**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: AUTO 1128

Course Title: Automatic Transmissions

Credit Hours: 5

Prerequisite: None

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

Course Description: In this course students explore theory and perform analysis/service of Automatic Transmissions and Transaxle systems of the automobile.

# **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**

Automatic Transmissions and Transaxles is one of eight NATEF (National Automotive Technicians Education Foundation.) Certified areas for Automotive Repair and is the curriculum adopted by Kansas Board of Regents.

# **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, identify and analyze Automatic Transmissions and Transaxles.

Linked External Standards: NATEF 2.A.1, thru 2.A.13.

1. Complete service work orders.
2. Identify, and verify customer concerns with transmission/transaxle performance.
3. Identify, analyze and determine needed repairs pertaining to leaks, noise/vibration, and electronic systems associated with Automatic Transmissions and Transaxles.
4. Service, analyze In-Vehicle Transmissions/Transaxle Maintenance and Repair.

Linked External Standards: NATEF 2.B.1, thru 2.B.6.

1. Evaluate and compare measurements to specifications found in service information.
2. Perform needed repairs and adjustments per industry standards.
3. Service transmission; perform visual inspection; replace fluid and filters.
4. Inspect, replace and align power train mounts.
5. Service, analyze Off-Vehicle Transmission and Transaxle Repair.

Linked External Standards: NATEF 2.C.1, thru 2.C.24.

1. Remove and reinstall transmission/transaxle and torque converter; inspect engine core plugs, rear crankshaft seal, dowel pins, dowel holes, and mating surfaces.
2. Disassemble, clean and inspect transmission/transaxle.
3. Inspect, analyze, repair and reassemble transmission/transaxle.
4. Air test operation of clutch and servo assemblies.
5. Describe the operational characteristics of a hybrid vehicle drive train.
6. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

# **COURSE OUTLINE**