. Student must have a 65-70 on Exams and complete Lab Objectives
4. Student must 71 thru 80 on Exams and complete Lab Objectives
5. Student must 81 thru 90 on Exams and complete Lab Objectives
6. Student must 91 thru 100 on Exams and complete Lab Objectives

Late Work, Make-Up, and Extra -Credit Policy:
Make-up exams must be scheduled with your professor but must be scheduled within 7 days of the original test date or you will receive a zero for the test. Make-up exams may score no higher than 90% unless the make-up exam was scheduled prior to the original exam date. At the instructor's discretion, make up exams may be in a different format from the scheduled exam. Labs and homework not turned in on the due date will be scored at 80% of the maximum

Attendance Policy: Attendance and Tardiness will be taken each class period. 3 Tardiness will equal to 1 absence. More than 6 absences may result in being dropped from Class!!!!

Communicating with your instructor: ALL electronic communication with the instructor must be through your COM email. Due to FERPA restrictions, faculty cannot share any information about performance in the class through other electronic means.

Student Learner Outcome	Maps to Core Objective	Assessed Via This Assignment
Describe welding positions with various joint designs on plate.	Critical thinking	Homework, Chapter 10 Written Exams, Lab Manual Assignments 10-1and 10-2
Describe the effects of welding parameters in GMAW, apply safety rules.	Critical thinking	Homework, Chapter 11 Written Exams, Lab assignments.11-5 and 11-6
Troubleshoot equipment used, perform inspection.	Critical thinking	Homework, Chapter 15 Written Exams, Lab assignments 15-13
Weld various types of structural material, diagnose welding problems.	Critical thinking	Homework, Chapter 15 Written Exams, Lab assignments 15-14,15-14

Academic Dishonesty: Any incident of academic policy will be dealt with in accordance with college policy and the Student Handbook. Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate discipline action.

Student Concerns: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact Derrick Lewis, Department Chair, 409-933-8321/409-933-8380 at dlewis22@com.edu

Course outline:

Week#	Day/Date	Topic	Reading Assignments & Homework Due Dates
1	M 8-18-25	Run, Hide, Fight Intro + Syllabus + Expectations + Explain Grading % + Welding Safety Rules + Welding Equipment	Chapter 10
	W 8-20-25	Welding Lecture-Simulator 2-hours lab	Chapter 10 key terms 1 thru 4
2	M 8-25-25	Welding Lecture-Simulator 2-hours lab	Chapter 10 key terms 5 thru 10
	W 8-27-25	Welding Lecture-Simulator 2-hours lab	Chapter 10 review questions 1 thru 5
3	M 9-1-25	Closed Labor Day	
	W 9-3-25	Welding Lecture-Simulator 2-hours lab	Chapter 10 review question 6 thru 10
4	M 9-8-25	Welding Lecture-Simulator 2-hours lab	Chapter 10 review question 11 thru 14
	W 9-10-25	Welding Lecture-Simulator 2-hours lab	Chapter 10 review questions 15 thru 18
5	M 9-15-25	Welding Lecture-Simulator 2-hours lab	Chapter 10 review questions 19 thru 27
	W 9-17-25	Class review and Exam on Chapter 10 Students have 7 DAYS to make-up test.	EXAM DUE
6	M 9-22-25	Welding Lecture-Simulator 2-hours lab	Chapter 11 key terms 1 thru 4
	W 9-24-25	Welding Lecture-Simulator 2-hours lab	Chapter 11 key terms 5 thru 8
7	M 9-29-25	Welding Lecture-Simulator 2-hours lab	Chapter 11 review question 1 thru 5

	W 10-1-25	Welding Lecture-Simulator 2-hours lab	Chapter 11 key terms 5 thru 10
8	M 10-6-25	Welding Lecture-Simulator 2-hours lab	Chapter 11 key terms 11 thru 14
	W 10-8-25	Welding Lecture-Simulator 2-hours lab	Chapter 11 review questions 15 thru 19
9	M 10-13-25	Welding Lecture-Simulator 2-hours lab	Chapter 11 review questions 20 thru 22
	W 10-15-25	Welding Lecture-Simulator 2-hours lab	Chapter 11 review questions 23 thru 25
10	M 10-20-25	Class review and Exam on Chapter 10 Students have 7 DAYS to make-up test.	EXAM DUE
	W 10-22-25	Welding Lecture-Simulator 2-hours lab	**Chapter 15 Key terms 1 thru 2**
11	M 10-27-25	Welding Lecture-Simulator 2-hours lab	Chapter 15 key terms 3 thru 6
	W 10-29-25	Class review and Exam on Chapter 21 1- hour lab Student has 7 DAYS to make-up exam	Chapter 15 review questions 1 thru 5
12	M 11-3-25	Welding Lecture-Simulator 2-hours lab	Chapter 15 review questions 6 thru 10
	W 11-5-25	Welding Lecture-Simulator 2-hours lab	Chapter 15 review questions 11 thru 15
13	M 11-10-25	Welding Lecture-Simulator 2-hours lab	Chapter 15 review questions 16 thru 21
	W 11-12-25	Class review and Exam on Chapter 15 Students have 7 DAYS to make-up test.	EXAM DUE
14	M 11-17-25	Welding Lecture-Simulator 2-hours lab	Lab
	W 11-19-25	Make-up and Lab	Lab
15	M 11-24-25	Make-up and Lab	Lab
	W 11-26-25	Make-up and Lab	Lab
16	M 12-1-25	Make-up and Lab	Lab
	W 12-3-25	Make-up and Lab Last Day of Class	

Institutional Policies and Guidelines

Grade Appeal Process: about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook https://www.com.edu/student-services/student-handbook.html. An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college careers. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact:
Kimberly Lachney, Student Accessibility Services Coordinator
Phone: 409-933-8919
Email: AccessibilityServices@com.edu
Location: COM Doyle Family Administration Building, Student Success Center

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Withdrawal Policy: Students may withdraw from this course for any reason prior to the last eligible day for a "W" grade. Before withdrawing students should speak with the instructor and consult an advisor. Students are permitted to withdraw only six times during their college career by state law. The last date to withdraw from the 1st 8-week session is October 1. The last date to withdraw from the 16-week session is November 14. The last date to withdraw for the 2nd 8-week session is November 25.

FN Grading: The FN grade is issued in cases of failure due to a lack of attendance, as determined by the instructor. The FN grade may be issued for cases in which the student ceases or fails to attend class, submit assignments, or participate in required capacities, and for which the student has failed to withdraw. The issuing of the FN grade is at the discretion of the instructor. The last date of attendance should be documented for submission of an FN grade.

Early Alert Program: The Student Success Center at College of the Mainland has implemented an Early Alert Program because student success and retention are very important to us. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Alert Program you will be contacted by someone in the Student Success Center who will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Resources to Help with Stress:
If you are experiencing stress or anxiety about your daily living needs including food, housing or just feel you could benefit from free resources to help you through a difficult time, please click

here https://www.com.edu/community-resource-center/. College of the Mainland has partnered with free community resources to help you stay on track with your schoolwork, by addressing life issues that get in the way of doing your best in school. All services are private and confidential. You may also contact the Dean of Students office at deanofstudents@com.edu or communityresources@com.edu.

Nondiscrimination Statement:
The College District prohibits discrimination, including harassment, against any individual on the basis of race, color, religion, national origin, age, veteran status, disability, sex, sexual orientation, gender (including gender identity and gender expression), or any other basis prohibited by law. Retaliation against anyone involved in the complaint process is a violation of College District policy.

3G GMAW Checklist

WLDG 1430	Needs Improvement	Standards Met
Root Pass		
Root Penetration – 1/16 – 3/32 penetration		
Weld Undercut – no undercuts (if there are undercuts the weld is being made too fast or with too much heat)		
Weld Tie In (Restarts) – uniform with no undercuts		
Cover Pass		
Size – each weld bead should not exceed AWS standards for the size of the Welding Wire		
Weld Undercut – no undercuts (if there are undercuts the weld is being made too fast or with too much heat)		
Weld Porosity – no pin holes in weld		
Continuous Welding Bead – straight uniform bead		
Cold Lap – need to run at proper temperature		

The lab assignments are a major part of the course outline each student will progress at their own pace. However, each student must pass at least number 5 lab assignments to pass the class at a minimum requirement to A.W.S. Standards. Students must demonstrate 3 Vee-Butt welds complete and consecutively meeting AWS standards. Any student not passed assignment 4 by (W-day) will meet with the instructor about their academic progress. The student and instructor will discuss any issue and/or distractions causing the problem. Faculty may, at their discretion withdraw a student due to an inability to maintain the prescribe minimum rate of progress stated in the course syllabi, or behavior detrimental to the learning process of the student or class.

SYLLABUS CHANGES:

The instructor reserves the right to make changes to this syllabus during the semester as needed to facilitate instruction and/or course needs.

REVISED BY VICTOR WOODS (SUMMER 2020)

Welding Safety Rules

1. **No Horseplay of any kind**
2. **No lighters or matches in the welding lab.**
3. **Safety glasses(Z87) or prescription glasses with Z87 frame and lens MUST be always worn in labs and outside when students are working, sunglasses are NOT acceptable.**
4. **Shaded cutting goggles or shaded cutting face shield must be worn when cutting with safety glasses.**
5. **Never use machinery or equipment unless instructed by faculty instructor or lab assistant.**
6. **Proper fitting clothing must always be worn in the lab (100% cotton, FRC)**
7. **Report all accidents immediately!**
8. **Grinding shields must be worn when grinding with safety glasses.**
9. **No tobacco of any type in the welding building**
10. **No spitting anywhere in the welding labs**
11. **Welding hoods with a shade of 9,10,11 or 12 must be worn while welding.**
12. **Tool rest for tungsten grinder must be maintained at 1/16 distance from wheel.**
13. **Gloves are required while welding, cutting, and handling metal in the welding lab.**
14. **FAILUE TO FOLLOW SAFETY RULES WILL RESULT TO BEING REMOVED FROM CLASS.**

SIGN_____

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