J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: AUT 183 **Credits: 4**

Course Title: Steering, Suspension, and Handling - OEM

Course Description:

Presents steering and suspension systems. Introduces diagnostic procedures emphasizing performing basic tire, steering and suspension service. Develops techniques to diagnose, locate, and repair faults in advanced steering and suspension systems, such as tire pressure warning systems, electric power steering systems, advanced driver assist system calibration, and alignment. This course is intended for students in an original equipment manufacturer (OEM) training program. Lecture 2 hours. Laboratory 8 hours. Total 10 hours per week. 4 credits

General Course Purpose:

This course is intended for students in an OEM training program to provide specific instruction and hands-on practice of the OEM's steering and suspension systems with a focus on developing appropriate diagnostic strategies following OEM-specific repair procedures. The course focuses on the tools and equipment, strategies for inspection, service, and repair of OEM-specific vehicles.

Course Prerequisites and Co-requisites:

- **Prerequisite:**
  Acceptance and good standing in the original equipment manufacturer (OEM) training program.
  AUT 181 Electrical I - OEM or program head approval.
- **Co-Requisite:**
  None

Student Learning Outcomes:
Upon completing the course, the student will be able to

- Prepare to sit for the A4 – Steering and Suspension Systems ASE exam in system 3.99 Duration 3.99 Duration 3.99
  - Inspect, service, diagnose and repair steering systems
  - Diagnose and repair alignment related handling concerns

Major Topics to Be Included:

- Tires, wheels and balancing
- Suspension systems
- Steering systems
- Alignment and handling
- Electric steering and suspension systems, including ADAS
- Other technologies as required by the OEM's specifications

Effective Date/Updated: January 1, 2023