

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

**Course Prefix and Number: DSL 161**

**Credits: 2**

**Course Title:** Air Brake Systems I

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

Studies the basic operational theory of pneumatic and air brake systems used in public transportation vehicles. Covers various air control valves, air and test system components, and advanced air system schematics. Part I of II. Lecture 2 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. Explain the basic operation of a bus air brake system
- b. Read and follow a schematic of an air brake system
- c. Identify various components and explain their function in an air brake system

**Major Topics to be Included**

- a. Basic theory of pneumatics as pertains to bus brake systems
- b. Schematics
- c. Basic components of the air brake system and their functions

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