

# AT-10 Intro to Auto Tech

## Course Information

- Semester and Year: Fall 2025
- Course ID and Section number: AT-10-E9064
- Instructor's name: Ernest Shull
- Day and time of required meetings: Tuesday, Thursday, 8:15 AM – 12:35 PM
- Location: AT-128
- Course units: 4

## Instructor Contact Information

- Office location or Online AT-122
- Office hours: Open Door Policy
- Phone number: 707-476-4221
- Email address: ernest-shull@redwoods.edu

## Required Materials:

- Safety Glasses ANSI Z87.1+
- **Text and References**  
Automotive Maintenance & Light  
Repair, 3rd Edition , Rob  
Thompson, Cengage Learning,  
ISBN 10: 0-357-76662-8

## 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.

## Course Student Learning Outcomes

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

## 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 may be dropped from this class by the instructor. There may be situations where this will occur due to unforeseen circumstances. Please contact me so we can discuss your attendance and possible makeup work.**

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.

## 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. Please fill out your repair orders as neatly and complete as possible. Some labs will be worth more points if they are a multi-day lab.
- Tests and Homework will contribute towards the other 50% with 10% towards Homework and 40% towards Tests. Homework will usually be completed as a group after the lecture; however, due to certain time constraints, it may have to be completed after class.
- Your final grade will be based on your grade in Canvas; however, I will also take into consideration attendance and attitude in the shop when considering your final posted grade. If you ever have any questions about this, feel free to contact me.
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**Extra Credit** - Each student may elect independently to read and report on a topic related to this course 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.

## Educational Accessibility and 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, or bipolar disorder
- 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
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the [LIGHT Center](#), 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 \(SASS\)](#). If you are unsure whether you qualify, please contact Student Accessibility Support Services (SASS) for a consultation: [sass@redwoods.edu](mailto:sass@redwoods.edu).

## SASS office locations and phone numbers

### Eureka campus

- Phone: 707-476-4280
- Location: Learning Resource Center (Library)

• **Course Schedule**

<i>Day</i>	<i>Theory</i>	<i>Lab</i>	<i>Assigned Reading</i>
8-26	Overview	Shop Safety/Safety Test	Ch. 2,
8-28	Shop Basics Vehicle ID	Engine Inspections	Ch. 22
9-2	Engine Principles	Engine Testing	Ch. 23
9-4	Engine Review	<b>Test 1</b>	
9-9	Electrical	ConsuLab/DMM	Ch. 17
9-11	Vehicle Wiring	Wiring Diagrams & Repair	Ch. 18
9-16	Electronic Service	Battery Service & Test	Ch. 19
9-18	Starting & Charging	Charging Lab	Ch. 20
9-23	Starting & Charging	Starting Lab	
9-25	Lighting & Electrical	Lighting Systems	Ch. 21
9-30	Electrical Review	<b>Test 2</b>	
10-2	Brake Principles	Brake Inspections	Ch. 10 & 11
10-7	Drum Brakes	Drum Brakes	Ch. 12 & 13
10-9	Disc Brakes	Disk Brakes	Ch. 14 & 15
10-14	ABS ESC	Parking Brakes & Assist	Ch. 16
10-16	Brakes Review	<b>Test 3</b>	
10-21	Wheels & Tires	Bearings & Tires	Ch. 5
10-23	Suspension Systems	Suspension Inspections	Ch. 6 & 7
10-28	Steering Systems	Steering Inspections	Ch. 8 & 9
10-30	Suspension/Steering Review	Component R&R	
11-4		<b>Test 4</b>	
11-6	Drive Trains	Drive Train Inspections	Ch. 25
11-11	<b>Veteran's Day</b>	<b>No Class</b>	
11-13	Transmissions	Transmission Inspections	
11-18	Transmissions	Fluid Replacement & Flushing	
11-20		<b>Test 5</b>	
11-25	<b>Fall Break</b>	<b>No Class</b>	
11-27	<b>Fall Break</b>	<b>No Class</b>	
12-2	Scan Tools	Scan Tools	Ch. 24
12-4	HVAC	HVAC	Ch. 26
12-9	Vehicle Inspections	Vehicle Inspections	Ch. 27
12-11	Make Up Day	Make Up Day	
12-16	<b>Final Exam</b>	<b>8:30AM – 10:30AM</b>	