



MONROE COUNTY COMMUNITY COLLEGE

Course Outcome Summary

Required Program Core Course

AST 101 Intro To Auto Service

Course information

Division	ASET
Contact hours	60
Theory	30
Lab hours	30
Total credits	3

Prerequisites – RDG 090

Course Description:

This course focuses on orientating the student to Monroe County Community College automotive service technology environment. Students will receive comprehensive instruction on laboratory procedures, policies, shop safety and proper tool usage. They will also be introduced to all eight of the major automotive systems, the industry as a whole, as well as the procedures to attaining both state and industry certifications.

This course is a required core course for students pursuing a (n) AAS or certificate in automotive technologies

Program outcomes addressed by this course:

Upon successful completion of this course, students should be able to meet the program outcomes listed below:

- A. Demonstrate the correct method of utilizing automotive service tools and equipment
- B. Identify all related system diagnostic/repair information within automotive service information
- C. Employ safe and professional work habits while conducting typical automotive service procedures.
- D. Explain how the various systems of an automobile work
- E. Demonstrate correct service procedures in the various automotive systems

Course outcomes

In order to evidence success in this course, the students will be able to:

1. Understand and demonstrate shop and personal safety policies and procedures

This outcome is relevant to program outcome: (A) and (C)

- a) Identify general shop safety rules and procedures.
- b) Utilize safe procedures for handling of tools and equipment.
- c) Identify and use proper placement of floor jacks and jack stands.
- d) Identify and use proper procedures for safe lift operation.
- e) Utilize proper ventilation procedures for working within the lab/shop area.
- f) Identify marked safety areas.
- g) Identify the location and the types of fire extinguishers and other fire safety equipment; demonstrate knowledge of the procedures for using fire extinguishers and other fire safety equipment.



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- h) Identify the location and use of eye wash stations.
- i) Identify the location of the posted evacuation routes.
- j) Comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities.
- k) Identify and wear appropriate clothing for lab/shop activities.
- l) Secure hair and jewelry for lab/shop activities.
- m) Demonstrate awareness of the safety aspects of supplemental restraint systems (srs), electronic brake control systems, and hybrid vehicle high voltage circuits.
- n) Demonstrate awareness of the safety aspects of high voltage circuits (such as high intensity discharge (hid) lamps, ignition systems, injection systems, etc.).
- o) Locate and demonstrate knowledge of material safety data sheets (MSDS).

2. Proper and effective usage of tools and equipment

This outcome is relevant to program outcomes: (A) , (C) and (E)

- a) Identify tools and their usage in automotive applications.
- b) Identify standard and metric designation.
- c) Demonstrate safe handling and use of appropriate tools.
- d) Demonstrate proper cleaning, storage, and maintenance of tools and equipment.
- e) Demonstrate proper use of precision measuring tools (i.e. Micrometer, dial-indicator, dial-caliper).

3. Preparing vehicle for service, and performing inspection and service as requested by customer.

This outcome is relevant to program outcomes: (B) , (C), (D) and (E)

- a) Identify information needed and the service requested on a repair order.
- b) Identify purpose and demonstrate proper use of fender covers, mats.
- c) Demonstrate use of the three c's (concern, cause, and correction).
- d) Review vehicle service history.
- e) Complete work order to include customer information, vehicle identifying information, customer concern, related service history, cause, and correction.

4. Preparing vehicle for return to customer after service is complete.

This outcome is relevant to program outcome: (C)

- a) Ensure vehicle is prepared to return to customer per school/company policy (floor mats, steering wheel cover, etc.).

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