



## Syllabus for WT-63 Weld inspection, testing, resistance, and pattern cutting

### Course Information

Semester & Year: Spring 2022

Course ID & Section #: WT63-E3132, Weld Inspection, testing, resistance and pattern cutting

Instructor's name: Melinda 'Mindy' Bacon

Day/Time of required meetings: Tuesday 4:30-5:35 lecture and 5:40-10:05 lab, Thursday 4:30-10:05 lab.

Location: Eureka Main Campus Room AT142

Number of proctored exams: Midterm/Final

Course units: 4.0 (1.0 lecture, 3.0 lab)

### Instructor Contact Information

Office location: AT142, or Online: (Zoom meetings can be arranged).

Office hours: By appointment

Phone number: Office 707-476-4595 (on campus), Cell 707-499-8838 (call or text 24/7)

Email address: [Melinda-bacon@redwoods.edu](mailto:Melinda-bacon@redwoods.edu)

### Required Materials

Textbook title: Welding Principles and Practices, 5<sup>th</sup> Edition

Author: Edward R. Bohnart

ISBN: 978-0-07-337386-7

Other requirement: Material Fee \$50, not included in fee is Personal Protective Equipment (PPE): Safety glasses, gas welding gloves, arc welding gloves, #5 shade goggles (gas welding/cutting), spark lighter, slp-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 repair and qualification procedures, inspection, testing, layout, pattern cutting, and resistance welding. Students will produce and analyze welds (emphasis E7018) and cuts on mild, low alloy, and sheet steel to accepted industry standards. 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 approved safety glasses required by second class meeting.

### Course Student Learning Outcomes *(from course outline of record)*

1. Safely weld mild and low alloy steel with oxyacetylene gas and electric arc welding (emphasis E7018).
2. Explain the arc and gas welding processes, related to SMAW, OAW, testing, pattern cutting, and resistance welding.

### Prerequisites/co-requisites/ recommended preparation

None required. The Welding Program has prerequisite or co-requisite courses ONLY on WT56, WT90, WT91, and WT67. Other than these four courses, ANY student with ANY skill level may enroll in ANY

course. There is NO absolute sequence of courses. Students are encouraged to take as many classes as they can afford time wise and monetarily.

## 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, 1<sup>st</sup> 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.

## 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

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. It is expected that students will make every effort to attend all of the lectures each TUE 4:30-5:30. 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. Please make arrangements to make up any missed lectures in a timely fashion. Communication is key. Please feel free to contact me any time of any day.

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. Final exam will be held on Tuesday May 10, 2022 at 4:30pm on CANVAS or in person, if preferred. If you have a conflict or need special testing needs, arrangements can be made with the instructor.

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. The exams will be available on CANVAS or for in class option; 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. Welds required for WT63 will be graded by myself.

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.

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.

## **Course Requirements**

Six welds from weld grade sheet, midterm and final exam.

The welds should be: Four SMAW (7018), One Pattern cut (machine), One Resistance Weld.

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 video's.

Course Outline - SMAW welding 70%, OAC 15%, RW 15%

## **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.

### **Class participation and attendance policy**

Again, 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. If you come to class late please let the instructor know, so a late may be entered into the attendance roster.

If you miss five classes, the instructor may drop you. Before dropping a student, the instructor will attempt to contact you, by either email or phone.

### **Communication Guidelines**

The best way to contact the instructor is by text or email. Although regularly checked, please expect that either of these methods may not be checked daily, and response may be over a day or more...especially during school breaks and holidays. Additional contact may be our Division Secretary August 'Gussy' Solem 707-476-4341, Augusta-Solem@redwoods.edu; our Division Dean is Mike Haley.

### **Additional Information**

- Canvas Information – Canvas is an interactive website that allows you to download and view information for this class. Students have an account that can be accessed by the following:
- Log into Canvas at <https://redwoods.instructure.com>

- Password is your 6 digit birth date
- For tech help, email [its@redwoods.edu](mailto:its@redwoods.edu) or call 707-476-4160
- Missed exams: may be made-up with instructor approval
- Withdrawal from class is the responsibility of the student (Note the college calendar dates and deadlines on pages 4-5). Please notify and discuss withdrawing with the instructor prior to dropping the course.

## **Admissions deadlines & enrollment policies**

Spring 2022 Dates

Classes begin: 01/15/22

Last day to add a class: 01/21/22

Martin Luther King, Jr's Birthday (all campuses closed: 01/17/22

Last day to drop without a W and receive a refund: 01/28/22

Census date (or 20% into class duration): 01/31/22

Last Day to file P/NP (only courses where this is an option) 02/11/22

Lincoln's Birthday (all campuses closed): 02/18/22

Presidents Day (all campuses closed): 02/21/22

Last day to petition to graduate or apply for certificate: 03/03/22

Spring Break (no classes): 03/14/22-03/19/22

Last day for student-initiated W (no refund): 04/01/22

Last day for faculty-initiated W (no refund): 04/01/22

Final examinations: 05/07/22-05/13/22

Semester ends: 05/13/22

Grades available for transcript release: approximately 05/30/22

### **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](mailto:its@redwoods.edu) or call 707-476-4160

Canvas Help for students: <https://www.redwoods.edu/online/Help-Student>

Canvas online orientation workshop:

<https://www.redwoods.edu/online/Home/Student-Resources/Canvas-Resources>

## 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](mailto: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](mailto: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 [Redwoods Public Safety Page](#). 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 Jolene Gates 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

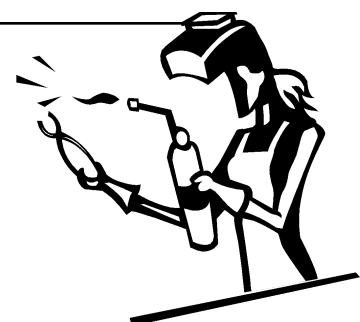
- [Academic Support Center](#) for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- [Library Services](#) to promote information literacy and provide organized information resources.
- [Multicultural & Diversity Center](#)

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

**College of the Redwoods**

**Instructor: Mindy Bacon**



**Welding Course Schedule - WT63 TTh**  
**Lecture on T and lab on Th**

<b>Week</b>	<b>Date</b>	<b>Subject 2022</b>	<b>Covered</b>
1-T	01/18/22	Chapter 32- Safety Instructions -first part	
1-Th	01/20/22	Safety & Instructions, Test, OAW - Setup and Shutdown	
2-T	01/25/22	Video on SMAW and Demonstration	
2-Th	01/27/22	Lab	
3-T	02/01/22	Video on OXY FUEL cutting and Demonstration	
3-Th	02/03/22	Lab	
4-T	02/08/22	Chapter 26 General Equipment Part 1 -----> Pg 832-847	
4-Th	02/10/22	Lab	
5-T	02/15/22	Chapter 26 General Equipment Part2 -----> Pg 848-868	
5-Th	02/17/22	Lab	
6-T	02/22/22	Chapter 2 Industrial Welding	
6-Th	02/24/22	Lab	
7-T	03/01/22	Chapter 11 Shielded Metal Arc Welding Principles	
7-Th	03/03/22	Lab	
8-T	03/08/22	Video OAC - REVIEW FOR EXAM	
8-Th	03/10/22	Lab	
9-T	03/15/22	HOLIDAY - Spring Break	OFF
9-Th	03/17/22	HOLIDAY - Spring Break	OFF
10-T	03/22/22	MIDTERM EXAM	
10-Th	03/24/22	Lab	
11-T	03/29/22	Chapter 6 - Flame Cutting Principles	
11-Th	03/31/22	Lab	
12-T	04/05/22	Chapter 7 - Flame Cutting Practice	
12-Th	04/07/22	Lab	
13-T	04/12/22	Chapter 12 - Shielded Metal Arc Welding Electrodes	
13-Th	04/14/22	Lab	
14-T	04/19/22	Chapter 4 - Basic Joints and Welds	
14-Th	04/21/22	Lab	
15-T	04/26/22	Chapter 28 - Joint Desgn, Testing, and Inspection	
15-Th	04/28/22	Lab	

16-T	05/03/22	CLEAN SHOP - REVIEW FOR EXAM	
16-Th	05/05/22	Lab	
17-T	05/12/22	FINAL EXAM Time TBA in AT142	

THE ABOVE SCHEDULE MAY CHANGE UPON EXTENUATING CIRCUMSTANCE