

Fall 2024

College of the Redwoods



Course Information

CT-260 Design and Production of a Solid Body Electric Guitar

Semester & Year: Fall 2024

Course ID & Section #: CT-260 Design and Production of a Solid Body Electric Guitar
#E8395

Instructor's name: Will Madaras and Bert Hafar

Day/Time of required meetings: Friday 05:30PM - 08:55PM

Location: Applied Technology, Room 109

Number of proctored exams: 0

Course units: 0

Materials Fee: \$255



Instructor Contact Information

Will Madaras:

Office Location: AT-109 (wood lab). Office hours: Variable Monday – Friday

Phone Number: Wood Lab 476-4100 extension 4623

Email address: william-madaras@redwoods.edu

Bert Hafar:

Office location: AT-124 (Near vending machines, south-west end of AT building)

Office hours: Tuesday and Thursday 3:00 - 5:00 PM and by appointment.

Phone number: Office 476-4349 Wood Lab 476-4100 extension 4623

Email address: bert-hafar@redwoods.edu



Catalog Description

A course designed to guide students through the design and construction of a custom solid body electric guitar. Students will learn to use CAD tools, manual and CNC woodworking processes, specialty luthier tools, testing and measurement processes, and electronics assembly to complete their own custom guitar. The tools and procedures for proper guitar setup and adjustment will be covered. Students do not need to know how to play guitar. Note: The course fee will cover standard materials, finishes, and components of the guitar. Students who do not complete their guitar are not entitled to a refund of any part of the fee.



Course Student Learning Outcomes

1. Select and safely use woodworking hand tools, power tools, and specialty luthier tools.
2. Employ the technologies of Computer Aided Design and Computer Numerical Control to automate design and manufacturing tasks.
3. Apply appropriate math, science, and technology concepts in the production and set up of an electric guitar.



Prerequisites / Co-requisites / Recommended Preparation

No requisites. This class is open to all those interested in building a guitar. No experience or “natural skill” is expected or required.



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 (e.g., dyslexia, reading comprehension), intellectual disability, autism, or acquired brain injury
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the [LIGHT Center \(https://www.redwoods.edu/dsps/DSPS-Home/LIGHT-Center.html\)](https://www.redwoods.edu/dsps/DSPS-Home/LIGHT-Center.html), counseling and advising, alternate formats of course materials (e.g., audio books, braille, 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 \(SASS\) \(https://www.redwoods.edu/dsps/\)](https://www.redwoods.edu/dsps/). If you are unsure whether you qualify, please contact Student Accessibility Support Services (SASS) for a consultation: [sass@redwoods.edu \(mailto:sass@redwoods.edu\)](mailto:sass@redwoods.edu).

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

Del Norte: 707-465-2353, main building, near the Library

Klamath-Trinity: 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** (<https://www.redwoods.edu/online>) (Comprehensive information for online students)
- **Library Articles & Databases** (<https://redwoods.libguides.com/az.php>)
- **Canvas help and tutorials** (https://support.canvaslms.com/s/?c__role=student&c__accountId=001A000000KMmj5IAD) (<https://www.redwoods.edu/Portals/72/Documents/Students/CR-OnlineStudentHandbook.pdf>)
- **Online Tutoring Resources** (<https://redwoods.libguides.com/Tutoring/Online>)

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 KT Office for specific information about student support services at 530-625-4821

Community College Student Health and Wellness

If you are in distress or are with someone at risk right now, call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255) or TEXT 741-741

Timely Care

When you're feeling under the weather physically or distressed mentally, you can find the help you're looking for in just a few quick taps. Students can schedule an appointment anytime via phone, video, and chat. Visit [TimelyCARE \(https://www.timelycare.com/redwoods\)](https://www.timelycare.com/redwoods).

Mental Health Counseling

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

Contact info

Text: 707-496-2856

Email: shawnabmft@gmail.com (<mailto:shawnabmft@gmail.com>)

Fax: 707-237-2318 (voicemail can be left via fax)

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 \(https://cvc.edu/wellness/\)](https://cvc.edu/wellness/).

Counseling

[Counseling & Advising \(https://www.redwoods.edu/counseling.html\)](https://www.redwoods.edu/counseling.html) can assist students in need of academic advising and professional counseling services. Eureka Campus-Visit the Welcome Center in the lower level of the student services building Monday –Friday 9am – 4pm (during the semester, summer hours may vary).

Eureka Downtown Site- 525 D St Eureka Phone: 707-476-4500 Email: ace@redwoods.edu

Basic Needs Center

[The Basic Needs Center \(https://www.redwoods.edu/student-services/Home/Basic-Needs.html\)](https://www.redwoods.edu/student-services/Home/Basic-Needs.html) provides for the health and safety of students by providing access to healthy food, financial resources, and referrals to safe and secure housing. Students can also [submit a request for services and information \(https://cm.maxient.com/reportingform.php?Redwoods&layout_id=7\)](https://cm.maxient.com/reportingform.php?Redwoods&layout_id=7) online.

Contact info

Phone: 707-476-4153

Email: the-grove@redwoods.edu

Learning Resource Center

Learning Resource Center includes the following resources for students:

- [Library Services \(https://www.redwoods.edu/library\)](https://www.redwoods.edu/library) to promote information literacy

and provide organized information resources.

- **Multicultural & Diversity Center.** (<https://www.redwoods.edu/student-services/Home/Multicultural-and-Equity-Center.html>)
- **Academic Support Center.** (<https://www.redwoods.edu/asc/index.html>) – offers tutoring and test proctoring for CR students.
- **Student Tech Help.** (<https://www.redwoods.edu/sts/>) – provides students with assistance around a variety of tech problems.

Extended Opportunity Programs & Services (EOPS)

Extended Opportunity Programs & Services (EOPS) (<https://www.redwoods.edu/student-services/Home/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 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** (<https://www.redwoods.edu/trio/eureka.html>) . or in **Del Norte** (<https://www.redwoods.edu/delnorte/TRiO.html>) .

Veterans Resource Center

The **Veteran's Resource Center.** (<https://www.redwoods.edu/student-services/Home/Vets.html>) 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

CalWORKs (<https://www.redwoods.edu/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!

Required Materials

Safety glasses, tape measure, pencils, hearing protection, face coverings or masks.

Materials fee: This fee covers the cost of all materials necessary to build an electric guitar. If you choose to upgrade your wood selection, you will be responsible for the additional costs.



Evaluation & Grading Policy

No grades are issued for this class. Success is determined by participation.

Classroom Policies

Class participation and Attendance policy: You are expected to attend every class session. Please arrive on time and be prepared to work. Lecture and discussion will start promptly at 5:30pm. If you miss valuable instruction do not expect your instructor to repeat instruction at your convenience. Guitar building is a sequential process, if you fall behind it is very difficult to catch up.

Lack of planning on your part does not constitute an emergency on my part.

Clean-Up: Everyone is expected to clean up after themselves. Please spend a minimum of 15 minutes at the end of each class meeting helping to keep the shop clean and orderly. This is a safety issue that all students need to be involved in.

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

Note: Please “check out” with your instructor before you leave.

Communication Guidelines:

Email is the best way to contact us: bert-hafar@redwoods.edu or william-madaras@redwoods.edu.

Please put CT260 in the subject line to ensure a timely response. We will try to respond to any email within 24 hours. Also, regularly check your email and Canvas for updates.

Additional Policies:

Safety: Lab safety and coworker safety are your top priorities as a student woodworker. In addition to machine-specific safety rules, always keep in mind the following rules, and

work toward developing a safety attitude.

- Wear safety glasses at all times.
- Use all the safety guards and other safety devices.
- Have the Instructor check special setups.
- Do not work with any tools or machinery unless the instructor is present.
- Do not work if you are intoxicated or under the influence of drugs.
- Report all accidents and injuries to the instructor immediately.

Student Code of Conduct Standards

All College of the Redwoods students are encouraged to familiarize themselves with, and conform to, college rules and regulations governing personal conduct on all campuses of the district as outlined in the current college catalog.

Electronic Devices: Do not answer your phone or engage in texting, gaming, or surfing the web during class time.

General Guidelines: Do not come to class stoned, drunk, or otherwise chemically compromised. If you do or if I have any reason to suspect you are, I will ask you to leave. The wood lab is inherently dangerous and is no place to be in an altered state of mind. If you have a medical condition or are using medication prescribed by a physician that may affect your ability to function in the lab, please discuss this with me.

NOTE: You may be withdrawn from this course for non-participation.

Covid 19

It is the intent of CR and your instructors to provide a safe, clean, Covid-free learning environment for you. If you feel that your health may have been compromised in any way, please contact your instructor immediately via email or phone. Please do not attend class if you feel sick or suspect an illness of any type. We must be considerate of the health of those around us.

It is recommended that you provide your own small, regularly used hand tools such as pencils, tape measure, chisels, etc. The fewer items we share the less likely we are to share our germs.

CAVEAT: The schedule and procedures for this course are subject to change in the event of extenuating circumstances.



Fake Student Policy

Fraudulent enrollments are on the rise. To ensure that real students can get seats in the class, no shows will be dropped in the middle of the first week of classes. Also, if you are suspected of being a bot, you will be dropped from the class. If you have been dropped but are a real student, please contact your instructor right away to be reinstated in the class.



Fall 2024 Dates

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)
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 (approximate)

Important Fall 2024 Academic Dates



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 \(https://go.boarddocs.com/ca/redwoods/Board.nsf/goto?open&id=C9RVCG801790\)](https://go.boarddocs.com/ca/redwoods/Board.nsf/goto?open&id=C9RVCG801790)) 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 \(https://www.redwoods.edu/catalog\)](https://www.redwoods.edu/catalog) and on the [College of the Redwoods website \(https://www.redwoods.edu/\)](https://www.redwoods.edu/).



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. The Student Code of Conduct ([AP 5500 \(https://go.boarddocs.com/ca/redwoods/Board.nsf/Public?open&id=policies\)](https://go.boarddocs.com/ca/redwoods/Board.nsf/Public?open&id=policies)) 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 \(https://www.redwoods.edu/catalog\)](https://www.redwoods.edu/catalog) and on the [College of the Redwoods website \(https://www.redwoods.edu/\)](https://www.redwoods.edu/).



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

Canvas Information

Log into Canvas at [My CR Portal \(https://myapps.microsoft.com/Redwoods.edu/\)](https://myapps.microsoft.com/Redwoods.edu/)

[\(https://myapps.microsoft.com/Redwoods.edu/\)](https://myapps.microsoft.com/Redwoods.edu/) For help with Canvas visit the [Canvas Help Page \(https://support.canvaslms.com/s/?c_role=student&c_accountId=001A000000KMmj5IAD\)](https://support.canvaslms.com/s/?c_role=student&c_accountId=001A000000KMmj5IAD)

If you cannot log into Canvas or access the CR Portal please submit a [help ticket \(https://help.redwoods.edu/support/home\)](https://help.redwoods.edu/support/home).

Canvas online orientation workshop: [Canvas Student Orientation Course \(instructure.com\) \(https://redwoods.instructure.com/courses/6781\)](https://redwoods.instructure.com/courses/6781)

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 \(https://www.redwoods.edu/admissions/index.html\)](https://www.redwoods.edu/admissions/index.html) 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 \(https://www.redwoods.edu/Portals/28/A.R.Forms.Docs/Miscellaneous/Student%20Information%20Updateb9bc.pdf?ver=2022-03-30-165900-813\)](https://www.redwoods.edu/Portals/28/A.R.Forms.Docs/Miscellaneous/Student%20Information%20Updateb9bc.pdf?ver=2022-03-30-165900-813).



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 \(https://webadvisor.redwoods.edu\)](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 \(mailto:security@redwoods.edu\)](mailto:security@redwoods.edu) if you have any questions. For more information see the [Redwoods Public Safety Page \(https://www.redwoods.edu/publicsafety\)](https://www.redwoods.edu/publicsafety).

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 \(https://www.redwoods.edu/Portals/70/pdfs/DN%20CampusSafetyMap_010819-2.pdf\)](https://www.redwoods.edu/Portals/70/pdfs/DN%20CampusSafetyMap_010819-2.pdf) 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 \(https://www.redwoods.edu/publicsafety\)](https://www.redwoods.edu/publicsafety) .

Eureka Campus Emergency Procedures

Please review the [campus emergency map \(https://www.redwoods.edu/Portals/33/Maps/EurekaEmergencyMap_S24%20\(2\).pdf\)](https://www.redwoods.edu/Portals/33/Maps/EurekaEmergencyMap_S24%20(2).pdf) 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 \(https://www.redwoods.edu/publicsafety\)](https://www.redwoods.edu/publicsafety) . 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, KlamathTrinity 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 even 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.
- Student Support
Services (required for online classes)