

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

Course Prefix and Number: AUT 156

Credits: 2

Course Title: Small Gasoline Engines

Course Description: Studies small gasoline engine operating principles, construction, design, variety, and their many purposes. Gives instruction on two-cycle and four-cycle small gas engines, their construction, design, fuel system, ignition systems, and lubricating systems. Demonstrates disassembly, reconditioning, overhaul, and reassembly in the lab. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

General Course Purpose: To provide the student with a fundamental understanding of the operational theory of small gasoline engines, enabling the student to perform basic tune-up and repair procedures. Safety will be emphasized.

Course Prerequisites and Co-requisites:

None

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Identify the components of a small gasoline engine;
- b. Describe the working principles of a small gasoline engine;
- c. Demonstrate disassembly and re-assembly of a small engine;
- d. Demonstrate basic tune-up procedures; and
- e. Apply repair procedures as described in a repair manual.

Major Topics to Be Included:

- a. Theory of operation
- b. Ignition system
- c. Cooling system
- d. Lubricating system
- e. Fuel system
- f. Tune-up and trouble shooting

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