# ASEP 155-001 - GM ADVANCED AIR INDUCTION SYS 2 CREDITS

### CATALOG DESCRIPTION

This course covers variable valve timing, turbo chargers and superchargers. The theory, operation and diagnosis of each of these systems will be covered and the manufacturers diagnostic and repair procedures will be stressed. Personal and vehicle safety will be emphasized. Co-requisite ASEP 150

Prerequisites: ASEP 130-135

Semester Offered:

Summer

#### **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. Demonstrate safe procedures for engine service.
- 2. Demonstrate knowledge of gasoline engine operating principles.
- 3. Demonstrate knowledge of variable valve timing principles.
- 4. Demonstrate knowledge of supercharging principles.
- 5. Diagnose turbocharger system faults.