

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: AUT 267

Credits: 4

Course Title: Automotive Suspension and Braking Systems

Course Description (including lecture hours, lab hours, total contacts)

Presents the operation, design, construction, repair and servicing of braking and suspension systems. Explains use of tools and test equipment, evaluation of test results, estimation of repair cost, front and rear suspension alignment, power and standard steering, standard and disc brakes. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

General Course Purpose

To examine the operation, service and repair of steering, braking and suspension systems commonly found on cars and light trucks. Safety will be emphasized.

Course Prerequisites/Corequisites (*Entry-level competencies **required** for enrollment*)

None

Course Objectives (Each item should complete the following sentence.)

Upon completing the course, the student will be able to:

- a. List the assemblies, sub-assemblies and components of frame and suspension
- b. Discuss the purpose and operation of automotive frame and suspension, braking and steering systems
- c. Analyze defects - their cause and effect upon automobile operation
- d. Demonstrate diagnostic methods and utilize tools and equipment used in suspension and braking systems tests
- e. Evaluate the extent of repairs and adjustments and parts necessary for correction

Major Topics to be Included

- a. Wheel and brake assemblies
- b. Suspension systems
- c. Steering
- d. Power brakes
- e. Skid control

Effective Date of Course Content Summary (Month, Date Year): April 1, 2009