Department:

Automotive Technology

Course Description:

This course is designed to provide knowledge about various parts of chassis work, such as wheel alignment, wheel balancing, and suspension system operation and repair.

Course Competencies:

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

1. Document fundamental suspension systems concerns.
2. Perform fundamental diagnostics of steering systems.
3. Perform fundamental repairs of steering systems.
4. Perform fundamental diagnostics of suspension systems.
5. Perform fundamental repairs of suspension systems.
6. Determine the need for wheel alignment and adjustment.
7. Perform fundamental diagnostics of wheel and tire systems.
8. Perform fundamental repairs of wheel and tire systems.

Course Content:

A. Tires and Wheels
B. Tire and Wheel Service
C. Suspension Systems Components and Operation
D. Front Suspension and Service
E. Rear Suspension and Service
F. Electronic Suspension Systems
G. Steering Columns and Gears
H. Steering Linkage and Service
I. Power-Assisted Steering Operation and Service
J. Wheel Alignment Principles
K. Alignment Diagnosis and Service
L. Automotive Wiring

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.