Department:

Automotive Technology

Course Description:

This course deals with the operation, diagnosis, and service of electrical and computer systems found on modern automobiles and light trucks. The course will focus on the latest developments in the field.

Course Competencies:

Upon completion of the course, the student should be able to:

1. Diagnose the cause of brighter than normal, intermittent, dim, or no light operation and then determine necessary action.
2. Inspect, replace, and aim headlights and bulbs.
3. Inspect and diagnose faulty turn signal or hazard light operation and then perform necessary action.
4. Inspect and test gauges and gauge sending units for cause of intermittent, high, low, or no gauge readings and then determine necessary action.
5. Diagnose the cause of faulty operation of warning devices and other driver information systems and then determine necessary action.
6. Diagnose faulty operation of motor-driven accessory circuits and then determine necessary action.
7. Diagnose supplemental restraint system (SRS) concerns and then determine necessary action.

Course Content:

A. Electronic Fundamentals
B. Batteries and Battery Testing
C. Restraint Systems and Airbags
D. Audio System Operation and Diagnosis

Learning Assessments:

Assessments may include quizzes, tests, project work, demonstrations, observations, weekly assignments, and written papers.
Instructional Materials:


Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students must complete the “Disabilities Self-Identification Form” at this link: https://highlandcc.edu/pages/disability-services.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.