

Print Date: 7/14/14
Course Objectives/Course Outline
Spokane Community College

Course Title: Theory and Application of Engine Repair

Prefix and Course Number: Auto 212

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Clean engines according to established standards
- Prepare work tickets and bills
- Diagnose and repair specific automotive components as detailed in the course outline.
- Identify and describe the purpose, types of applications, and operation methods pertaining to automobile engine theory.

Course Outline:

- I. Engine Operation
 - A. Cleaning the Engine
 - B. Engine Shop Equipment and Safety
 - C. Measuring: US and Metric
- II. Preliminary Diagnosis Before Repair and Cost of Repairs
 - A. Engine Removal, Disassembly, Inspection, and In-Car Repairs
 - B. Cylinder Head Recondition
 - C. Cam and Manifold
 - D. Cylinder Block – Inspection, Service and Recondition
 - E. Crankshaft and Bearings, Piston and Rod Service and Repair
 - F. Lubrication and Cooling Systems Service and Repair
 - G. Engine Hardware: Fasteners, Thread Repair, Broken bolt Removal, Gaskets, and Torqueing Procedure
 - H. Reassembly, Starting, and Engine Break-In
 - I. Work Repair Tickets and Billing