

ASEP-140-GM DRIVABILITY 4 CREDITS

SYLLABUS

CATALOG DESCRIPTION

A systematic troubleshooting method for General Motors fuel, electrical, and electronic systems. Use of tools and equipment needed for proper diagnosis emphasized.

Co-requisites: ASEP-130

Semester Offered: Spring

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Work safely on automotive fuel systems, utilizing manufacturers' approved processes.
2. Demonstrate the use of an oscilloscope and identify patterns for 5 computer sensors.
3. Diagnose electrical, fuel & mechanical problems using an exhaust analyzer.
4. Diagnose computer systems trouble codes.

5. Perform a wet and dry compression test.
6. Perform a cylinder leak down test.
7. Check a timing belt or chain for looseness or jumped timing.
8. Inspect vacuum control systems for proper operation.
9. Check the exhaust system for leaks or restrictions.
10. Perform an engine tune-up using recommended manufacturer procedures.

General Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. To provide the student with a logical approach for diagnosing engine performance problems.
2. Completion of 100% of NATEF priority 1 tasks.
3. Completion of 85% of NATEF priority 2 tasks.
4. Completion of 75% of NATEF priority 1 tasks.