

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

**Course Prefix and Number: DSL 153**

**Credits: 3**

**Course Title:** Power Trains I

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

Focuses on manual, hydrostatic, and heavy-duty automatic transmissions. Examines various types of power trains and their components, such as multidisc clutch, multi-speed transmissions, torques, drive lines, and differentials. Includes disassembly and assembly of various components. Part I of II. 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 various types of clutches and perform maintenance
- b. Identify various transmission types and perform maintenance
- c. Identify various drive lines and make proper adjustments and repairs
- d. Identify various differential types and make proper repairs
- e. Perform proper service and maintenance procedures

**Major Topics to be Included**

- a. Single and multi-disc clutch
- b. Multi-speed transmission
- c. Drive lines
- d. Single and multi-speed differentials

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