CR COLLEGE OF THE REDWOODS — Syllabus for CT 32 – Photovoltaic Design & Installation

Course Information

Semester & Year: **Spring 2022**
Course ID & Section #: E3067
Instructor's name: **Robert Satava**
Day/Time of required meetings: W 6:05pm-9:35pm
Location: **HU 129**
Course units: **1**

Instructor Contact Information

Office location: **N/A**
Office hours: **N/A**
Phone number: **N/A**
Email address: **robert-satava@redwoods.edu**

Catalog Description

A basic overview of the design and installation of a utility-intertie Photovoltaic system. Successful completion of this course will provide the student with the entry-level skills of a Photovoltaic system installer.

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

1. Identify the components of a solar Photovoltaic (PV) system.

2. Design and construct solar PV system.

3. Evaluate a solar PV system

Prerequisites/co-requisites/ recommended preparation

None

Textbook

Recommended Text:
The Electrician's Guide to Photovoltaic System Installation, by *Greg Fletcher*, ISBN: 978-1-111-63996-9

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.

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.

Canvas Information

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)

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.

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.

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

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)

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 will be handled by dismissal from the jobsite. We will cover many safe practices but it is also the responsibility of the student 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 32 Course Evaluation

Grades will be earned as follows:

      Attendance - 10 points each/8 classes, 80 points possible
      Chapter Quizzes/worksheets - 10 points each, (TBD) points possible
      Late Homework submissions will be discounted 25%
      Final - TBD
      TOTAL – (TBD) points possible

            A 90-100%
            B 80-89%
            C 70-79%
            D 60-69%
            F 59% and below

Course Calendar

Week 1	Course Introduction
Mar. 23	Intro to course

Week 2	PV System Installation at Project House
Mar. 30	Meet at project house in Fortuna
Week 3	PV System Installation at Project House
Apr. 6	Meet at project house in Fortuna
Week 4	PV System Installation at Project House
Apr. 13	Meet at project house in Fortuna
Week 5	PV System Installation at Project House
Apr. 20	Meet at project house in Fortuna
Week 6	PV System Installation at Project House
Apr. 27	Meet at project house in Fortuna
Week 7	PV System Installation at Project House
May 4	Meet at project house in Fortuna
Week 8	PV System Installation at Project House
May 11	Meet at project house in Fortuna

This is a preliminary schedule and can be updated as needed. Always check Canvas for the most current schedule.
in your pocket)