

# AUTO 100: AUTOMOTIVE TECHNOLOGY AND MAINTENANCE FOR THE CONSUMER

## Citrus College Course Outline of Record

Heading	Value
Effective Term:	Fall 2023
Credits:	3
Total Contact Hours:	72
Lecture Hours :	54
Lab Hours:	18
Hours Arranged:	0
Outside of Class Hours:	108
Total Student Learning Hours:	180
Strongly Recommended:	ENGL 101.
Transferable to CSU:	Yes
Transferable to UC:	No
Grading Method:	Standard Letter, Pass/No Pass

## Catalog Course Description

Intended for non-majors. Automobiles and light trucks will be explained from the point of view of the consumer. Operation of essential automotive technologies is central to the course goal of skill development in the inspection of various automobile systems for needed repairs and/or maintenance performed by the end-user. Appropriate lab activities in automobile inspection, service and repair are included. 54 lecture hours, 18 lab hours.

## Course Objectives

- explain how the various automotive systems work
- explain why required maintenance and service is needed
- perform basic maintenance and service
- independently diagnose basic problems found in the various automotive systems

## Major Course Content

1. Theory of Operation, Maintenance, Inspection, and Basic Service & Repair of the following Automotive Systems:
  - a. Engines
  - b. Fuel & Ignition Systems
  - c. Chassis Systems
  - d. Electrical/Electronic Systems
  - e. Drivetrain
  - f. Alternative Propulsion Methods
2. Service Equipment Usage, Procedures and Safety
  - a. Basic Hand Tools
  - b. Vehicle Lifting Apparatus
  - c. Pneumatic Tools
  - d. Precision Measuring Tools

- e. Hazardous Materials
  - f. Fasteners
  - g. Basic Shop Safety - Personal Protective Equipment
3. Service Literature and Vehicle Information
    - a. Vehicle Identification Numbers
    - b. Vehicle Labels
    - c. Specifications
    - d. Maintenance Schedules
    - e. Technical Service Bulletins
    - f. Safety Recalls and Special Service Campaigns
    - g. Owners Manuals
    - h. Repair Manuals
    - i. Online/Electronic Resources
  4. Vehicle Purchasing
    - a. Financing
    - b. Inspection
    - c. Value Assessment
    - d. MSRP vs. Dealer Cost
    - e. Common Mistakes

## Lab Content

Maintenance, Inspection, Basic Service and Repair of the following Automotive Systems

1. Engines
2. Fuel & Ignition Systems
3. Chassis Systems
4. Electrical/Electronic Systems
5. Drivetrain

## Suggested Reading Other Than Required Textbook

None

## Examples of Required Writing Assignments

Students are required to write critical reviews of technical articles taken from the internet or technical magazines provided by the instructor. Students will write a research and/or technical paper. Completion of classroom and laboratory worksheets

## Examples of Outside Assignments

Students will be required to complete the following types of assignments outside of the regular class time:  
Read required materials Complete classroom worksheets Write a research/technical paper. Research overall dealer cost of a new vehicle and determine initial offer to begin the sale process. Do research in Department Library

## Instruction Type(s)

Lab, Lecture, Online Education Lab, Online Education Lecture