

Department:

Automotive Technology

Course Description:

This course provides current information to develop more advanced skills needed to diagnose and fix more complex drivability problems. The course will cover analyzing, servicing, and diagnosing a variety of fuel, exhaust, and induction systems.

Course Competencies:

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

1. Analyze engine mechanical integrity.
2. Analyze fuel system concerns.
3. Analyze ignition system concerns.
4. Analyze induction system concerns.
5. Analyze exhaust system concerns.
6. Service fuel system concerns.
7. Repair fuel system concerns.
8. Service ignition system concerns.
9. Repair ignition system concerns.
10. Service induction system concerns.
11. Repair induction system concerns.
12. Service exhaust system concerns.
13. Repair exhaust system concerns.

Course Content:

- A. Engine Performance
- B. General Engine Diagnosis
- C. Computerized Engine Controls Diagnosis and Repair
- D. Fuel, Air Induction, and Exhaust Systems Diagnosis and Repair
- E. Emissions Control Systems Diagnosis and Repair
- F. Engine Related Service

Learning Assessments:

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

Instructional Materials:

Automotive Technology, Halderman, 3rd Edition. ISBN 978-0-13-175477-5

Automotive Technology, Halderman, 3rd Edition , Lab Manual. ISBN 978-0-013-511203-8

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.