Course Title - Automotive Suspension & Steering Systems

Course Prefix and Number - AUMT 1316

Department - Automotive Technology
Division - Vocational Science

Course Type: (check one)
☐ Academic General Education Course (from ACGM – but not in WCJC Core)
☐ Academic WCJC Core Course
☒ WECM course (This course is a Special Topics or Unique Needs Course: Y☐ or N☒)

Semester Credit Hours #: Lecture hours#: Lab/other hours #  3:2:4

EQUATED PAY HOURS FOR COURSE - 4

Course Catalog Description – Diagnosis and repair of automotive suspension and steering systems including electronically controlled systems. Includes component repair, alignment procedures and tire and wheel service. May be taught manufacturer specific.

Prerequisites/Co-requisites - Credit for AUMT 1301
Co-requisite: AUMT 1345

Prepared by Curtis Cline  Date 1/12/2015
Reviewed by department head Curtis Cline  Date 1/12/2015
Accuracy verified by Division Chair Timothy Guin  Date 1/12/2015
Approved by Dean or Vice President of Instruction  Date 1-15-15
I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practical, clinical or other non-lecture instruction):

The instructor will organize the course in such a manner that all areas of the course objectives will be covered in a balanced manner. It is within the prerogative of the instructor to assign exact amounts of time to each of the objectives which are:

Chassis design, Materials, Fasteners, and Safety
Tire and Wheels, Tire and Wheel Service
Wheel Bearing Service
Steering System Components and Operation, Steering System Diagnosis and Service
Suspension System Components and Operation, Suspension System Diagnosis and Service
Wheel Alignment Principles, Alignment Diagnosis and Service
Vibration and Noise Diagnosis and Correction

II. Course Learning Outcomes

<table>
<thead>
<tr>
<th>Learning Outcomes</th>
<th>Method of Assessment</th>
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<td>Upon successful completion of this course, students will:</td>
<td>1. Quizzes and assignments</td>
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<td>1. Utilize appropriate safety procedures.</td>
<td>2. Quizzes and assignments</td>
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<td>2. Explain operations of suspension and steering systems.</td>
<td>3. Quizzes and assignments</td>
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<td>3. Diagnose and repair system components including electronically controlled systems.</td>
<td>4. Quizzes and assignments</td>
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<td>4. Perform wheel alignment procedures.</td>
<td>5. Quizzes and assignments</td>
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<td>5. Perform tire service and repair.</td>
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III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

IV. Suggested Course Maximum - 24

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

Automotive Suspension and Steering Systems 5th edition class and shop Manuals by Don Knowles copyright 2011. Complete set of tools in compliance with the tool list

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.
90% to 100% = A
80% to 89% = B
70% to 79% = C
60% to 69% = D
Below 60% = F

The grade is based on the percentage basis between lecture and lab.

Quizzes and assignments will count 30% of the course grade. At the end of the course a final exam will be given that will count 10% of the course grade. The auto shop lab grade will count 60% of the course grade. Lab work will be evaluated on attendance, percentage completion of priority 1, 2, and 3 items on the ASE task list, job sheets, having the required tools to perform lab work, cleanliness, and attitude.

VII. Curriculum Checklist

☐ - Academic General Education Course (from ACGM – but not in WCJC Core)
   No additional documentation needed

☐ - Academic WCJC Core Course
   Attach the Core Curriculum Checklist, including the following:
   • Basic Intellectual Competencies
   • Perspectives
   • Exemplary Educational Objectives

☒ - WECM Courses
   If needed, revise the Program SCANS Matrix & Competencies Checklist.