

Intermediate Wood Technology CT-21B-E8394

Course Information

Semester & Year: Fall 2024

Course ID and Section number: CT-21B-E8394 (058394)

Instructor's name: Leonard Bechler

Day and time of required meetings: Friday 8:20- 9:20am, 10:40am – 5:10pm

Location: AT109 wood shop

Number of proctored exams: none

Course units: 3.0

Instructor Contact Information

Office location or Online : AT109

Office hours: Thursday 11:00 – 1:00pm

Phone number:

Email address: leonard-bechler@redwoods.edu

Catalog Description

An intermediate level woodworking course. Project-based instruction includes the set-up and use of woodworking hand tools and machinery, furniture joinery, wood turning, veneering, surface preparation and wood finishing.

Course Student Learning Outcomes

CONCEPTS

What terms and ideas will students need to understand and be conversant with as they demonstrate course outcomes?

Lecture:

1. Project sequence.
2. Project plans, diagrams and bill of materials.
3. Appropriate material selection.
4. Seasonal wood movement in furniture.

5. Traditional woodworking techniques.
6. Hybrid Woodworking: blending power and hand tools.
7. Wood lab organization and safety practices.

Lab:

8. Lumber and plywood processing.
9. Hand tool manipulation.
10. Power tool setup and operation.
11. Wood joinery.
12. Wood shop organization and practices.
13. Wood shop safety procedures.
14. Rotary cutting operations; slicing versus scraping.

THEMES & ISSUES

What motifs, if any, are threaded throughout the course? What primary tensions or problems inherent in the subject matter will students engage?

1. Attention to detail, fit, finish and quality of work.
2. Teamwork and mutual regard for classmates.
3. Work ethic and soft skill development.
4. Safety attitude.
5. Use and application of low VOC finishes.
6. Efficient use of time.
7. High quality workmanship and attention to detail is required for high quality results.
8. Gender neutrality is an essential professional and legal obligation in a community workspace as well as in woodworking industry.
9. The use of mind altering substances puts individuals and their coworkers in danger.
10. Cumulative error. Proper tool etiquette and maintenance.

SKILLS

What abilities must students use to demonstrate course outcomes? (e.g., use a scientific calculator, read college-level texts, safely use power tools, etc.)

Lecture:

1. Review plans and specifications to determine project requirements.
2. Research and report on current woodworking materials, equipment and trends.
3. Plan a woodworking project and complete a bill of materials.
4. Select materials to match color, grain and texture.
5. Cut complex joinery using woodworking hand tools and power tools.
6. Grind, hone and polish tools to keep them sharp.
7. Organize materials and equipment for use in a logical sequence of operations.
8. Operate tools and equipment according to safety instructions.
9. Wear and use personal protective equipment.
10. Maintain a clean and orderly work area.
11. Dimension, shape and assemble wooden parts to a high degree of accuracy. Glue and clamp woodworking projects.

Prerequisites/corequisites/ recommended preparation

CT-21A

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, bipolar disorder, and ADHD
- 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
- A learning disability (such as dyslexia, reading comprehension), intellectual disability, autism,

- or acquired brain injury
- Vision, hearing, or mobility challenges

Available services include extended test time, quiet testing environments, tutoring, counseling and advising, alternate formats of materials (such as audio books or E-texts), assistive technology, on-campus transportation, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact [Disability Services and Programs for Students \(DSPS\)](#). If you are unsure whether you qualify, please contact DSPS for a consultation: dsp@redwoods.edu.

DSPS office locations and phone numbers

Eureka campus

- Phone: 707-476-4280
- Location: Student Services Building, first floor

Del Norte campus

- Phone: 707-465-2324
- Location: Main Building, next to the library

Klamath-Trinity campus

- Phone: 707-476-4280

Student Support Services

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.

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

[CR Online Learning Support](#)

Tech support, laptop loans, guides to using Canvas, installing Office 365 for free, and more.

[Library Articles & Databases](#)

Find the best library databases for your research.

[Online Tutoring Resources](#)

Participate in tutoring over Zoom.

To learn more about the resources available to you, click on a title bar below, or click the down arrow to expand them all.

Klamath-Trinity students can contact the CR Klamath-Trinity Office for specific information about student support services at 530-625-4821.

Community College Student Health and Wellness

National Suicide Prevention Lifeline

If you are in distress or are with someone at risk right now, call or text the National Suicide Prevention Lifeline.

Call the National Suicide Prevention Lifeline
1-800-273-TALK (8255)

Text the National Suicide Prevention Lifeline
741-741

Timely Care

When you're not feeling well physically or distressed mentally, Timely Care can offer the help you're looking for in just a few quick taps. Students can schedule an appointment anytime via phone, video, and chat. [Log in or set up an account with Timely Care.](#)

Mental Health Counseling

Students should text, email, or fax Shawna Bell directly for scheduling and/or services.

- Text: 707-496-2856
- Email: shawnabmft@gmail.com
- Fax and voicemail: 707-237-2318

Wellness Central

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 [Wellness Central](#).

Counseling

[Counseling and Advising](#) can assist students in need of academic advising and professional counseling services. Call, email or stop by one of our offices to make an appointment!

Counseling and Advising office locations and contact info

Eureka campus

- Phone: 707-476-4150
- Location: Student Services Building, first floor
- Email: counseling@redwood.edu
- Hours: Monday through Friday, 9am to 4pm. Summer hours may vary

Del Norte campus

- Phone: 707-476-2300
- Location: Main Building, next to the library
- Hours: Summer hours may vary

Klamath-Trinity campus

- Phone: 530-625-4821
- Email: KT-staff@redwoods.edu

- Hours: Summer hours may vary

Basic Needs Center

[The Basic Needs Center](#) provides for the health and safety of students by providing access to healthy food, financial resources, and referrals to safe and secure housing. [Submit a request for services and information.](#)

Basic Needs Center contact info

- Phone: 707-476-4153
- Email: the-grove@redwoods.edu

Learning Resource Center

The Learning Resource Center includes the following resources for students:

Library Services

[Library Services](#) promotes information literacy and provides organized information resources.

Multicultural and Equity Center (MCE)

The [Multicultural and Equity Center](#) is a dynamic and inclusive place that supports all students in their academic and personal journeys at the college. We do this by creating community, home away from home, and a safe place for cultural expression, cross-cultural learning, access to college and dignity resources, and social justice work opportunities. The MEC is committed to retention and student success by offering activities related to leadership development, student connectedness and student equity. We are a student-centered program that fosters respect for all people.

Academic Support Center

The [Academic Support Center](#) offers tutoring and test proctoring for CR students.

Student Tech Help

[Student Tech Help](#) provides students with assistance around a variety of tech problems.

Extended Opportunity Programs and Services (EOPS)

[Extended Opportunity Programs and Services](#) (EOPS) provides services to eligible income disadvantaged students including: textbook awards, grants, career academic and personal counseling, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!

TRiO Student Success Program

The TRiO Student Support Services Program provides eligible students with a variety of services including academic advising, career assessments, assistance with transfer, and peer mentoring. Students can apply for the program with the [Eureka TRiO office](#) or the [Del Norte TRiO office](#).

Veterans Resource Center

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.

CalWORKS

California Work Opportunity & Responsibility to Kids ([CalWORKS](#)) provides supportive services to student parents with children under the age of 18, who are receiving cash assistance (TANF benefits), to become self-sufficient. Services include: transportation assistance, basic student supplies, tutoring, priority registration, laptop and calculator loans, career, academic, and personal counseling, and more!

Evaluation & Grading Policy

COURSE REQUIREMENTS

1. & 2. Assigned and Free Choice Projects (40%)

The planning for your free choice project must start right away. The main focus of this course is furniture construction. To get the most out of the lectures you should try to include the assignments into your free choice project. Plan to complete the required projects during the semester. Free choice projects require that you turn in a working drawing, Bill of Material, and Plan of Procedure for review with instructor before starting projects.

The required assignments are listed below. You may incorporate several of the assignments into your free choice project, or they may be done on scrap wood and turned in for a grade. To get the most out of the lectures the assigned projects should be completed following the lecture.

1. Sharpen and fine-tune a hand plane.
2. Construct mortise and tenon joinery on a leg and apron.
3. Create a cove using the table saw.
4. Build a drawer with dovetail joinery using the router.
5. Produce cabriole leg, ogee bracket foot or bandsawn box using the bandsaw.
6. Make a mortising template or patterning template to use as a router guide.
7. Turn a cylinder, taper, and bead on the wood lathe, sharpen a lathe tool.

8. Make a shop aid or jig useful to your future needs.
9. Apply a clear wood finish to a project.
10. Review an article from Fine Woodworking Magazine checked-out from C.R. Library. Submit an abstract.

Involve your instructor in the planning of your project. He can help you plan for the proper materials and sequence of work. If the project is already planned go over the plans with your instructor prior to beginning. A word of advice: a simple project well executed will provide a greater sense of accomplishment than a large complex project whose results are a bit “lumpy”.

3. Clean up (10%)

Everyone is expected to clean up after themselves. Please spend 15 minutes each class helping to keep the shop clean and orderly. The instructor views clean-up as a safety issue that all students need to be involved in.

4. Work Habits: including on-time Attendance and Participation (20%)

Developing good work habits is one of the objectives of any vocational course. Just as you would at a job, arrive at class on time, and ready to work. Work together with your classmates, develop a safety attitude and put in a good effort each time you attend class.

Note: Please “check out” with the instructor prior to leaving.

5. Homework (15%)

Homework for this course will consist primarily of textbook reading assignments and questions from the lecture syllabus. The textbook for this course is very readable as well as a

6. Tests and Quizzes (10%)

Each student is required to attend a safety lecture and complete a safety test prior to using the tools and machinery in the C.R. woodshop.

7. Final Assessment (5%)

Students in all classes are expected to attend and participate in the final assessment that is held at the end of each semester. Each student is expected to present their project to the class. Prior arrangements must be made with the instructor if for any reason you are unable to attend the final.

A Non-emergency excuse for absence on final day results in loss of one full course grade.

Final Exam: Friday Dec. 20, 10:00 - 12:00 pm

Students in all classes are expected to attend and participate in the final assessment at the end of the semester. This includes a project review and written final. Prior arrangements must be made with the instructor if for any reason you are unable to attend the final. Non-emergency excuse for absence on final day results in loss of one full course grade

Grading/Evaluation: Grades are part of the teaching and learning process. Keep in mind that you earn grades; I do not “give” them to you. I will assess your work according to how well it meets class objectives, fulfills requirements, meets the assignment rubric, and reflects the academic skills expected of college students. It is your responsibility to understand why you have achieved a certain grade and

what steps you can take to maintain or improve your grade. Please feel free to consult with me using email or office visits. However, I will ask that, prior to speaking with me about your grade, you wait at least one day so you may carefully review the assignment and the grading rubric in order to clearly present your concerns to me.

Course Assessment: Student success in CT- 21B will be assessed in the following areas:

Grading Criteria Available Points

1. Manipulative Assignments = 400 100% - 93% = A Excellent

2. Participation = 300 92% - 90% = A-

Clean up (100) 89% - 87% = B+

Work Habits (200) 86% - 83% = B

4. Homework = 150 82% - 80% = B-

5. Tests, Quizzes, Report = 100 79% - 77% = C+

6. Final Assessment = 50 76% - 70% = C

_____ 69% - 66% = D

Total 1000 < 59% = Fail

Fall 2024 Dates

August 30

September 6

20
 27
October 4
 11
 18
 25
November 1
 8
 15
 22
December 6
 13
 20

Date	To Remember
August 23	Last day to register for classes (day before the first class meeting)
August 24	Classes begin
August 30	Last day to add a class
September 2	Labor Day Holiday (district wide closure)
September 6	Last Day to Drop & Receive a Refund
September 8	Last Day to Drop w/out a "W"
September 9	Census Date (20% of class)
October 31	Last Day to Petition to Graduate & Petition for Certificate
November 1	Last Day for Student/Faculty Withdrawal
November 11	Veteran's Day Holiday (District Wide Closure)

Date	To Remember
November 25-26	Fall Break (No Classes)
November 27-29	Thanksgiving Holiday (District Wide Closure)
December 14-20	Final Examinations
December 20	Last Day to File P/NP Option
December 20	Semester Ends
December 27	Grades Due
January 3	Grades Available for Transcript Release

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 [2023-2024 College Catalog](#) and [CR Board and Administrative Policies](#).

AI Use Class Policy

Recent advancements in generative artificial intelligence (AI) have made large language models such as ChatGPT and Google's Bard widely available. However, overuse of these tools in this class can undermine your learning and curtail the development of your critical and creative thinking skills. In addition, AI outputs are often unreliable and frequently subject to bias. For these reasons, the policy of this class is that AI cannot be used at any point in the completion of class assignments, including discussion posts. Any or all of your assignment submissions and discussion posts may be screened by AI detection

software, but the real penalty for AI misuse is that you will miss out on an opportunity to learn.

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. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [2023-2024 College Catalog](#) and [CR Board and Administrative Policies](#).

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.

Canvas Information

- Log into Canvas at [My CR Portal](#)
- For help logging in to Canvas and general tech help, visit [Student Technical Support](#)
- Once you're logged in to Canvas, you click on the Help icon on the left menu
- Canvas online orientation workshop: [Canvas Student Orientation Course](#)

Setting Your Preferred Name and Pronouns in Canvas

Students have the ability to display personal pronouns and an alternate first name in Canvas. Students may change their pronouns on their own in Canvas (Account :: Settings :: Edit Settings). To request a change to your preferred list name, contact [Admissions & Records](#). 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 \(pdf\)](#).

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](#) 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 visit [Redwoods Public Safety](#).

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.

To learn more about campus-specific Emergency Procedures, click on a title bar below, or click the down arrow to expand them all.

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, visit [Redwoods Public Safety](#).

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. In the event of an emergency, communication shall be the responsibility of the district employees on scene:

1. Dial 911, to notify local agency support such as law enforcement or fire services.
2. If safe to do so, notify key administrators, departments, and personnel.
3. If safe to do so, personnel shall relay threat information, warnings, to ensure the school community is notified.
4. Contact 530-625-4821 to notify of situation.
5. Contact Hoopa Tribal Education Administration office 530-625-4413
6. Notify Public Safety 707-476-4111.

In the event of an emergency, the responsible district employee on the scene will:

1. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet.
2. Lock all doors and turn off lights if in lockdown due to an active shooter or similar emergency.
3. Close all window curtains.
4. Get all inside to safe location Kitchen area is best internal location.
5. If a police officer or higher official arrives, they will assume command.
6. Wait until notice of all is clear before unlocking doors.
7. If safe to do so, move to the nearest evacuation point outside building (Pooky's Park), directly behind the Hoopa Tribal Education Building.
8. Do not leave site, unless it has been deemed safe by the person in command.