

Course Objectives/Course Outline

Spokane Community College

Course Title: Engine Repair Applications

Prefix and Course Number: Auto 109 – New as of summer 2011

Learning/Performance Expectations (e.g., outcomes, performance objectives, competencies, etc.)

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