

Master Syllabus

AUT 1116 - Automotive Steering & Suspension Systems

Division: Science, Mathematics and Engineering

Department: Automotive Technology

Credit Hour Total: 3.0

Lecture Hrs: 1.4 **Lab Hrs:** 4.8

Date Revised: May 2016

Course Description:

Steering system diagnosis and service including front and rear suspension components, wheel and tire and front and rear wheel alignment. Basic hand tools are required. One classroom, six lab hours per week.

General Education Outcomes:

- ▣ Critical Thinking/Problem Solving

Course Outcomes:

Four-wheel alignment

Perform an accurate four-wheel alignment.

Assessment Method: Performance appraisals
Performance Criteria:

Student will receive 3 out of 4 on a 0-4 rubric evaluation

Front and rear suspension

Identify the various front and rear suspension system components.

Assessment Method: Locally developed exams
Performance Criteria:

70% of the students will pass with a 70% on a written exam

Wheel balancing

Perform both static and dynamic type wheel balancing on a variety of wheels and tires.

Assessment Method: Performance appraisals
Performance Criteria:

3 out of 4 to pass on a rubric evaluation of the activity

Steering systems

Pressure test a power steering system and diagnose steering problems.

Assessment Method: Performance appraisals
Performance Criteria:

3 out of 4 on a rubric evaluation of the activity

Four-wheel alignment equipment

Demonstrate the ability to use the latest computerized four-wheel alignment equipment.

Assessment Method: Performance appraisals
Performance Criteria:

3 out of 4 on a rubric evaluation of the activity

Outline:

Identify suspension components and operation. Demonstrate diagnostic procedures for determining suspension problems. Align front and rear suspensions of a vehicle. Identify alignment problems on driveability. Identify tire wear and construction. Understand the operation of steering systems. Demonstrate diagnostic methods for determining steering problems.