

San Joaquin Valley College
PROGRAM ASSESSMENT PLAN
To be revised at each Curriculum Conference

Program: Heating, Ventilation, Air Conditioning & Refrigeration

Date: 03.2015

ALIGNMENT STATEMENTS

Mission Alignment

- Include a one-two sentence explanation of how this program aligns with SJVC's mission.

The fifth sentence of the Mission statement says *The College is committed to the success of every student*. This holds true in regards to where the HVACR program is now and where it's going. The College is proving its commitment to the success of every student buy allowing us the opportunity to put things in place, such as assessment reports, assessment dada, curriculum conference, etc. All of which enhance the student learning and makes for a better graduate in his or her community.

Values Alignment

The Core Values at SJVC are: **Success, Diversity, Community Involvement, Integrity, Excellence and Lifelong Learning.**

- Include a one-two sentence explanation of how this program aligns with SJVC's values.

The HVACR Program is aligned with SJVC's Core Values. Student success and excellence is supported and built upon by the completion of each course in the HVACR program. The campus culture is embedded in the principles of diversity and students are also exposed to issues of diversity and integrity during ethics and sociology classes. Students are encouraged to support our community independently and through Student Council. The core value of lifelong learning is nurtured in class and graduates are encouraged to seek further professional development and higher-level learning through Academic Transfer Workshops and Professional Organization Memberships applicable to the student's field of study.

Institutional Learning Outcomes

The Institutional Learning Outcomes (ILOs) at SJVC apply to all students (and employees) regardless of program or position. SJVC's ILOs include having graduates who are **confident, educated, professional, skilled, citizens, and communicators.**

- Include a one-two sentence explanation of how this program aligns with SJVC's ILOs.

Each of the Institutional Learning Outcomes is achieved through completion of the IT program. A rigorous 15 month curriculum aligns with employers expectations and SJVC standards ensure that our knowledgeable and educated graduates are confident professionals in the installation/maintenance and repair field. Through formal courses and informally by the daily interaction with each instructor and staff, students are forged into effective communicators and good citizens.

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OUTCOMES

Program Learning Outcomes	
Program Learning Outcomes (PLOs) are statements describing what a student will be able to demonstrate upon completion of the program. <ul style="list-style-type: none"> • List your Program Learning Outcomes below: 	
PLO 1	Discuss theories of heating, refrigeration, and air conditioning and relate these concepts to practical applications
PLO 2	Apply proper procedures for the installation, operation, maintenance and repair of both residential and light commercial heating, ventilation, air conditioning, and refrigeration equipment and systems
PLO 3	Demonstrate proper usage of the basic tools of the trade
PLO 4	Demonstrate requisite mastery to apply for and obtain the EPA 608 certification from the Environmental Protection Agency
PLO 5	Create effective reports and documents, electronically and in writing
PLO 6	Apply advanced electrical concepts and critical thinking skills to interpret and draft schematic wiring diagrams, and perform system diagnostics and interpret results
PLO 7	Relate and apply concepts of communication, reasoning, critical analysis, ethical behavior and appropriate interpersonal interaction to situations in his or her career and personal life
PLO 8	Demonstrate the social skills, professional appearance, attitudes, and behavior that employers expect of all SJVC graduates
PLO 9	Adhere to national, state, and local safety practices used by service technicians working on HVAC-R systems

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ASSESSMENT PROCESS

Assessment Methods				
Describe 2-4 assessment methods and/or tools used to evaluate student achievement of PLOs.				
<ul style="list-style-type: none"> • Criteria are rubrics, skill sheets or other tools used to measure whether the outcome has been met. • Achievement target describes the expected mastery level of the PLOs (e.g. 85% or level 3 on a 4 point rubric). • Achievement target is not the same as a passing grade. 				
	Assessment or Evaluation Method	Criteria (Rubric)	Achievement Target	Data Collection Method (if not done through eCourses)
PLO 1 Discuss theories of heating, refrigeration, and air conditioning and relate these concepts to practical applications	AC 100 Heat Load Calculation Project	Heat Load Calculation Project Rubric- <i>Overall Score</i>	Level 2 of 2- <i>Achieved</i>	
PLO 2 Apply proper procedures for the installation, operation, maintenance and repair of both residential and light commercial heating, ventilation, air conditioning, and refrigeration equipment and systems	RF 100 Refrigeration Component Project	RF 100 Refrigeration Component Project Rubric- <i>Overall Score</i>	Level 3 of 3- <i>Achieved</i>	
PLO 3 Demonstrate proper usage of the basic tools of the trade	RF 100 Manifold Gauge Project	Manifold Gauge Project Rubric- <i>Overall Score</i>	Level 2 of 2- <i>Achieved</i>	
	EC 100 Meter Project	EC 100 Meter Project Rubric- <i>Overall Score</i>	Level 2 of 2- <i>Achieved</i>	
PLO 4 Demonstrate requisite mastery to apply for and obtain the EPA 608 certification from the Environmental Protection Agency	AC 400 Common Assessment Questions (11)		85%	

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PLO 5 Create effective reports and documents, electronically and in writing	AC 100 Heat Load Calculation Project	AC 100 Heat Load Calculation Project Rubric- <i>Overall Score</i>	Level 2 of 2- <i>Achieved</i>	
	AC100 Heat Duct System Project	AC 100 Heat Duct System Project Rubric- <i>Overall Score</i>	Level 2 of 2- <i>Achieved</i>	
PLO 6 Apply advanced electrical concepts and critical thinking skills to interpret and draft schematic wiring diagrams, and perform system diagnostics and interpret results	EC 100 Ladder Schematic Drawing	Ladder Schematic Drawing Rubric- <i>Overall Score</i>	Level 3 of 3- <i>Achieved</i>	
	EC 302 Light Commercial Wiring Project	EC 302 Light Commercial Wiring Project Rubric- <i>Overall Score</i>	Level 2 of 2- <i>Achieved</i>	
PLO 7 Relate and apply concepts of communication, reasoning, critical analysis, ethical behavior and appropriate interpersonal interaction to situations in his or her career and personal life	RF 100 Refrigeration Component Project	RF 100 Refrigeration Component Project Rubric- <i>Overall Score</i>	Level 3 of 3- <i>Achieved</i>	
	EC 200 Pictorial Using a Ladder Diagram	EC 200 Pictorial Using a Ladder Diagram Rubric- <i>Overall Score</i>	Level 2 of 2- <i>Achieved</i>	
PLO 8 Demonstrate the social skills, professional appearance, attitudes, and behavior that employers expect of all SJVC graduates	General education course requirements	Completion of required general education courses	90% completion rate	Course Completion Data from Report and Dashboard Library
PLO 9 Adhere to national, state, and local safety practices used by service technicians working on HVAC-R systems				

*PLO data will be skewed because of PLOs being accessed in different terms

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Program Review & Curriculum Conferences	
This section outlines the cycle of the evaluation.	
<ul style="list-style-type: none"> • Indicate which year your program reviews are held. • Indicate which year your curriculum conferences are held. 	
Program Review Years	Every two years beginning in 2016

COMMUNICATION

Communication of Results	
This section identifies how results will be disseminated and communicated to stakeholders:	
	<ul style="list-style-type: none"> • A draft of the Program Review Report is completed by the Curriculum Technician or designee and made available to program constituents for evaluation. After the evaluation period, all documentation is uploaded to InfoZone where it is permanently housed.
	<ul style="list-style-type: none"> • A draft of the Curriculum Conference Report is completed by the Curriculum Technician or designee after a Curriculum Conference and made available to program constituents for evaluation. After the evaluation period, all documentation is uploaded to InfoZone where it is permanently housed.
	<ul style="list-style-type: none"> • Campus management and Program Directors forward information to Advisory Board members, employers, potential employers or other stakeholders who may be interested in the information.