

Course Objectives/Course Outline
Spokane Community College

Course Title: Toyota Engine Performance II

Prefix and Course Number: Auto 220

Course Learning Outcomes:

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

- Have a working knowledge of special problems in basic fuel systems, emissions, and ignition systems.
- Diagnose special problems in engine, ignition, fuel, or emissions control problems with an infrared exhaust analyzer.
- Perform analytic/diagnostic procedures on vehicles with onboard or self-diagnostic type computer systems.

Course Outline:

- I. Toyota fuel pump systems
 - A. Diagnose and Repair
 1. gas tank
 - a. filter
 - b. cap
 - c. fuel lines
 - d. hoses
 2. fuel pumps
 - a. pump controls
 - b. filters
- II. Toyota Exhaust Emissions Systems Service, Repair and Diagnosis
 - A. Positive Crankcase Ventilation
 - B. Spark Timing Controls
 - C. Idle Speed Controls
 - D. Exhaust Gas Recirculation
 - E. Exhaust Gas Treatment
- III. Toyota Fuel Injection Systems Service, Repair and Diagnosis
 - A. Fuel Injection Components
 1. fuel injectors
 2. fuel pressure regulators
- V. Toyota Ignition Systems Service, Repair and Diagnosis
 - A. Electronic Ignition Systems
 1. ignition primary circuit and wiring
 2. ignition secondary circuit and wiring
 3. timing and timing advance