**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: AUTO 1120

Course Title: Engine Performance I

Credit Hours: 3

Prerequisite: None

Division/Discipline: Workforce Training and Economic Development/Automotive Technology

Course Description: In this course students will explore engine theory and perform maintenance and service of engine mechanical, electrical, fuel, and ignition systems.

# **INSTRUCTOR INFORMATION**

# **COLLEGE POLICIES**

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The College assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. The student is responsible for learning the rules of, and avoiding instances of, intentional or unintentional plagiarism. Information about academic integrity is located in the Student Handbook.

The college reserves the right to suspend a student for conduct that is determined to be detrimental to the College educational endeavors as outlined in the College Catalog, Student Handbook, and College Policy & Procedure Manual. (Most up-to-date documents are available on the College webpage.)

Any student seeking an accommodation under the provisions of the Americans with Disability Act (ADA) is to notify Student Support Services via email at disabilityservices@bartonccc.edu.

# **COURSE AS VIEWED IN THE TOTAL CURRICULUM**

Engine Performance I is the first in a series of courses pertaining to the engine mechanical, fuel, ignition and emission control systems.

Engine Performance II is a Kansas aligned course.

# **ASSESSMENT OF STUDENT LEARNING**

Barton Community College is committed to the assessment of student learning and to quality education. Assessment activities provide a means to develop an understanding of how students learn, what they know, and what they can do with their knowledge. Results from these various activities guide Barton, as a learning college, in finding ways to improve student learning.

Course Outcomes, Competencies, and Supplemental Competencies:

1. Evaluate engine mechanical condition and determine malfunction.

Linked External Standards: NATEF 8.A1, 8.A.2, 8.A.3, 8.A.4, 8.A.5, 8.A.6, 8.A.7, 8.A.8, 8.A.9, 8.A.10, 8.A.11, 8.A.12, 8.A.15, 8.A.16, 8.B.1, 8.B.6, 8.C.3

1. Complete work order and check history.
2. Identify engine mechanical integrity.
3. Service, analyze, and repair engine fuel systems.

Linked External Standards: NATEF 8.A.1, 8.A.2, 8.A.3, 8.A.12, 8.B.1, 8.B.6, 8.B.8, 8.D.1, 8.D.2, 8.D.3, 8.D.4, 8.D.5, 8.D.6, 8.D.7

1. Complete work order and check history.
2. Explore the fundamentals of fuel system theory.
3. Identify fuel system concerns.
4. Service, analyze, and repair engine ignition systems.

Linked External Standards: NATEF 8.A.1, 8.A.2, 8.A.3, 8.A.12, 8.B.1, 8.B.6, 8.B.8, 8.C.1, 8.C.2, 8.C.3, 8.C.4

1. Complete work order and check history.
2. Explore the fundamentals of ignition system theory.
3. Identify ignition system concerns.
4. Service, analyze, and repair air induction and exhaust systems.

Linked External Standards: NATEF 8.A.1, 8.A.2, 8.A.3, 8.A.7, 8.A.8, 8.B.1, 8.B.6, 8.B.8, 8.D.1, 8.D.5, 8.D.7

1. Complete work order and check history.
2. Identify induction system concerns.
3. Identify exhaust system concerns.
4. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

# **COURSE OUTLINE**