

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

**Course Prefix and Number: DSL 171**

**Credits: 2**

**Course Title:** Transportation Air Conditioning I

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

Studies the fundamentals of air conditioning systems used in public transportation vehicles. Includes the basic theory of operation, repair, servicing, and troubleshooting of the air conditioning system. Prerequisite: sponsorship by a public transit authority and divisional approval. Lecture 2 hours per week.

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

Sponsorship by a public transit authority and divisional approval.

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

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

- a. Demonstrate a basic understanding of the theory and principles of air conditioning systems
- b. Identify the various components of an air conditioning system and list their functions
- c. Perform normal service procedures on a typical air conditioning system

**Major Topics to be Included**

- a. Basics of air conditioning
- b. Refrigerants and oils
- c. Service equipment
- d. Service procedures

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