

**CASPER COLLEGE  
COURSE SYLLABUS**

**COURSE NUMBER & TITLE:** WELD 1710-01 Oxyacetylene Welding and Cutting  
**SEMESTER/YEAR:** Fall 2015

**LECTURE HOURS:** 1      **LABORATORY HOURS:** 1      **CREDITS:** 1.5

**CLASS TIME:** 7:00 – 7:50 a.m.      **MW**      **ROOM:** WT 128/141

**INSTRUCTOR'S NAME:** Darin Miller

**INSTRUCTOR'S CONTACT INFORMATION:**

Office Location: WT 129A  
Office Phone: 268-2278  
EMAIL: dmiller@caspercollege.edu

**OFFICE HOURS:** As Posted

**COURSE DESCRIPTION:** Instruction in welding safety, oxyacetylene cutting (OAC), oxyacetylene welding (OAW) and torch brazing (TB) processes. Identification of the most common joint designs, including joining processes using bead, fillet, and groove welds. Applications used with art forms, pipe welding, and nonferrous metals are covered.

**EXTENDED COURSE DESCRIPTION:** For persons with little or no previous welding experience. This course offers entry level through advanced instruction on the use of oxyacetylene cutting and welding techniques. Applications used with art forms, pipe welding, and nonferrous metals joining are introduced using the OXYACETYLENE WELDING (OAW) and OXYACETYLENE CUTTING processes.

**STATEMENT OF PREREQUISITES:** None

**GOAL:** The student will develop the necessary skills to produce quality welds on mild steel joints utilizing both processes.

**OUTCOMES:** To provide the student with a thorough understanding of the OAW, OAC, and TB processes. Areas of instruction include welding safety, acetylene welding and cutting mild steel plate and pipe, fillet and groove welds on mild steel plate using OAW, and braze welding, the AWS electrode classification system as it applies to all processes mentioned. Demonstrate effective oral and written communication, solve problems using critical thinking and creativity, use appropriate technology and information to conduct research

**METHODOLOGY:** One (1) lecture hour per week and a one (1) hour lab for sixteen (16) weeks. Students will be evaluated on the quality of assigned laboratory exercises and quizzes given throughout the length of the course. Additional grading will come in the form of a mid-term and final exam.

**EVALUATION CRITERIA:** Students will be evaluated on quizzes, tests, and lab projects. The quizzes and tests may be either written or practical. The final exam will be worth 30% of the final grade.

**GRADING SCALE**

100 - 90 = A  
89 - 80 = B  
79 - 70 = C  
69 - 60 = D  
59-below =F

**Attendance Policy:** Attendance is of utmost importance. Unexcused absences in the excess of 4 will result in the loss of one letter grade. Due to the consideration of the instructors and students, you **must** be present at the designated starting class time or you

will not be allowed to participate unless prior arrangements with the instructor have been made.

**Tool Use:** Misuse of shop tools will result in the loss of tool privileges.

REQUIRED TEXTS, READINGS, AND MATERIALS:

Welding Principals and Applications 7<sup>th</sup> ed., Jeffus

**CLASS POLICIES:**

*Last Date to Change to Audit Status:* See current Casper College catalog.

*Last Date to Withdraw with a W Grade:* See current Casper College catalog.

**No cell phones or other electronic devices are allowed in the classroom or laboratories.**

**SAFETY:** Personal and equipment safety standards will be strictly enforced. It is the individual's responsibility to develop and use a safe work attitude.

**STUDENT RIGHTS AND RESPONSIBILITIES:** Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

**Chain of Command:** If you have any problems with this class, you should first contact the instructor in order to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take your problem through the appropriate chain of command starting with the Department Head/Program Director, the Academic Dean, and lastly the vice president for academic affairs.

**Academic Dishonesty - Cheating & Plagiarism:** Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct.

**Official Means of Communication:** Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly.

**ADA Accommodations Policy:** If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, [bheuer@caspercollege.edu](mailto:bheuer@caspercollege.edu). The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

**CALENDAR OF COURSE CONTENT:**

COURSE OUTLINE		
WEEK	CHAPTER	
1 – 4	30	Oxyacetylene Welding and Cutting Equipment, Setup, & Operation
5 - 8	31	Oxyacetylene Gases and Filler Metals Test 1
9 - 12	7	Flame Cutting
	32	Oxyacetylene Welding
12- 16	33	Braze Welding Final Exam

## REQUIRED WELDMENTS

OXYACETYLENE WELDING:	1G,2G,3G	BUTT JOINT
	1F	CORNER JOINT
	2F,3F	LAP JOINT
	2F,3F	TEE JOINT
BRAZE WELDING:	1G,2G,3G	BUTT JOINT
	2F,3F	LAP JOINT
	2F,3F	TEE JOINT
CUTTING EXERCISES	As Assigned	