Virginia Western Community College AUT 266 Automotive Alignment, Suspension & Steering

Prerequisites

None

Course Description

Introduces use of alignment equipment in diagnosing, adjusting, and repairing front and rear suspensions. Deals with repair and servicing of power and standard steering systems.

Semester Credits: 4 Lecture Hours: 1 Lab/Clinical/Internship Hours: 6

Required Materials

Textbook:

Fundamentals of Automotive Technology, Principles, and Practice, 2nd Edition, ISBN: 978-1-284-10995-5

Other Required Materials:

- Safety Glasses
- Closed-toe shoes
- CDX Automotive Interactive CD
- Publisher's online material
- ASE Online Prep Tests

Course Outcomes

At the completion of this course, the student should be able to:

- Explain & discuss the construction of steel and alloy wheels
- Demonstrate lug tightening procedures and torque
- Discuss and identify components in the construction of tires
- Demonstrate the repair & balancing of tires
- List and describe the various components of the steering and suspension systems
- Repair and/or replace parts in a steering and/or suspension systems
- Diagnosis and adjust alignment problems
- 70% of students completing AUT 266 will demonstrate how to diagnose, adjust, and repair front and rear suspensions by receiving a score of 71% or higher on the ASE entry-level certification test on suspension and steering or the final exam

Topical Description

| Section XII | Suspension and Steering |
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| Chapters | Title |
| 109 | Tires & Wheels |
| 110 | Tire Pressure Monitoring |
| 111 | Tire & Wheel Service |
| 112 | Suspension Systems Principles & Components |
| 113 | Front Suspensions and Service |
| 114 | Rear Suspension and Service |
| 115 | Electronic Suspension Systems |
| 116 | Steering Columns and Gears |
| 117 | Steering Linkage and Service |
| 118 | Power Steering Operation |
| 119 | Wheel Alignment Principles |
| 120 | Alignment and service |

Notes to Instructors

- Practical exam is given on week 16
- ASE online testing
- Electronic tire monitoring system integration will be discussed in the on-line computer classes