

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

Course Prefix and Number: DSL 160

Credits: 3

Course Title: Air Brake Systems

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

Studies the basic operational theory of pneumatic and air brake systems as used in heavy-duty and public transportation vehicles. Covers various air control valves, test system components, and advanced air system schematics. Teaches proper service and preventative maintenance of systems. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

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 components of brake systems and make effective repairs
- b. Identify and properly work with test system components
- c. Perform proper service and preventive maintenance procedures

Major Topics to be Included

- a. Fundamentals of air brakes
- b. Test system components
- c. Service and preventive maintenance procedures

Effective Date of Course Content Summary (Month, Date Year): 2/12/09