COURSE INFORMATION FORM

DISCIPLINE
Automotive Technology

COURSE TITLE
Automotive Maintenance and Light Repair

CR.HR. 6 LECT HR. 3 LAB HR. 6 CLIN/INTERN HR. C CLOCK HR. 

CATALOG DESCRIPTION

This is an introductory course designed to provide the student with fundamentals of operation, service, maintenance and light repair of modern automobiles. Students will learn basic automotive shop safety, tool and equipment use, basic engine, cooling system, brake, steering, suspension, serpentine belt and electrical system maintenance.

PREREQUISITES

Concurrent enrollment in or completion of AUTO 100.

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)

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

1. Demonstrate the cognitive and manipulative skills necessary to complete assigned tasks.
2. Describe and employ safe work habits, observing both personal safety and a concern for the safety of others.
3. Analyze, diagnose and determine necessary actions to solve general service, maintenance and light repair problems.
4. Apply procedures needed to successfully perform service operations.
5. Employ effective behaviors necessary to successfully work with others.

GENERAL EDUCATION OUTCOMES (ESO)

Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

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<th>Outcomes</th>
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PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Students will demonstrate the knowledge necessary to obtain industry recognized certifications.
2. Students will demonstrate the knowledge and application of safety rules and regulations.
3. Students will exhibit professional behavior.
4. Students will demonstrate teamwork and collaboration.
5. Students will communicate effectively using written and oral methods.
6. Students will be able to use mathematics as it pertains to the automotive technicians.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Written evaluations (1-4)
2. Oral evaluation (1-5)
3. Performance exams (1-4)
4. Written Laboratory assignments (1-5)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Career Opportunities

II. Service Information
   A. Service manuals
   B. Electronic Service Information
   C. Flat Rate Manuals
   D. Other resources

III. Safety
   A. Basic hand tools
   B. Power Tools
   C. Safe work habits
   D. Lifting a vehicle

IV. Fasteners and torque
   A. Fastener identification and usage
   B. Torque procedures
   C. Torque wrench types and usage

V. Interior/Exterior
   A. Horn operation
   B. Interior lighting
   C. Windshield wiper and washer operation
   D. Wiper insert service
   E. Exterior lighting operation
   F. Bulb Remove and Replace (R&R)
   G. Cabin filter R&R

VI. Battery inspection and service
   A. Battery safety
   B. Battery identification and inspection
   C. Battery testing
   D. Battery R&R
   E. Jump starting a vehicle
   F. Battery charging
VII. Under Hood Service
   A. Fluid level identification and inspection
   B. Drive belt inspection, replacement and adjustment
   C. Cooling system inspection and service
   D. Air filter inspection and replacement

VIII. Under vehicle service
   A. LOF (oil and filter service)
   B. Brake system identification and inspection
   C. Steering system identification and inspection
   D. Suspension system identification and inspection
   E. Driveline identification and inspection
   F. Clutch identification and inspection
   G. Exhaust system identification and inspection
   H. Fluid leak identification
   I. Tire identification and inspection
   J. Tire rotation

IX. Shop communication and processes
   A. Customer vehicle care
   B. Communication with service advisor
   C. Resetting maintenance reminders
   D. Identify next service on static clings
   E. Vehicle delivery
   F. Manual transmission driving operation (if necessary)