

SYLLABUS

DIVISION: Business and Engineering Technology

REVISED: Fall 2014

CURRICULA IN WHICH COURSE IS TAUGHT: Automotive Analysis & Repair
Curriculum

COURSE NUMBER AND TITLE: AUT 112 Automotive Engines II

CREDIT HOURS: 3 HOURS/WK **LEC:** 3 HOURS/WK **LAB:** 3 **LEC/LAB COMB:** 6

I. CATALOG DESCRIPTION:

Presents analysis of power, cylinder condition, valves and bearings in the automotive engine to establish the present condition, repairs or adjustments. Part II of II.

Lecture 2-3 hours. Laboratory 2-3 hours. Total 4-6 hours per week.

3-4 credits

II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES:

Students will:

A. demonstrate technical competencies & skills in automotive engine repair

B. demonstrate punctuality & reliability acceptable to the auto repair industry

C. use safety equipment & procedures required for the tasks being performed

D. read & interpret technical information required for projects & assignments

E. demonstrate and maintain a clean, orderly, safe & attractive work place &
maintain a personal appearance that will enhance that work place

III. REQUIRED BACKGROUND/PREREQUISITIES:

Textbook: Fundamentals of Automotive Technology by CDX Automotive, latest addition, published by Jones & Bartlett Learning. The student must have work clothes and a tool set available each day.

IV. COURSE CONTENT:

Identify and interpret engine concern; determine action

Research applicable vehicle service information

Locate and interpret vehicle and service information

List and describe the components of the engine

Explain engine components and their functions

Describe the general process behind engine block manufacturing

Identify worn or damaged engine parts

Inspect and replace engine timing components

Perform a general engine overhaul

Perform engine sealing techniques

V. THE FOLLOWING GENERAL EDUCATION OBJECTIVES WILL BE ADDRESSED IN THIS COURSE (Place X by all that apply)

☒ Communications Skills

☒ Computational and Computer

☒ Learning Skills Society

☒ Understanding Culture and

☒ Critical Thinking Technology

☒ Understanding Science and

☐ Interpersonal Skills and Human Relations

☐ Wellness

VI. LEARNER OUTCOMES

VII. EVALUATION

A. demonstrate the use of precision measurement tools such as inside and outside micrometers, dial indicators, bore gauges and plasti-gauge	Lab exercises Written test Online exam 75% of students will be able to complete these assignments
B. identify the disassembly-assembly process for repair/overhaul of and automotive engine	Lab exercises Written test Online exam 75% of students will be able to complete these assignments
C. diagnose causes of engine failure	Lab exercises Written test Online exam 75% of students will be able to complete these assignments
D. identify the correct engine repair procedures	Lab exercises Written test Online exam 75% of students will be able to complete these assignments
E. demonstrate the correct procedures for unit engine repair	Lab exercises Written test Online exam 75% of students will be able to complete these assignments
F. Explain and demonstrate proper procedures for sealing a modern gasoline engine	Lab exercises Written test Online exam 75% of students will be able to complete these assignments

