

Lassen Community College Course Outline

AT-90 Automotive Survival

0.5-Unit

I. Catalog Description

This is an introductory seminar course designed for the novice from the stand-point of owner survival in the marketplace. Automotive vocabulary, preventive maintenance, and consumer issues will be addressed. This course has been approved for hybrid delivery.

Does not transfer to UC/CSU

8.5 Hours Lecture, 17 outside-of-class hours, 25.5 total student learning hours

Scheduled: Spring, summer, fall

II. Coding Information

Repeatability: 1 Time

Grading Option: Pass/No Pass Only

Credit Type: Credit - Degree Applicable

TOP Code: 094800

III. Course Objectives

A. Course Student Learning Outcome

Upon completion of this course the student will be able to:

1. Understand, define and use automotive vocabulary in the marketplace.
2. The student will be able to self-maintain or seek out qualified professionals for vehicle maintenance and repair.

B. Course Objectives

Upon completion of this course the student will be able to:

1. Demonstrate a working knowledge of automotive industry vocabulary
2. Identify major automobile components
3. Demonstrate an understanding of owner/operator preventative maintenance responsibilities
4. Identify and access appropriate parts and services for other maintenance and repairs.

IV. Course Content

A. Tools, equipment, manuals

1. Industry tools, hand
2. Minor equipment, specialized
3. Owners, repair manuals

B. Under hood

1. Component identification
2. Fluids
3. Service, maintenance

C. Tires, wheels

1. Identification and labels
2. Wear characteristics
3. Selection criteria

D. Under car

1. Identification components

2. Shocks
 3. Exhaust
 4. Drive train
- E. Battery**
1. Safety, service, ratings
 2. Charging methods
 3. Jump starting methods
- F. Electrical**
1. Safety
 2. Bulb service, selection
 3. Digital multi-meter applications
 4. Gauges, warning lights
- G. Fuel system**
1. Type of fuels, octanes, cost
 2. Diesel
 3. Components
- H. Engine lubrication**
1. Oil types, method of lubrication
 2. Filters
 3. Disposal
 4. Miscellaneous lube and chemicals
- I. Cooling System**
1. Coolant testing
 2. Anti-freeze
 3. Belts, Hoses, leaks
 4. Water pump, radiator
- J. Brake System**
1. Hydraulic, parking
 2. Brake fluids, leaks, D.O.T.
 3. Disc, drum
 4. Pads, shoes
- K. Smog**
1. Consumer rights/responsibilities
 2. Ownership change
 3. Initial registration
- L. Used Car/New Car**
1. Purchasing techniques
 2. Selling techniques
- M. Road Side Service**
1. Diagnosis
 2. Towing
 3. Safety of occupants
 4. Changing a Flat Tire
- N. Body/paint**
1. Car finish, interior, exterior
 2. Body damage
 3. Insurance claims
 4. Remove, replace or repair
- O. Buying parts**
1. Shopping – New or Rebuilt

2. Vehicle identification

V. Assignments

A. Appropriate Readings

Industry pamphlets and bulletins

B. Writing Assignments

Parts lists and shop evaluations

C. Expected Outside Assignments

Visit various shops to make observations relevant to the assigned topic

D. Specific Assignments that Demonstrate Critical Thinking

Determination of part specifications and bid evaluations

VI. Methods of Evaluation

Traditional Evaluation

Term paper (topic choice, thesis statement, outline, bibliography, rough draft, final draft), homework, classroom discussion, essay, journals, lab demonstrations and activities, multiple choice quizzes, and participation.

Hybrid Evaluation

All quizzes and exams will be administered during the in person class time. Students will be expected to complete online assignments and activities equivalent to in class assignments and activities for the online portion of the course. Electronic communication, both synchronous and asynchronous (chat/forum) will be evaluated for participation and to maintain effective communication between instructor and students.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

Traditional Classroom Delivery Correspondence Delivery

Hybrid Delivery Online Delivery

Traditional delivery:

The appropriate method of instruction will be determined by the instructor and may include:

1. Lecture with or without various audio/visual aids
2. Group problem solving, discussion, debate, and/or critique
3. Demonstration
4. Field assignments

Hybrid Delivery

A combination of traditional classroom and online instruction will be utilized. Each semester a minimum of 17 hours, or 1/3 of the lecture hours, will be taught face-to face by the instructor and the remaining hours will be instructed online through the technology platform adopted by the District. Traditional class instruction will consist of exercises/assignments, lectures, visual aids, and practice exercises. Online delivery will consist of exercises/assignments, lecture posts, discussions, adding extra resources and

other media sources as appropriate.

VIII. Representative Texts and Supplies

Industry pamphlets, trade journals and handouts (reference materials) as determined by the instructor.

IX. Discipline/s Assignment

Automotive Technology

X. Course Status

Current Status: Active

Original Approval Date: 02/14/1999

Revised By: Chad Lewis

Curriculum/Academic Standards Committee Revision Date: 11/7/2023