

## Course Information

Semester & Year: **Fall 2024**

Course ID & Section #: **E7468**

Instructor's name: **Robert Satava**

Day/Time of required meetings: **W 6:05pm-10:20pm**

Location: **HU 129**

Course units: **2**

## Instructor Contact Information

Office location: **N/A**

Office hours: **N/A**

Phone number: **N/A**

Email address: [robert-satava@redwoods.edu](mailto:robert-satava@redwoods.edu)

## Textbook

**House Wiring, 5th edition by Greg Fletcher (ISBN: 978-1-337-40241-5)**

## Catalog Description

A continuing study of the electrical theory, principles and skills learned in CT-78B. Students will act as group leaders and be involved in problem solving. Specific instruction will be in relays, motors, 3-phase power, schematics, heating equipment, high efficacy lighting and electronic controls required for the completion of the student project house.

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

1. Calculate the electrical requirements for a single family residence, including watt loss and voltage drop for 2-wire and 3-wire circuits.
2. Apply the NEC and California Electrical Code requirements for electrical service.
3. Install the major components of the typical residential electrical system.

## Prerequisites/co-requisites/ recommended preparation

**None**

## 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](mailto: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

## Admissions deadlines & enrollment policies

### 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

Date	To Remember
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 [College Catalog](#) and on the [College of the Redwoods website](#).

## 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](#)) 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](#).

## 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 <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.

## 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 emergency situations 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.

## 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 financial assistance, support and encouragement for eligible income disadvantaged students at all CR locations.
- 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.

## Evaluation & Grading Policy

### Student Contribution

Students are expected to spend time reading assigned material, answering chapter review questions, and studying for tests as necessary outside of normal class time. Attendance is critical in this course. Lectures may contain material not included in the textbook and students will be responsible for this material. The student will be expected to participate in all lectures, preferably as “interactive aides”, but minimally as “active listeners”. Each student is responsible for all material presented in this course regardless of class attendance. Students will be expected to adhere to the College of the Redwoods Student Code of Conduct and Discipline at all times.

### Course Participation Policy

In every occupation participation is critical and this course is no different. Everyone has a task and something to contribute, we all depend on each other in order to realize our goals. In order to fully participate, students must be present and actively engaged in whatever the current task is. Punctuality is an important part of participation. If someone is late for work, it not only reflects poorly on their character, it puts the entire process behind schedule.

**\*\*Attendance is required: 10 points for each class attended (0 points if class is missed, 5 points if you are late or leave early)\*\***

### Assignments/Exams

Assignments and exams are to be completed as assigned. Assignments and exams are posted in Canvas with a description of how to complete the assignments and when it is due. If there are questions about the requirements for any assignment or exam, it is the student's responsibility to seek clarification from the instructor. There will be no substitutions for assigned course work, as a general rule.

### Late and/or Missing Work

By default, all late and missing work is the responsibility of the student and should be completed as assigned. The instructor assumes no obligation to offer make-up work or any type of alternative arrangement for late and/or missing assignments.

### Missed Assignments/Exams

Some assignments and exams can only be completed if students are in class. If a student must miss a class, for any reason, their ability to make up the missed assignment is up to the discretion of the instructor. If a student must miss an exam, it is their responsibility to notify the instructor PRIOR to the scheduled exam. A student's ability to make up a missed exam is mostly dependent on how much notice the instructor is given. The process for makeup exams entails students making

an appointment with the Testing Center at the Academic Support Center in the Learning Resource Building on campus. The exam must be made up prior to the post exam review that follows the original exam date. Typically, an exam is scheduled on a certain day and the following week the exam is returned to students and a post exam review is held in class. Therefore, typically, a makeup exam must be completed either before, or within a week of, the original exam date.

### **Safety**

Workplace safety is of the highest priority in any industry. As we are learning, and in a sense training, to be electricians it is of the utmost importance that we discuss and practice workplace safety in everything we do. Some students may have taken courses designed for this while others have not. Therefore while we are at the project house all students will conduct themselves in a safe and professional manner. Any lack of attention or regard for the safety of oneself or others can and 4student to ask about proper safety practices before attempting any task that may be deemed “unsafe” without prior training. This includes, but is not limited to: climbing ladders, using power tools and working on or around live circuitry. **No student is authorized to energize any circuits without first receiving approval from the instructor. No student will ever be permitted to work on a circuit that is energized without first de-energizing the circuit.**

### **Drug and Alcohol Policy**

Being under the influence of drugs or alcohol during class is unacceptable and is a violation of the student code of conduct. Any student suspected of being under the influence of drugs or alcohol will be asked to leave. Further action may include referral to the Chief Student Services Officer and/or removal from the program.

### **CT 78A Course Evaluation**

Grades will be earned as follows:

- Attendance - 10 points each/15 classes, 150 points possible
- Chapter Quizzes/worksheets - 10 points each, 140 points possible
- Midterm - 100 points
- Final - 100 points
- TOTAL - 490 points possible
- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%
- F 59% and below

### **Course Calendar**

Aug. 28	First day of class introduction and lecture
Week 1 Sep. 4	Switching Circuit Installation Read chapter 13 complete quiz on Canvas
Week 2 Sep. 11	Branch Circuit Installation Read chapter 14 complete quiz on Canvas
Week 3 Sep. 18	Special Residential Wiring Situations Read chapter 15 complete quiz on Canvas
Week 4 Sep. 25	Video, Voice, and Data Wiring Installation Read chapter 16 complete quiz on Canvas

Week 5 Oct. 2	Lighting Fixture Installation Read chapter 17 complete quiz on Canvas
Week 6 Oct. 9	Device Installation Read chapter 18 complete quiz on Canvas
Week 7 Oct. 16	In-class Midterm
Week 8 Oct. 23	Service Panel Trim-Out Read chapter 19 complete quiz on Canvas
Week 9 Oct. 30	Electrical Box Installation Read chapter 10 complete quiz on Canvas
Week 10 Nov. 6	Checking Out and Troubleshooting Electrical Wiring Systems Read chapters 20 complete quiz on Canvas
Week 11 Nov. 13	TBD
Week 12 Nov. 20	TBD
Nov. 25-29	Fall Break – No Classes
Week 13 Dec. 4	TBD
Week 14 Dec. 11	TBD
Dec. 18	Final Projects Due

\*\*\* There will be some classes that are spent at the project house site or lab. Those dates are TBD and will adjust the class schedule accordingly. This is a preliminary schedule and can be updated as needed. Always check Canvas for the most current schedule.\*\*\*

**Required tool list:**

- Tool belt and/or bag
- Utility knife or cable stripper
- Tape measure
- Hammer
- Safety glasses
- Linesmans pliers
- Needle nose pliers
- Wire strippers
- #2 Squaredrive screwdriver
- Standard straight blade screwdriver

- #2 Phillips screwdriver
- Permanent Marker (e.g. Sharpie™)
- Pen and notepad (one that will fit in your pocket)