Course Description: A study of the operation, hydraulic principles, and related circuits of modern automatic transmission and automatic transaxles. Diagnosis, disassembly, and assembly procedures with emphasis on the use of special tools and proper repair techniques. May be taught manufacturer specific.

Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity will be reported as never attended and dropped from the course.


Course Goals/Objectives: Utilizing appropriate safety procedures, the student will perform general transmission and transaxle diagnosis; perform automatic transmission and transaxle maintenance and adjustments; and perform in-vehicle and off-vehicle automatic transmission and transaxle repair.

A. GENERAL TRANSMISSION AND TRANSAXLE DIAGNOSIS
B. TRANSMISSION AND TRANSAXLE MAINTENANCE AND ADJUSTMENT
C. IN-VEHICLE TRANSMISSION AND TRANSAXLE REPAIR
D. OFF-VEHICLE TRANSMISSION AND TRANSAXLE REPAIR
   a. Removal, Disassembly and Reinstallation
   b. Oil Pump and Converter
   c. Gear Train, Shafts, Bushings and Case
   d. Friction and Reaction Units

Student Contributions and Class Policies:
1. Student/Participant must furnish a set of approved safety eye glasses.
2. Student/Participant must understand class attendance is critical; therefore, three consecutive absences or five total absences may be considered justification for failure or dismissal from class.
3. Punctuality, being prepared for class, being alert, participating pro-actively and exhibiting a respectful and appropriate attitude will be required.

Evaluation of Students:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter Questions &amp; Final Exams</td>
<td>40%</td>
</tr>
<tr>
<td>Attendance</td>
<td>10%</td>
</tr>
<tr>
<td>Lab Tasks</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Grade Scale:
- 90 and above: A
- 80-89: B
- 70-79: C
- 60-69: D
- 59 and below: F
**Course Schedule**: This class meets for 2 lecture hours and 4 lab hours per week.

**SCANS Information**: SCANS skills are taught and/or reinforced in automotive courses. The student must locate, read, interpret and understand instruction information and direction materials. The participant must communicate thoughts, ideas and information through verbal and written mediums. Practical arithmetic and mathematics will apply continually throughout automotive technology training. Listening, interpreting, and responding to verbal communications and instructions as well as speaking in response to questioning will be a daily involvement. Thinking, reasoning, visualizing and problem solving are required assets to the automotive technician. The student/participant must display responsibility, self-management and honesty.

**Administrative Information**: Curt Pervier, Division Chair Technical Studies
Lisa Tanner, Applied Technology Secretary
(432) 685-4676
Fax: (432) 685-6472

Students should feel free to contact the instructor at any time. Appointments are encouraged for advising and planning the most appropriate or beneficial course work.

*Syllabus subject to change as deemed necessary by the instructor to ensure learning objectives and course goals are met.*

**Students with Disabilities**: Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must place documentation on file with the Counselor/Disability Specialist. Students with disabilities should notify Midland College prior to the beginning of each semester. Student Services will provide each student with a letter outlining any reasonable accommodations. The student must present the letter to the instructor at the beginning of the semester.

10/19/16