

Syllabus for Welding Technology 90 (WT-90)

Course Information

Semester & Year: Fall 2022

Course ID & Section #: WT-90-E3762 Gas Metal Arc and Gas Tungsten Arc Welding

Instructor's name: Kyle Shamp

Day/Time of required meetings:

- Wednesday: Lecture 8:30 – 9:35 Room AT 127 and Lab 9:40 – 12:50 Room AT142

Course units: 2

Instructor Contact Information

Office location: AT121

Office hours: By Appointment

Phone number: 707-476-4355

Email address: kyle-shamp@redwoods.edu (Best way to contact instructor)

Required Materials

Textbook title: Welding Principles and Practices

Edition: 5th Edition

Author: Edward R. Bohnart

ISBN: 978-0-07-337386-7

Other requirement: Material Fee \$49, Personal Protective Equipment: 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. A handout is available with options on how and where to acquire PPE and textbook.

Catalog Description

A course in metal inert-active gas (MIG-MAG), tungsten inert gas (TIG) welding, and plasma arc cutting (PAC) theory, equipment, and processes. Students produce, analyze, test welds and cut both ferrous and nonferrous materials such as mild steel, aluminum and stainless steel. Includes coordinated lab experience.

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 cut mild or low alloy steel and nonferrous material.
- Explain the arc and gas welding processes related to materials and fit ups, SMAW (Shielded Metal Arc Welding), OAW (Oxyacetylene Welding), MIG-MAG (Metal Inert/Active Gas Welding), GTAW (Gas Tungsten Arc Welding), and FCAW (Flux Core Arc Welding).

Prerequisites/co-requisites/ recommended preparation

One of the following should be taken as a prerequisite:

- WT-53: Basic Gas and Arc Welding
- WT-54: General Gas, Braze (emphasis) Welding and soldering
- WT-60: Welding Gas and Arc (emphasis E6013) and Gas Cutting

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or [Disability Services and Programs for Students](#) (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

POLICIES FOR THIS CLASS

Class participation and Attendance policy:

- Attendance is looked upon as if you were showing up for a job and may qualify the grade that you receive, active participation is expected, and one of the most important things that you can do to succeed in this course is to attend every class meeting. Missing the first day of class may result in the instructor dropping a student from the course because the first day of class is spent going over welding/shop safety. Missing the first day of class may result in increased safety hazards of all students as well as faculty in the course. If you miss five classes, the instructor may drop you.

Classroom/Lab Safety:

- During the course of this class you will be engaged in activities that are inherently dangerous and you will be using tools/equipment that can cause great bodily injury. I take safety very seriously and have established a safety policy for my classes that seeks to ensure your safety as well as the safety of your peers and instructor. Please know that I will enforce these rules without hesitation and I will hold you accountable to the following:

General Safety Guidelines:

- You must follow all class rules regarding wearing appropriate safety gear (safety glasses, hearing protection, appropriate footwear and attire, etc.).
- You must follow all class rules regarding the safe and appropriate use of tools and equipment.
- You must follow all instructor directives relative to safety.

Safety Guidelines Relative to Drug/Alcohol Use:

- Being under the influence of drugs or alcohol during class/lab is STRICTLY PROHIBITED and is a clear violation of the student code of conduct. Any student suspected of being under the influence of drugs or alcohol OR who is displaying behaviors that I deem to be unsafe will be immediately removed from class, and I will report your removal (and the reasons behind it) to the Division Dean for further action. Additional action may include referral to the Vice President/Chief Student Services Officer.
- Please be aware that even though marijuana has been legalized in California for recreational use, it is still strictly forbidden on campus (in any form) and you are still prohibited from being under the influence while on campus.

Student Support

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful.

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 - Six welds from weld grade sheet, midterm, and final exam. The welds should be: three TIG, two MIG and one hand plasma cut. The student is expected to read the assigned chapters 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. So, bring paper and pencils into the lectures, discussions, and films.

Course Outline – TIG welding 50%, MIG welding 35%, and plasma cutting 15%

Withdrawal - The responsibility is solely upon the student to be within college calendar dates. Please notify and discuss withdrawing with the instructor prior to dropping the course. Again, if you miss five classes, the instructor may drop you.

Canvas Information – Canvas is an interactive website that allows you to download and view information. See below for Canvas log in.

Attendance - is looked upon as if you were showing up for a job and may qualify the grade that you receive. Active participation is expected. You will not be graded on attendance. One of the most important things that you can do to succeed in this course is to attend every class meeting. If an employer calls for reference, your attendance may be reported. If you miss five classes, the instructor may drop you.

Grade: Midterm exam = 17%, Final exam = 17%, Manipulative = 66%-- Missed work may be made up upon discretion and arrangement of the instructor. Extra credit can be earned by work such as extra welds, written papers, projects, and will increase a grade dependent on the amount, quality, and level of work. If extra welds are done, the highest six scores are averaged for grade and the remaining are

considered extra credit. Any welds recorded are not able to be used in future welding classes with the idea to increase welding technique and skill.

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 will be multiple choice/ true or false/ fill-ins....or a combination of these. A Scantron answer card and #2 pencils are required. Student 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 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.

The **responsibility** is solely upon the student to be within college calendar dates. Please notify and discuss withdrawing with the instructor prior to dropping the course. Again, if you miss five classes, the instructor may drop you.

Additional Policies

- Missed exams: may be made-up with instructor approval.
- Tardiness: Being late for class can happen to all of us. If you are late, please enter the class without disrupting lectures, other students, or instruction. Let the instructor know that you are in attendance so you can be marked in.
- Use of personal technological devices: Turn off or silence your phones during lectures and films. Loud music or radio is not allowed unless the entire class approves.

Admissions deadlines & enrollment policies

Fall 2022 Dates

- *Classes begin: 8/20/22*
- *Last day to add a class: 8/26/22*
- *Last day to drop without a W and receive a refund: 9/02/22*
- *Labor Day Holiday (all campuses closed): 09/05/22*

- *Census date: 9/06/22 or 20% into class duration*
- *Last day to petition to file P/NP option: 09/16/22*
- *Last day to petition to graduate or apply for certificate: 10/27/22*
- *Last day for student-initiated W (no refund): 10/28/22*
- *Last day for faculty-initiated W (no refund): 10/28/22*
- *Veteran's Day (all campuses closed): 11/11/22*
- *Fall Break (no classes): 11/21/22 – 11/25/22*
- *Thanksgiving Holiday (all campuses closed): 11/23/22 – 11/25/22*
- *Final examinations: 12/10/22 – 12/16/22*
- *Semester ends: 12/16/22*
- *Grades available for transcript release: approximately 01/06/23*

Academic dishonesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) and on the [College of the Redwoods website](#).

Disruptive behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process, a disruptive student may be temporarily removed from class. In addition, the student may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) and on the [College of the Redwoods website](#).

Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is inclusive and respectful.

Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact [Admissions & Records](#) to request a change to your preferred first name and pronoun. Your Preferred

Name will only be listed in Canvas. This does not change your legal name in our records. See the [Student Information Update form](#).

Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

Log into Canvas at <https://redwoods.instructure.com>

Password is your 8 digit birth date

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas Help for students: <https://webapps.redwoods.edu/tutorial/>

Canvas online orientation workshop: [Canvas Student Orientation Course \(instructure.com\)](#)

Community College Student Health and Wellness

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges [Health & Wellness website](#).

[Wellness Central](#) is a free online health and wellness resource that is available 24/7 in your space at your pace.

Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

Emergency procedures / Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones.

Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into WebAdvisor <https://webadvisor.redwoods.edu> and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions. For more information see the [Redwoods Public Safety Page](#).

In an emergency that requires an evacuation of the building anywhere in the District:

- Be aware of all marked exits from your area and building
- Once outside, move to the nearest evacuation point outside your building
- Keep streets and walkways clear for emergency vehicles and personnel

Do not leave campus, unless it has been deemed safe by the campus authorities.

Del Norte Campus Emergency Procedures

Please review the [Crescent City campus emergency map](#) for campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information, see the [Redwoods Public Safety Page](#).

Eureka Campus Emergency Procedures

Please review the [campus emergency map](#) for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the [CR Police Department-Public Safety](#). It is the responsibility of College of the Redwoods to protect life and property from the effects of emergencies within its own jurisdiction.

In the event of an emergency:

1. Evaluate the impact the emergency has on your activity/operation and take appropriate action.
2. Dial 911, to notify local agency support such as law enforcement or fire services.
3. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
4. Public Safety shall relay threat information, warnings, and alerts through the Everbridge emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
5. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).
6. If safe to do so, notify key administrators, departments, and personnel.
7. Do not leave campus, unless it is necessary to preserve life and/or has been deemed safe by the person in command.

Klamath Trinity Campus Emergency Procedures

Please review the responsibilities of, and procedures used by, the College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to communicate to faculty, staff, students and the general public during an emergency. It is the responsibility of College of the Redwoods, Klamath-Trinity Instructional Site (KTIS) to protect life and property from the effects of emergency situations within its own jurisdiction.

1. In the event of an emergency, communication shall be the responsibility of the district employees on scene.
 - a. Dial 911, to notify local agency support such as law enforcement or fire services.
 - b. If safe to do so, notify key administrators, departments, and personnel.
 - c. If safe to do so, personnel shall relay threat information, warnings, to ensure the school community is notified.
 - d. Contact 530-625-4821 to notify of situation.
 - e. Contact Hoopa Tribal Education Administration office 530-625-4413
 - f. Notify Public Safety 707-476-4111.
2. In the event of an emergency, the responsible district employee on scene will:
 - a. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet.
 - b. Lock all doors and turn off lights if in lockdown due to an active shooter or similar emergency.
 - c. Close all window curtains.
 - d. Get all inside to safe location Kitchen area is best internal location.
 - e. If a police officer or higher official arrives, they will assume command.
 - f. Wait until notice of all is clear before unlocking doors.
 - g. If safe to do so, move to the nearest evacuation point outside building (Pooky's Park), directly behind the Hoopa Tribal Education Building.

- h. Do not leave site, unless it has been deemed safe by the person in command. Student Support Services (required for online classes)

Student Support Services

The following online resources are available to support your success as a student:

- [CR-Online](#) (Comprehensive information for online students)
- [Library Articles & Databases](#)
- [Canvas help and tutorials](#)
- [Online Student Handbook](#)

[Counseling](#) offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- [Academic Support Center](#) for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- [Library Services](#) to promote information literacy and provide organized information resources.
- [Multicultural & Diversity Center](#)

Special programs are also available for eligible students include

- [Extended Opportunity Programs & Services \(EOPS\)](#) provides services to eligible income disadvantaged students including: textbook award, career academic and personal counseling, school supplies, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!
- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in [Eureka](#) or in [Del Norte](#)
- The [Veteran's Resource Center](#) supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821

Parking passes

Parking passes are available online at MyCampus.com; or pay daily fees at ticket machines upon entering campus.

Caveat: The above schedule and procedures are subject to change in the event of extenuating circumstances and “the instructor” reserves the right to make changes.