

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

Course Prefix and Number: AUT 130

Credits: 2

Course Title: Introduction to Auto Mechanics

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

Introduces auto mechanics, including auto shop safety and tool identification and use. Explains automobile system theory and function. Stresses quality work practices and job opportunities. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

General Course Purpose

Identify, care and use of hand tools, power tools, and automotive diagnostic equipment. Discuss the basic theory, function, and repair the automobile. 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. Identify and demonstrate proper use of hand tools
- b. Demonstrate repair procedures according to manufacturer
- c. Demonstrate preventative maintenance procedures
- d. Produce and maintain a Maintenance Record for each vehicle owned
- e. Prepare an automotive terms list
- f. Choose tools for starter tool set

Major Topics to be Included

- a. How to become intimately involved with my automobile
- b. Tests on my vehicle with diagnostic equipment
- c. The way to your car's heart is through your toolbox
- d. What makes it go, the internal combustion engine
- e. The inner secrets of your car
- f. The fuel system
- g. The cooling system
- h. How to jack up your car and change your tires
- i. Lubrications and suspension: preventive maintenance
- j. Wheels and tires: how to keep your car from getting sore feet
- k. How to get the best deal on a new or used car
- l. How to find and deal with a good technician and what to do if you get ripped off
- m. Automotive technical terms

Effective Date of Course Content Summary (Month, Date Year): February 9, 2009