# CR COLLEGE OF THE REDWOODS

## Course Information

Semester & Year: Fall 2023
Course ID & Section #: AT-10-E5567
Instructor's name: Ernest Shull
Day/Time of required meetings: Tuesday & Thursday 8:15 AM to 12:35 PM
Location: AT-128
Course units: 4

## Instructor Contact Information

Office location AT-129A
Office hours: Monday and Wednesday 11:30 AM to 12:30 PM
Phone number:707-476-4221
Email address: Ernest-Shull@redwoods.edu

## Catalog Description

The Maintenance and Light Repair (MLR) certificate is part of the Automotive Technology Program. It is designed as an entry level certificate, recognizing the knowledge and skills industry has identified as required for employment for entry level technicians. The development of this certificate will provide a pathway of stackable credentials leading to the AS Automotive Technology.

### Text and References

Automotive Maintenance & Light Repair, 2nd
Edition , Rob Thompson, Cengage Learning, ISBN
10: 1337564397

## Course Student Learning Outcomes

1. Research and perform routine maintenance on a modern vehicle.
2. Exhibit proficiency with precise measurement instruments.
3. Perform routine inspections and repairs on a modern vehicle.

## 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 challenges

Available services include extended test time, quiet testing environments, tutoring, counseling and advising, alternate formats of materials (e.g., audio books, 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: dsps@redwoods.edu.

- Eureka: 707-476-4280, Student Services Building, 1st floor
- Del Norte: 707-465-2324, Main Building, near the library
- Klamath-Trinity: 707-476-4280

## 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

## Course Evaluation

### Course Points
All Labs will contribute 50% towards your final grade. Labs are graded at 20 points per lab. 10 Points towards participation and 10 points towards Repair Orders.
Tests and Homework will contribute towards the other 50% with 10% towards Homework and 40% toward Tests

### Chapter Quiz Assignment
Homework will include completing the chapter quizzes for that day as a group in class. This can be made up if a class day is missed.
**Extra Credit -** Each student may elect independently to read and report on a topic related to automatic transmissions/transaxles from a source other than the course text i.e. recognized trade publications, library reference material, magazines, newspaper articles, etc... The report must be no less than one page typed and no longer than three pages typed. You must properly cite your references on a separate page. You may earn up to 50 points per report and you may turn in a maximum of 1 report per semester. Please inform the instructor of your topic prior to doing this assignment.

## Fall 2023 Dates
- **August 18th: Last day to register for classes (day before the first class meeting)**
- **August 19th: Classes begin**
- **August 25th: Last day to add a class**
- **September 1st: Last day to drop without a "W" and receive a refund**
- **September 4th: Labor Day Holiday (All Campuses Closed)**
- **September 5th: Census Date (20% of class)**
- **October 26th: Last day to petition to graduate**
- **October 27th: Last day for student initiated withdrawal (62.5% of class)**
- **October 27th: Last day for faculty initiated withdrawal (62.5% of class)**
- **November 11th: Veterans Day (All Campuses Closed)**
- **November 20th-25th: Thanksgiving break (no classes)**

- **November 22nd-24th: No Classes, all campuses closed**
- **December 9th-15th: Final Examinations**
- **December 15th: Last day to file for P/NP option**
- **December 15th: Semester Ends**
- **December 22nd: Grades due**
- **January 5th: Grades available**

## Course Attendance Policy

Attendance will be taken at the start of each class session. **Students who accumulate 4 absences during the first 10 weeks of class will be dropped from this class by the instructor, no exceptions.**
Punctuality is essential in the workplace and is considered respectful of fellow students and instructors. Excessive tardiness can affect your score as well. Less time present means you have less time to complete tasks.

Students who have experienced extenuating circumstances can complete & submit the **Excused Withdrawal Petition** to request an Excused Withdrawal (EW) grade instead of the current Withdrawal (W) or non-passing (D, F & NP) grades. The EW Petition is available from the Admissions and Records Forms Webpage. Supporting documentation is required.

## 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

**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 [My CR Portal](#)

For help logging in to Canvas, visit [My CR Portal](#).

For help with Canvas once you're logged in, click on the Help icon on the left menu.

For tech help, email [its@redwoods.edu](mailto:its@redwoods.edu) or call 707-476-4160

Canvas online orientation workshop:  [Canvas Student Orientation Course (instructure.com)](#)

## 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](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 [CR Police Department-Public Safety](#) 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
- Online Tutoring Resources

Counseling offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- Library Services to promote information literacy and provide organized information resources.
- Multicultural & Diversity Center
- Academic Support Center – offers tutoring and test proctoring for CR students.
- Student Tech Help – provides students with assistance around a variety of tech problems.

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.
- CalWORKS – assists student parents with children under the age of 18, who are receiving cash assistance (TANF), to become self-sufficient.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821

**Course Schedule**

| Day | Theory | Lab | Assigned Reading |
|---|---|---|---|
| 8-22 | Overview | Shop Safety/Safety Test | Ch. 2, |
| 8-24 | Shop Basics Vehicle ID | Engine Inspections | Ch. 22 |
| 8-29 | Engine Principles | Engine Testing | Ch. 23 |
| 8-31 | Engine Review | **Test 1** | |
| 9-5 | Electrical | ConsuLab/DMM | Ch. 17 |
| 9-7 | Vehicle Wiring | Wiring Diagrams & Repair | Ch. 18 |
| 9-12 | Electronic Service | Battery Service & Test | Ch. 19 |
| 9-14 | Starting & Charging | Charging Lab | Ch. 20 |
| 9-19 | Starting & Charging | Starting Lab | |
| 9-21 | Lighting & Electrical | Lighting Systems | Ch. 21 |
| 9-26 | Electrical Review | **Test 2** | |
| 9-28 | Brake Principles | Brake Inspections | Ch. 10 & 11 |
| 10-3 | Drum Brakes | Drum Brakes | Ch. 12 & 13 |
| 10-5 | Disc Brakes | Disk Brakes | Ch. 14 & 15 |
| 10-10 | ABS ESC | Parking Brakes & Assist | Ch. 16 |
| 10-12 | Brakes Review | **Test 3** | |
| 10-17 | Wheels & Tires | Bearings & Tires | Ch. 5 |
| 10-19 | Suspension Systems | Suspension Inspections | Ch. 5 & 7 |
| 10-24 | Steering Systems | Steering Inspections | Ch. 8 & 9 |
| 10-26 | Suspension/Steering Review | Component R&R | |
| 10-31 | | **Test 4** | |
| 11-2 | Drive Trains | Drive Train Inspections | Ch. 25 |
| 11-7 | Drive Train | Half-Shaft R&R | |
| 11-9 | Transmissions | Transmission Inspections | |
| 11-14 | Transmissions | Fluid Replacement & Flushing | |
| 11-16 | | Test 5 | |
| 11-21 | **Fall Break** | **No Class** | |
| 11-23 | **Fall Break** | **No Class** | |
| 11-28 | Scan Tools | Scan Tools | Ch. 24 |
| 11-30 | Vehicle Maintenance | Vehicle Inspections & HVAC | Ch. 27 & 26 |
| 12-5 | Vehicle Inspections | Vehicle Inspections | |
| 12-7 | Make Up Day | Make Up Day | |
| | | | |
| 12-12 | **Final Exam** | **Final Exam** | |