



WLDG-1425-225CL
Oxy-Acetylene Welding and Cutting,
And Other Cutting Processes
Fall 2023
MW 6:00PM - 9:20PM

Instructor: Rico Brown, rbrown@com.edu, 409-933-8380

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. (Faculty may add additional statement requiring monitoring and communication expectations via D2L or other LMS)

Student hours and location Mon-Th 11:00 am-1:00 pm Welding Technology Office

Required Textbook: Welding Principles and Applications (Larry Jeffus)
(ISBN-13: 978-1-111-03918-9) (ISBN-10: 1-111-03918-6)
(ISBN-13: 978-1-111-03917-2) (ISBN-10: 1-111-03917-8)
The Hard back and Lab book is required.

Course Description

An introduction to oxy-fuel welding and cutting, including history and future in welding, safety, setup and maintenance of oxy-fuel welding, and cutting equipment and supplies. The student will describe or explain oxy-fuel welding and cutting safety procedures and identify and classify fuels and filler metals. The student will perform entry level oxy-fuel welding and cutting operations and select proper equipment and materials

Course requirements:

WLDG 1425 Lab Assignments	Performance Rating	Date Completed	Instructor's Initials	Trainee's Initials
Plasma Arc Cutting				
1. Perform safety inspections of equipment and accessories				
2. Operate manual plasma arc cutting equipment				
3. Perform cutting on Tee Plates				
4. Perform cutting on 3/8 "plates				
5. Perform cutting on pipe				

Air Carbon Arc Cutting				
6. Perform safety inspections of equipment and accessories				
7. Operate manual air carbon arc cutting equipment				
8. Perform removing welding from tee plates				
9. Perform removing welds from 3/8" plates				
10. Perform removing welds from pipe				
Machine Oxy-fuel Gas Cutting				
11. Perform straight cutting operations on plain carbon steel				
12. Perform bevel cutting operations on plain carbon steel				
Manual Oxy-fuel Gas Cutting and Welding				
13. Operate manual oxy-fuel gas cutting equipment				
14. Perform straight cutting operations on plain carbon steel				
15. Perform beveled cutting operations on plain carbon steel				
16. Remove weld metal on plain carbon steel using weld washing techniques				
17. Perform straight cutting operations on carbon steel pipe				
18.. Perform beveled cutting operations on carbon steel pipe 5G				
19. Perform Manual oxy-fuel gas welding on plain carbon steel				

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 1 thru 7=D
4. Student must 71 thru 80 on Exams and complete Lab Objectives 1 thru 8=C
5. Student must 81 thru 90 on Exams and complete Lab Objectives 1 thru 9=B
6. Student must 91 thru 100 on Exams and complete Lab Objectives 1 thru 10=A

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.

Student Learner Outcome	Maps to Core Objective	Assessed via this Assignment
Demonstrate oxy-fuel welding and cutting safety procedures	Teamwork	Homework, Written Exams, Lab Manual Quiz Chapter 7. Students will do a safety inspection in the welding lab as a group of two or more students in front of the instructor
Identify and classify fuels and filler metals	Critical thinking	Homework, Written Exams, Lab Manual Assignment. Welding Quiz Chapter 31.
Perform entry-level oxy-fuel welding and cutting operations	Critical thinking	Homework, Written Exams, Lab Manual Quiz Chapter 32
Select proper equipment and materials.	Critical thinking	Homework, Written Exams Lab Manual Quiz Chapter 33

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 409-933-8607 dlewis22@com.edu

Course outline

Week#	Day/Date	Topic	Reading Assignments & Homework Due Dates
1	M 8-28-23	Intro + Syllabus + Expectations + Explain Grading % + Welding Safety Rules and Welding Equipment	
	W 8-30-23	Welding Lecture-Simulator 2 hours Lab	
2	M 9-4-23	Welding Lecture-Simulator 2 hours Lab	Chapter 7 Key Terms

	W 9-6-23	Welding Lecture-Simulator 2 hours Lab	Chapter 7 Review questions 1-15
3	M 9-11-23	Welding Lecture-Simulator 2 hours lab	Chapter 7 Review questions 16-34
	W 9-13-23	Welding Lecture-Simulator 2 hours lab	Chapter 7 Review questions 35-52
4	M 9-18-23	Welding Lecture-Simulator 2 hours lab	Chapter 7 quiz #5,#6
	W 9-20-23	Class Exam chapter 7	
5	M 9-25-23	Class Exam chapter 7 Welding Lecture-Simulator 2 hours lab	Chapter 8 Key Terms
	W 9-27-23	Welding Lecture-Simulator 2 hours lab	Chapter 8 Review questions 1-26
6	M 10-2-23	Welding Lecture-Simulator 2 hours lab	Chapter 8 quiz #3
	W 10-4-23	Welding Lecture-Simulator 2 hours lab	Chapter 8 quiz #6
7	M 10-9-23	Welding Lecture-Simulator 2 hours lab	
	W 10-11-23	Welding Lecture-Simulator 2 hours lab	
8	M 10-16-23	Class Exam chapter 8	
	W 10-18-23	Welding Lecture-Simulator 2 hours lab	Chapter 9 key terms
9	M 10-23-23	Welding Lecture-Simulator 2 hours lab	Chapter Review questions
	W 10-25-23	Welding Lecture-Simulator 2 hours lab	Chapter 9 quiz #3
10	M 10-30-23	Welding Lecture-Simulator 2 hours lab	Chapter 9 quiz #4
	W 11-1-23	Class Exam chapter 9	
11	M 11-6-23	Welding Lecture-Simulator 2 hours lab	Chapter 32 Key terms
	W 11-8-23	Welding Lecture-Simulator 2 hours lab	Chapter 32 Review questions 1-15
12	M 11-13-23	Welding Lecture-Simulator 2 hours lab	Chapter 32 Review questions 16-29
	W 11-15-23	Welding Lecture-Simulator 2 hours lab	Chapter 32 quiz #3
13	M 11-20-23	Welding Lecture-Simulator 2 hours lab	Chapter 32 quiz #4
	W 11-22-23	Class Exam chapter 32	
14	M 11-25-23	Welding Lecture-Simulator 2 hours lab	
	W 11-27-23	Closed Thanksgiving Holiday	
15	M 12-4-23	OPEN LAB	
	W 12-6	OPEN LAB	

16	M 12-11-23	OPEN LAB	
	W 12-13-23	OPEN LAB	

Grade Appeal Process: Concerns 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/docs/Student_Handbook_2023-2024_v2.pdf. *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 with 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 at 409-933-8919 or klachney@com.edu. The Office of Services for Students with Disabilities is in the 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 11. The last date to withdraw from the 16-week session is November 28. The last date to withdraw for the 2nd 8-week session is December 7.

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.

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.

The Speaking, Reading and Writing Center provides free tutoring services to students, staff and faculty seeking assistance for writing, reading and oral presentations for academic and non-academic assignments/projects. Located in the Technical Vocational Building 1306, the center provides face to face and online tutoring sessions in a welcoming environment. Appointments can be made in person, or on the center scheduler at com.mywconline.com, or by clicking the SRWC icon on the COM website.

Welding Safety Rules

- 1. No Horseplay of any kind**
- 2. No lighters or matches in the weld 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 be worn at all times 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 hood 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 weld lab**
- 14.FAILUE TO FOLLOW SAFETY RULES WILL RESULT BEING REMOVED FROM CLASS**