

# College of the Redwoods



## Course Information

Semester & Year: Spring 2026

Course ID & Section #number: WT-61- E9985

Instructor's name: KYLE SHAMP (lecture) & AMANDA CUTTLER (lab)

Day/Time of required meetings: MONDAYS & WEDNESDAYS: LECTURE - 1:15 - 2:20 & LAB: 2:30 - 5:40

Location: AT-142

Course units: 4



## Instructor Contact Information

Course location: AT-142 OR AT-121

Office hours: BY APPOINTMENT

Phone number: 707-476-4595 (Welding lab office)

Email address: [kyle-shamp@redwoods.edu](mailto:kyle-shamp@redwoods.edu) (lecture questions) OR [amanda-cuttler@redwoods.edu](mailto:amanda-cuttler@redwoods.edu) (lab questions)



Using the Pronto app and contacting instructor through canvas will be discussed during class.



## Required Material

- Material Fee \$65, Personal Protective Equipment (PPE): Safety glasses, gas welding gloves, arc welding gloves, #5 goggles, spark lighter, slip-joint pliers, soapstone marker, tip cleaners, tape measure, ear plugs, leather shoes, fire resistant clothing and a respirator (required for welding stainless steel). A handout is available with options on how and where to acquire PPE and textbook.
- Helmets will be provided to those who will need them, but they will be kept in the welding shop and not allowed to be taken home. Leather jackets and gloves can be checked out if needed but priority will be given to those who are new to the program as there is a limited number of items available for check out. It is expected students will strive to get their own gear during the first semester of taking classes and will not need to continually check out these items.



## Catalog Description

- A course in oxy-acetylene welding (OAW, OABW), cutting (OAC), arc welding (SMAW) and gouging (CAC). Students will produce and analyze welds and cuts on mild steel. Coordinated lab experience is included, and no prior experience in welding is needed.  
Note: Students provide their own required safety gear and equipment (list of requirements given first class meeting). OSHA (Occupational Health Act) approved safety glasses required by second class meeting



## Course Student Learning Outcomes



- Safely weld and/or cut mild steel with oxyacetylene gas, electric arc welding (emphasis E7018 and braze).
- Explain the arc and gas welding processes, related to OAW (Oxyacetylene Welding), OAC (Oxyacetylene Cutting), and SMAW (Shielded Metal Arc Welding).



## Course Calendar

Week	Date	Lecture/Lab
1-M	19-Jan	MLK DAY
1-W	21-Jan	Orientation- Safety and Instructions: Review Equipment
2-M	26-Jan	OAW/OAC set up and shut down & Plasma set up and shut down
2-W	28-Jan	Scenario
3-M	2-Feb	Review symbols and plans from welding competition
3-W	4-Feb	Scenario
4-M	9-Feb	Basic joints and welds & Film SMAW & Demo
4-W	11-Feb	Scenario
5-M	16-Feb	Presidents Day- No class
5-W	18-Feb	Scenario
6-M	23-Feb	Welding Symbols
6-W	25-Feb	Scenario
7-M	2-Mar	Shielded Metal Arc Welding: Principles and Electrodes
7-W	4-Mar	Scenario
8-M	9-Mar	Finish SMAW: Principles and Electrodes/Review for Midterm
8-W	11-Mar	MIDTERM
9-M	16-Mar	SPRING BREAK
9-W	18-Mar	SPRING BREAK
10-M	23-Mar	Review Midterm
10-W	25-Mar	Scenario
11-M	30-Mar	Open Lecture Day
11-W	1-Apr	Scenario



12-M	6-Apr	Mathematics for Welding
12-W	8-Apr	Scenario
13-M	13-Apr	Flame cutting and Carbon Arc Cutting
13-W	15-Apr	Scenario
14-M	20-Apr	SMAW Plate
14-W	22-Apr	Scenario
15-M	27-Apr	SMAW Pipe
15-W	29-Apr	Scenario
16-M	4-May	History of Welding
16-W	6-May	CLEAN SHOP - REVIEW FOR EXAM
17-M	11-May	No class this day
17-W	13-May	FINAL EXAM 3:15 - 5:15
		THE ABOVE SCHEDULE MAY CHANGE UPON EXTENUATING CIRCUMSTANCE



## Evaluation & Grading Policy

### Evaluation & Grading Policy

**Class size** - Maximum number of students per class is 20 students.

**Grading Standard** - Grade only, NOT a pass/no pass.

**Course Requirements**- Nine welds from weld grade sheet, midterm, and final exam. The welds should be:

1-OAW 4-SMAW (E7018) 1-OAWB 1-OAC 2-CAC

The student is expected to read the assigned paperwork/ watch videos before coming to class. Although not a requirement, it is highly recommended that the student take notes during the lectures which may be used when taking the exams.

- 60% Class Assignments (Required Welds)
- 10% Class Participation
- 5% Quizzes
- 10% Midterm
- 15% Final



## Grade scale:

Student final course grade is as follows: A (100-92), A- (91.9-90), B+ (89.9-87) B (86.9-82), B- (81.9-80), C+ (79.9-77), C (76.9-70), D (69.9-60), F (59.9-0)

## Exams and quizzes

- Exams and quizzes may be given in a written format and/or practical format. Written format will be multiple choice/ true or false/ fill-ins...or a combination of these given in person or through canvas. Practical format will be a small project to create in the shop and the project will be evaluated by the instructor. Students will maintain their individual weld sheet (provided by instructor). It is recommended that the student leave their weld sheet in the classroom and on the appropriate clipboard which is marked by course. It is the students' responsibility to approach the instructor with welds to be graded.

## A rubric

A rubric is currently in place to assess the required welds which typically deducts 5% for each weld flaw where a "perfect" industry standard weld would rate 100%. The five percent may be subject to decrease or increase depending on the severity of the flaw. Such flaws may be undercut, porosity, inclusion, excessive reinforcement, under-fill, cold lap, brittle, uneven weld. Weld grade related to number as follows: A+ (100), A (95), A- (90), B+ (87.5), B (85), B- (80) ...and so on.

A second method of assessment is also used when testing American Welding Society-AWS certification of welders. A mechanical bend test is done on these welds and qualifying or passing is subject to the AWS parameters and accepted flaws.

## Grade Sheet

Each student receives a Grade Sheet (orange), which follows them throughout their study in the Welding Program. All the welding that students perform is recorded on this one sheet, and for all courses. It is the student's responsibility to bring welds to the instructor for grading. Students can follow their own welding progress daily. The written test results may be obtained by consultation with the instructor. The final grade for the course may be found on the student's WebAdvisor account after all grading is calculated.



## Prerequisites / Co-requisites / Recommended Preparation

NONE







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## Educational Accessibility & Support

College of the Redwoods is committed to providing reasonable accommodations for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, or bipolar disorder
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders and diseases
- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the [LIGHT Center](https://www.redwoods.edu/services/sass/light.php) ,  [\(https://www.redwoods.edu/services/sass/light.php\)](https://www.redwoods.edu/services/sass/light.php), counseling and advising, alternate formats of course materials (e.g. audio books or E-texts), assistive technology, learning disability assessments, approval for personal attendants, interpreters, priority registration, on-campus transportation, adaptive physical education and living skills courses, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact [Student Accessibility Support Services \(SASS\)](https://www.redwoods.edu/services/sass/index.php) ,  [\(https://www.redwoods.edu/services/sass/index.php\)](https://www.redwoods.edu/services/sass/index.php).

If you are unsure whether you qualify, please contact SASS for a consultation:  
[SASS@redwoods.edu](mailto:SASS@redwoods.edu) (<mailto:SASS@redwoods.edu>).

### SASS office locations and phone numbers

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#### Eureka campus

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- Phone: 707-476-4280,
- Locations: Student Services building, first floor SS113

#### Northridge campus

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- Phone: 707-465-2353
- Location: Main building, near the Library

#### Klamath-Trinity campus

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- 707-476-4280

