Print Date: 7/14/14

Course Objectives/Course Outline
Spokane Community College

Course Title: **Toyota Engine Performance I Lab**
Prefix and Course Number: **Auto 124**

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

- a student should learn basic engine performance theory and operation:

- Possess in-depth knowledge of basic fuel systems, emissions, and ignition systems.
- Have an in-depth knowledge of diagnosing engines, ignition, fuel, or emissions control problems with
  an infrared exhaust analyzer.
- Have an in-depth knowledge of performing analytic/diagnostic procedures on vehicles with onboard or
  self-diagnostic type computer systems.

Course Outline

I. Testing and analyze engine operation
- **A.** Identify major control systems/components
- **B.** Locate needed engine control systems service information
- **C.** Be familiar with engine control systems terms
- **D.** Determine the condition of input sensors and circuit based on their signal output
- **E.** Determine the root cause of the failure(s) using appropriate diagnostic procedures
- **F.** Determine the condition of the ignition system based on input and output signals
- **G.** Determine the condition of the fuel delivery system based on fuel pressure
- **H.** Determine miner or major engine failures related to drivable
- **I.** Determine operation of the emissions system
- **J.** Use of the engine analyzer and scan tools for engine performance