**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
* 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

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