



Crocus Plains Regional Secondary School

Course Outline

Program: Automotive Technology

Course Title: AU30S- Drivetrain Fundamentals and Service

Teacher: T. Sloane

Course Description: Students wanting to develop skills in the automotive industry must have knowledge of the basic principles of the vehicle drivetrain. Students will develop an understanding of the different drivetrain configurations and their components. The student will be able to diagnose and repair a variety of drivetrain components.

Students who successfully complete this course will be able to:

- Describe and demonstrate the theory and service of a manual transmission clutch assembly
- Describe and demonstrate the theory and service of driveshafts and drive axles
- Describe the operating principles and function of manual transmissions and transaxles.
- Describe and demonstrate the theory and service of differential assemblies.
- Describe types of gears, power flows, and calculate gear ratios on drivetrains
- Describe the operation principles of drivetrain components (e.g., 4WD, AWD, CVTs)

Course Evaluation Structure:

- Theory Assignments: 25%
- Practical Assignments & Projects: 50%
- Final Assessment 25%

