

## **ASEP-165-GM ADVANCED HVAC DIAGNOSIS 3 CREDITS**

### **SYLLABUS**

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#### **CATALOG DESCRIPTION**

This course will cover advanced diagnosis theory and practice on GM vehicle heating, air conditioning and ventilation systems. The course will address computer based HVAC controls as well as the network of sensors. Environmental and personal safety will be emphasized.

Prerequisites: ASEP 150-155 Co-requisite: ASEP-160

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 techniques while working with refrigerant systems.
2. Demonstrate an understanding of current HVAC environmental regulations.
3. Diagnose and repair computer controlled HVAC system controls.

4. Diagnose and service HVAC sensor network communications.