## Form: "PSR 2022 INSTRUCTIONAL Comprehensive Cohort C"

Participating Area: Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR) Cohort-C 0947 I-CTE



✓	4	Show	All	Possible	Responses

Response is required

## 1. PROGRAM OVERVIEW

Program Title & Code

**Program Title** 

HVACR

(Max chars: 100)

**Program Code** 

**0947 I-CTE** (Max chars: 100)

Is this a CTE program?

Yes

 $\bigcirc$  No

1a. Select the Chaffey Goals that directly relate and are MOST relevant to your program.

Goals are numbered for the purpose of making reference points so that PSR writers can identify and locate which Chaffey Goals relate to their program. Goal numbers do not represent priority numbers.

- ✓ Goal 1: Equity and Success--Chaffey College will be an equity-driven college that fosters success for all students.
- 🗹 Goal 2: Learning and Completion--Chaffey College will ensure learning and timely completion of students' educational goals.
- ✓ Goal 3: Community Opportunities and Needs--Chaffey College will develop and maintain programs and services that maximize students' opportunities and reflect community needs.
- Goal 4: Technology--Chaffey College will optimize the use of technological tools and infrastructure to advance institutional efficiency and student learning.
- Goal 5: Efficiency--Chaffey College will efficiently and effectively manage systems, processes, and resources to maximize capacity.
- Goal 6: Agility--Chaffey College will responsively adapt to changes in students' academic and career needs.
- Goal 7: Professional Learning--Chaffey College will prioritize and align professional learning for all employees to support the achievement of Chaffey Goals.

# 1b. Describe how your program aligns with the Chaffey Goals. Please provide supporting statements and/or examples.

Refer back to the Chaffey Goals marked above (e.g., Goal 4: Provide supporting statements of how the program aligns with this goal).

Goal 1: Equity and Success- The strategic plan for the HVACR department along with the Chaffey community specifies measurable outcomes for equitable education, with a focus on equity for all students, and progress towards achievement can be evaluated and shared with the campus community. Recognizing the "knowledge-gap", the HVACR department is putting the educational resources in place to cultivate the next generation of graduates among the different age, gender, race, and ethnic groups classified as entrants into the labor force and those exiting. In preparation for career success, affordability (distance education and non-credit curricular design focus, and providing low cost and no-cost textbooks), hands-on real-world learning opportunities (internships), and supportiveness has been the dominant theme in making program courses more attractive to students. To further promote support for the program's female students, our goal is to reach a larger number of female students and to share career advice from the industry. Promoting diversity goes well beyond improving gender equality and must include enabling opportunities for underrepresented minority students. To close an identified gap, effort is being made by the program to attract more women and underrepresented minorities with expanded outreach to the community.

Goal 2 Learning and Completion- Ensuring learning and timely completion of students' educational goals, we want to offer short term, late start classes and also morning and night classes which would fit into the students' schedules. We have added Hybrid classes, as well as online classes to the program for students' flexibility. Students can earn their level 1 certificate within one semesters, and their level 2 certificate within one years. We also want to develop an accredited associate degree program, obtaining an associate degree will be an additional process but this will also give our students more career options for the future.

Goal 3 Community Opportunities and Needs- The HVACR program continues to develop and maintain programs and services that maximize students opportunities and reflect community needs. The HVACR program is key to fulling demands in the Inland Empire. <a href="https://coeccc.net/inland-empire-desert/2022/03/environmental-control-technology-hvac/">https://coeccc.net/inland-empire-desert/2022/03/environmental-control-technology-hvac/</a>.

Goal 4 Technology- The HVACR program must optimize the use of technological tools and infrastructure to advance institutional efficiency and student learning. There is always a need in the ever changing technological tools and materials that are used in HVACR such as refrigerants, wireless gauges, new codes, software and techniques. These changes are reflected and ingrained in our student learning and reflected in the program outcomes by acquiring the latest tools and having industry standard professionals speak to the students about industry standards. The HVACR must continue to adapt the program meeting students learning needs. One example is the ever changing need to get the latest refrigerant, equipment and tools to work on the new HVAC-R systems. <a href="https://www.achrnews.com/articles/146235-take-time-to-train-for-refrigerant-transition.">https://www.achrnews.com/articles/146235-take-time-to-train-for-refrigerant-transition.</a>

## PRIOR VIP GOALS STATUS/PROGRESS

1c. Please list the program's VIP Goals from the last PSR cycle and report on the progress (complete, ongoing, etc.).

N/A

## OTHER RESOURCES REQUESTS

1d.1 At any point during the past PSR cycle (last three years), did you have "other resources requests" that were funded by the Resource Allocation Committee?

If yes, proceed to questions 1d.2. If no, skip to section 2.

If you have items that were funded by Strong Workforce and Perkins, please mark "yes."

○ Yes

O No

1d.2 If yes, did those purchases meet the program's intended purpose. Please explain.

No answer specified

## 2. EVIDENCE

The evidence section comprises of the following: (a) equity, (b) learning and completion, (c) CTE data if applicable, and (d) learning outcomes.

## **EQUITY DATA**

Please reference the "Equity" Institutional Research data file to evaluate the following areas.

### 2a.1 Concerning GENDER/IDENTITY, identify important EQUITY developments and trends.

Review data from the last six years and indicate whether the number of enrollments, success rates, and retention rates in the following categories have increased, decreased, not changed (plus or minus 2%), or there is insufficient data available.

Response Legend:  1 = Increase 2 = Decrease 3 = No Change (plus or minus 2%)	(o) <b>4</b> = Insuf	ficient Data Ava	ilable	
	1	2	3	4
Number of enrollments by males		~		
Number of enrollments by females			<b>✓</b>	
Success rate by males			<b>✓</b>	

Success rate by females		<b>&gt;</b>	
Retention rate by males		~	
Retention rate by females			~

## **2a.2** Concerning RACE/ETHNICITY, identify important EQUITY developments and trends.

Review data from the last six years and indicate whether the number of enrollments, success rates, and retention rates in the following categories have increased, decreased, not changed (plus or minus 2%), or there is insufficient data available.

Response Le $1 = \text{Increase}$ $2 = \text{Decrease}$ $3 = \text{No Change (plus of } 3)$		icient Data Ava	ilable	
<del>-</del> <del>-</del> <del>-</del>	1	2	3	4
Number of enrollments by African American				~
Number of enrollments by Asian		~		
Number of enrollments by Caucasian	<b>✓</b>			
Number of enrollments by Hispanic		~		
Number of enrollments by other race/ethnicity		~		
Success rate by African American				~
Success rate by Asian		~		
Success rate by Caucasian		~		
	1	2	3	4
Success rate by Hispanic			~	
Success rate by other race/ethnicity				~
Retention rate by African American			~	
Retention rate by Caucasian			~	
Retention rate by Asian			~	
Retention rate by Hispanic			~	
Retention rate by other race/ethnicity			<b>✓</b>	

## 2a.3 Concerning AGE GROUP, identify important EQUITY developments and trends.

Review data from the last six years and indicate whether the number of enrollments, success rates, and retention rates in the following categories have increased, decreased, not changed (plus or minus 2%), or there is insufficient data available.

Response Legend:

1 = Increase 2 = Decrease 3 = No Change (plus or minus 2%	o) <b>4</b> = Insuffi	cient Data Ava	ilable	
	1	2	3	4
Number of enrollments by age group, 19 or younger				<b>✓</b>
Number of enrollments by age group, 20-24		~		
Number of enrollments by age group, 25-29		~		
Number of enrollments by age group, 30-39		~		
Number of enrollments by age group, 40-49		~		
Number of enrollments by age group, 50 or older		~		
Success rate by age group, 19 or younger		~		
Success rate by age group, 20-24		<b>✓</b>		
	1	2	3	4
Success rate by age group, 25-29		<b>✓</b>		
Success rate by age group, 30-39		~		
Success rate by age group, 40-49		~		
Success rate by age group, 50 or older	~			

Retention rate by age group, 19 or younger			~	
Retention rate by age group, 20-24		<b>✓</b>		
Retention rate by age group, 25-29		<b>✓</b>		
Retention rate by age group, 30-39		<b>✓</b>		
Retention rate by age group, 40-49		<b>✓</b>		
Retention rate by age group, 50 or older		<b>✓</b>		

## 2a.4 Concerning OTHER CHARACTERISTICS, identify important EQUITY developments and trends.

Review data from the last six years and indicate whether the number of enrollments, success rates, and retention rates in the following categories have increased, decreased, not changed (plus or minus 2%), or there is insufficient data available.

Response Legend: <b>1</b> = Increase <b>2</b> = Decrease <b>3</b> = No Change (plus or minus 2%)	%) <b>4</b> = Insuff	icient Data Ava	ailable	
	1	2	3	4
Number of enrollments by students with disabilities				<b>✓</b>
Number of enrollments by first generation		~		
Number of enrollments by economically disadvantage		~		
Success rate by students with disabilities				<b>✓</b>
Success rate by first generation	<b>~</b>			
Success rate by economically disadvantage		~		
Retention rate by students with disabilities				<b>✓</b>
Retention rate by first generation			~	
Retention rate by economically disadvantage			<b>✓</b>	

# 2a.5 Over the last three years, has the number of course sections offering zero-cost textbooks increased, decreased, or remained the same?

Response Legend:  1 = Increase 2 = Decrease 3 = No Change			
	1	2	3
Number of sections with zero-cost textbooks			~

#### **2b. IDENTIFY EQUITY STRENGTHS**

- a. First, summarize "equity" data from Institutional Research that describes your program strengths.
- b. Second, if applicable, summarize internal or external data/evidence/research the department has (e.g., surveys, interviews, focus groups, external assessment techniques). Programs may provide additional information or data that has not been included in their Institutional Research files.
- c. Considering the evidence, explicitly identify specific "equity" strengths.

There is not enough data currently available to provide more detail on any particular equity strength. The drop in enrollment was due to the pandemic classroom limit of no more than 12 students in face to face labs.

HVACR is a non credit program, and it continues to have a majority of first generation students and economically disadvantaged students.

## **2**c. IDENTIFY DISPARITIES IN EQUITY

- a. First, summarize "equity" data from Institutional Research that describes areas of improvement.
- b. Second, if applicable, summarize internal or external data/evidence/research the department has (e.g., surveys, interviews, focus groups, external assessment techniques). Programs may provide additional information or data that has not been included in their Institutional Research files.
- c. Third, considering the evidence, identify disparities in equity.
- If there is a disparity in equity, DO NOT discuss responsive strategies in this section. You will be able to address responsive strategies in the STRATEGIC PLANNING section (item 4d).

\*If the data shows favorable results for equity, answer the following question instead: How will the program maintain excellence in equity?

There is not enough data (2years) to go into detail and the drop in enrollment was because of the pandemic classroom limit.

There have not been any females that have enrolled in the program. To address this, the HVACR program is pursuing a partnership with <a href="http://www.WomenInHVACR.org">http://www.WomenInHVACR.org</a> with the goals of inviting more women into the trade and empower them within HVACR.

A focus in <u>Soft skills</u> in the HVACR industry needs improvement. Soft skills in communication, conflict resolution, and empathy play a big role in customer relations. The ability to not lose your head, remain calm, and truly understand their perspective when someone is upset will help you be able to diffuse any high-tempered situations and calm customers. To address the lack of soft skills in the industry, students are to role play real life scenarios to experience and get used to responding with soft skills in mind.

## LEARNING AND COMPLETION DATA

Please reference the "Learning and Completion" Institutional Research data file to evaluate the following areas.

### 2d.1 Identify important LEARNING and COMPLETION developments and trends.

Review data over the last six years.

1 = Increase 2 = Decrease 3 = No Chan	Response Legend: age (plus or minus 2%) 4	= N/A <b>5</b> = In	sufficient Data	Available	
	1	2	3	4	5
Overall Enrollment		~			
Overall Retention			~		
Overall Course Success			~		
FTES		~			
All ADT degrees awarded				<b>✓</b>	
All AA degrees awarded				<b>✓</b>	
All AS degrees awarded				<b>✓</b>	
All degrees awarded				<b>✓</b>	
	1	2	3	4	5
All Certificate Completion		~			
Average units earned, ADT degree				~	
Average units earned, AA degree				~	
Average units earned, AS degree				~	
Average units earned, all degrees				~	
Average units earned by certificate(s)				<b>✓</b>	

CTE PROGRAMS: Labor Market Information (LMI): Regional Job Outlook (If Applicable)
OCCUPATIONAL GROWTH

### 2d.2 Identify important CTE PROGRAM developments and trends.

For the most up-to-date data about projected occupational growth, please visit the Center for Excellence Labor Market Demand data. The CoE Labor Marker Demand data is available at: COE - Supply and Demand | Centers of Excellence (coeccc.net)

Response Legend: 1 = Middle Skill 2 = Above Middle Skill		
	1	2

CTE: Projected Occupational Growth

#### 2e. IDENTIFY LEARNING AND COMPLETION STRENGTHS--ASSESSMENT OF PROGRAM HEALTH

a. First, summarize "learning and completion" data from Institutional Research that describes your program strengths. Be sure to address any items marked "increase" and/or "no change," if "no change" is a positive reflection of the program (e.g., provide data for stable or increased enrollment, retention, success patterns, or data for increased number of certificates/degrees). If applicable, summarize data related to program strengths for "projected occupational growth."

b. Second, if applicable, summarize internal or external data/evidence/research the department has (e.g., surveys, interviews, focus groups, external assessment techniques). Programs may provide additional information or data that has not been included in their Institutional Research files.

c. Third, considering the evidence, explicitly identify specific "learning and completion" strengths.

#### Summary

- There is not enough data currently available to provide a proper assessment of program health, as the program has been in existence for only 2 years. The drop in enrollment was due to of the pandemic classroom limit. Courses were limited to 12 students due to the pandemic distancing requirement for face to face students
- Even with the decrease in enrollment the amount of student retention and success have not changed
- When the program goes back to full capacity the, department believes enrollment numbers will increase, just like the first year the program was created.

The HVACR field is growing in opportunities according to the <u>LMI data</u>. Employment is to increase by 10% by 2025, with over 465 job opening annually within the Inland empire. Over the previous 12 months, 907 job ads for heating, air conditioning, and refrigeration mechanics and installers were posted in the region.

#### 2f. LEARNING AND COMPLETION AREAS OF IMPROVEMENT

- a. First, summarize "learning and completion" data from Institutional Research that describes areas of improvement. Be sure to address any items marked "decrease" and/or "no change," if "no change" reflects an area needing improvement (e.g., provide data for decreased enrollment patterns or the number of certificates/degrees earned). If applicable, summarize data related to areas of improvement for "projected occupational growth."
- b. Second, if applicable, summarize internal or external data/evidence/research the department has (e.g., surveys, interviews, focus groups, external assessment techniques). Programs may provide additional information or data that has not been included in their Institutional Research files. c. Third, considering the evidence, explicitly identify specific areas in which the program can improve over the next three years.

You are only be asked to identify areas of improvements. You will be asked to address the strategies that the program plans to implement in the STRATEGIC PLANNING section (item 4d).

\*If the data shows favorable results for learning and completion, answer the following question instead: How will the program maintain excellence in learning and completion?

## Summary

- There is not enough data currently available to provide a proper assessment of program health, as the program has been in existence for only 2 years. The drop in enrollment was due to of the pandemic classroom limit. Courses were limited to 12 students due to the pandemic distancing requirement for face to face students
- Areas that need to be improved from the review of the data is enrollment and completion of all students. Program faculty believe, this is due to pandemic.

#### Improvements

The HVACR field is growing in opportunities according to the LMI data. Employment is to increase by 10% by 2025, with over 465 job opening annualy over the Inland empire. Over the previous 12 months, 907 job ads for heating, air conditioning, and refrigeration mechanics and installers were posted in the region.

The Heating, Ventilation,Air Conditioning and Refrigeration(HVACR)selected goals 2, 3, and 4. We are developing our program around Chaffey's goals of learning and completion, community opportunities, along with technology which are directly aligned with our programs. With the ever demand energy savings especially in California. Title 24 is the code and minimum requirements to build upon. Title 24 in conclusion is forcing older, and extremely large energy consuming equipments to be replaced, which creates more job and opportunities in HVACR.



## 3. EVIDENCE--LEARNING OUTCOMES

Learning Outcomes represents the third element of the EVIDENCE component of the PSR evaluation. If you have questions about the learning outcomes requirements in section 3, please contact Shannon Jessen at shannon.jessen@chaffey.edu or Laura Picklesimer at laura.picklesimer@chaffey.edu.

3a. MANDATORY COMPONENTS: Please identify which of the following MANDATORY components have been completed by checking the appropriate boxes.

The Outcomes and Assessment Committee will verify if mandatory components have been fulfilled.

- ✓ COURSE LOs (CLOs) have been revised/updated as needed and entered in the course SLO Taskstream workspace.
- COURSE LOs (CLOs) have been mapped to Program or Institutional Learning Outcomes in each course's Taskstream workspace.
- PROGRAM LOs (PLOs) for each degree/certificate have been revised/updated as needed, and entered in the Program Learning Outcomes (PLO) Workspace.
- PROGRAM LOs (PLOs) for each degree/certificate have been mapped to Institutional Learning Outcomes in the Program Learning Outcomes (PLO) Workspace.
- Each Degree and Certificate has a Curriculum Map that aligns Courses to PROGRAM LOs in Taskstream's Program Learning Outcomes (PLO) Workspace.

## Three Year Cycle

3b.1 List any courses from your department that were not offered during the previous three-year cycle (from fall 2018 through fall 2021). Enter NONE if all courses were offered.

There is NO SCORING for element 3b.1

HVACR-612

3b.2 Did you evaluate learning outcomes for all courses other than those listed in 3b.1 within the previous three-year period? Note: evaluating courses for ACES-ILO (formerly New World of Work, or NWOW) counts for this component.

○ Yes

No

## Assessment Results and Reflection

3c.1 Is there ACES-ILOs assessment data (formerly known as NWOW employability skills) for courses in your department?

There is NO SCORING for element 3c.1.

Yes

O No

3 c.2 Are all COURSE LO assessment results (other than ACES-ILO/NWOW data) from fall 2018 through fall 2021 entered into Taskstream?

○ Yes

No

3c.3 Mark all applicable approaches to illustrate how your department currently uses course learning outcome (CLO) results. Mark all that apply.

Review & share results as a department

Revise CLOs

✓ Attend professional development
✓ Change methods of assessment
✓ Modify criteria for measuring success
Other:
3c.4 PROGRAM STRENGTHS
Describe how your department is using CLO assessment results to draw thoughtful conclusions regarding the strengths of your program(s). Use data from course learning outcomes assessments to support your answer. If applicable, include data for ACES (formerly NWOW) employability skills that
have been assessed in your program.
The strengths of the program lie in the multiple ways that instruction is delivered from lecture, videos, computer simulations(VR), guest speakers and hands on learning opportunities with all of these choices students have more chances of learning in a way they are able to absorb easier.
The HVACR program has eliminated some textbooks to reduce costs for students. The program is able to stay in a hybrid modality because of the implementation of Cengage but will moving to using Interplay. The advantage of using interplay are they cost less (than cengage), user can be changed if a student drops out of class (its is not tied to on student), the VR headset is compatible with their simulations, and better simulations.
3 3c.5 PROGRAM AREAS OF IMPROVEMENT
Describe how your department is using CLO assessment results to draw thoughtful conclusions to address areas for improvement in your program(s). Use data from course learning outcomes assessments to support your answer. If applicable, include data for ACES (formerly NWOW) employability skills that have been assessed in your program.
There is no data from the previous years. Hence, moving forward, the departmentwill be mindful of the importance of best practices in data practices.
Evaluations methods, data collection, and assessment results will need to be addressed for online classes to best capture program strengths and areas of improvement.
3 3c.6 Identify next steps that will help address gaps in achievement of the Program Learning Outcomes.
Revise program learning outcomes
☐ Embed ACES-ILOs outcomes and assessments into the curriculum
✓ Attend professional development/training in embedding ACES-ILO) formerly New World of Work/NWOW) outcomes and assessments into the curriculum
✓ Develop a department Canvas shell to share discipline-specific ACES-ILO resources
✓ Schedule a department meeting with members of the OAC and/or the ACES-ILO team for Q&A and coaching
☐ Implement changes to course assignments and/or curriculum
Other (please specify):
actitutional Learning Outcomes ACES II O Assessment Plan

# Institutional Learning Outcomes ACES-ILO Assessment Plan

Change instructional strategies

In previous PSR cycles, courses were mapped (aligned) to Program Learning Outcomes (PLO, introduced/practiced/mastered), which were also mapped (aligned) with Institutional Learning Outcomes (ILO). Academic, Career/Community, & Employability Skills (ACES, formerly New World of Work/NWOW) were subsequently introduced to connect college coursework to skills valued by employers and advanced programs of study. The ACES skills have been aligned with ILOs, creating opportunities to directly assess ILOs and measure student progress longitudinally.

Develop a three-year plan that identifies one or more ACES-ILO skills and provides opportunities for students to demonstrate their level of competency in at least THREE (of the 40 possible) ACES-ILO (formerly New World of Work/NWOW) outcomes in Canvas. For statistically valid results, a good goal is to obtain assessment data for at least 50% of all sections for each course over the three year PSR cycle. Please specify one or more specific objectives and action items for each of the next three years.

3d.1 Identify the ACES-ILO skill(s) for which your department will assess outcomes over the next three years.

If it is helpful, refer to the ACES-at-a-Glance document, located at https://tinyurl.com/za9b3kps, or refer to the Top 3 ACES by Academic & Career Community, located at https://www.chaffey.edu/outcomes/digital-badges.php.

_ , ,
☐ Analysis / Solutions Mindset
Collaboration
Communication
☐ Digital Fluency
☐ Empathy
Entrepreneurial Mindset
Resilience
☐ Self Awareness
✓ Social / Diversity Awareness

Adaptability

3d.2 What specific objectives or actions will be taken each year to ensure at least three of the 40 possible ACES-ILO outcomes are assessed in all courses (at least 50% of sections) for the next three years? NOTE: During the three year cycle, a minimum of three different outcomes MUST be assessed.

#### **ACES-ILO YEAR 1 ACTIONS**

Social/ Diversity Awareness- Introduce diverse range of perspective by introducing speakers from different background and women. This will help all students understand and appreciate diversity and promote inclusion.

10a. INCLUSION: Demonstrates a climate where individuals from different backgrounds and social groups feel supported.

10b. CULTURAL SELF AWARENESS: Articulates insights into own cultural rules and biases to demonstrate cultural self-awareness and improve academic and professional relationships.

#### ACES-ILO YEAR 2 ACTIONS

Adaptabilty: Student will be trained to adapt to the

- 1a. OPENNESS TO EXPERIENCES: Adapts to new situations, to changing circumstances, and to different environments.
- 1b. RECEIVING FEEDBACK: Utilizes feedback to establish performance expectations and to progress toward goals
- 1c. ACCOMMODATES CHANGE: Recognizes changes (like new technologies or responsibilities) as potential opportunities rather than obstacles.
- 1d. GOAL SETTING: Sets feasible goals, anticipates possible consequences and makes back-up plans for success

## ACES-ILO YEAR 3 ACTIONS

Entrepreneurial Mindset:

- 7a. MOTIVATED TO LEARN: Acquires new knowledge, skills, and greater responsibilities.
- 7b. CREATIVE THINKING: Thinks of new ideas and innovative ways of doing things.
- 7c. SYNTHESIZE: Draws connections, comparisons, and combines different sources of information.

7d. TAKING RISKS: Willing to take risks and make adjustments accordingly to achieve a favorable outcome.

## 4. STRATEGIC PLANNING

Perhaps the most important piece in the PSR process is strategic planning. Here you will create your Visionary Improvement Plan (VIP) Goals. VIP Goals is an opportunity for all faculty (not just primary writers) to get together to analyze data, discuss the overall self-study, and identify area improvement goals for the next three years. You will then develop an action plan, which outlines how your area plans to achieve your VIP Goals.

4a. Do you have any plans to modify a degree or certificate in your program?
☐ Yes
✓ No
4b. Are you planning to initiate a new program?
✓ Yes
□ No
4c. Please identify specific factors that have contributed to or have influenced program areas of improvement

Refer to the following elements to help you answer this question:

- 2c. Identify disparities in equity
- 2f. Learning and completion areas of improvement
- 3c.3. Learning Outcomes Areas of Improvement

Disparities in Equity - 2c Based on the data there have not been any women in the HVACR program. Hopefully partnering with <u>Women In HVACR</u> will bring more diversity in the program and create more opportunities for outreach to women in the local community who are seeking careers in industrial maintenance.

Learning and completion areas- 2f Based on the data when the HVACR program started there was a higher enrollment of students, but because of the pandemic it has significantly gone down. We anticipate enrollments will rise agian post pandemic.

Learning Outcome Areas of improvement- 3c.3

- Review & share results as a department- Have the other department peer review the program learnign outcomes.
- Revise CLOs- revise CLO's to fit the evolving HVACR.
- Change instructional strategies- Use/test different method of instruction deliveries and improve or remove if not producing results.
- Attend professional development- keeps the instructors up to date on new technologies and teaching strategies, but also develop better network.
- Change methods of assessment- since there are many methods of deliveries used in the program, changing the assessment methods to support diversity, equity and inclusion
- Modify criteria for measuring success- develop a better meassuring success that keeps diversity, equity and inclusion as priority.

## **DEVELOP AN ACTION PLAN**

## 4d. What is your program's action plan to make improvements?

An effective action plan is descriptive and has well-defined steps. Within the three-year plan, an action plan may include yearly milestones or incremental deadlines that help the program to achieve their VIP goal(s).

VIP goal 1: increase the number of awards (Certificates). Aligning with industry's needs, follow Advisory committee recommendations, as well asimprove student outcomes in HVACR. By providing our diverse students with a safe, engaging environment that will optimize the use of technology and tools for a timely completion of our students' education

VIP goal 2: Increase the retention rate. Review curriculum, courses and labs to advance institutional efficiency and student learning. Develop and maintain programs and services that will maximize students' opportunities which align with the evolving HVACR industry.

## CURRICULUM

4e. How does (or will) your department's degree and certificate programs incorporate opportunities for students to explore careers?

Information will be forwarded to the Curriculum Office. There is NO SCORING for curriculum question, 4e.

The certificates of the HVACR program is an introduction to the skills needed in the HVACR field. This gives the student option for advancement in HVACR field.

## PROFESSIONAL DEVELOPMENT SUGGESTIONS

## 4f. What topics, skills or types of professional learning would help you or your program execute future plans?

Information will be forwarded to the Faculty Success Center, Distance Education, Classified Success Network, and the Professional Development Committee to inform future professional development planning.

There is NO SCORING for item 4f.

No answer specified

## **VIP GOALS**

## 4g.1 What are your Three-Year Visionary Improvement Plan Goals (1-3 goals recommended)?

VIP Goals should align with the Chaffey Goals, and should be clear, specific, measurable, actionoriented, realistic, and time bound.

Goal 1: Equity and Success- The strategic plan for the HVACR department along with the Chaffey community specifies measurable outcomes for equitable education, with a focus on equity for all students, and progress towards achievement can be evaluated and shared with the campus community.

Goal 2 Learning and Completion- Ensuring learning and timely completion of students' educational goals, we want to offer short term, late start classes and morning and night classes which would fit into the students' schedules.

Goal 3 Community Opportunities and Needs- The HVACR program continues to develop and maintain programs and services that maximize students' opportunities and reflect community needs. The HVACR program is key to fulling demands in the Inland Empire. https://coeccc.net/inland-empire-desert/2022/03/environmental-control-technology-hvac/.

# 4g.2 Select the Chaffey Goals that directly relate and are MOST relevant to your VIP GOALS (please select all that apply):

VIP goals should relate to Chaffey Goals.

- ✓ Goal 1: Equity and Success--Chaffey College will be an equity-driven college that fosters success for all students.
- Goal 2: Learning and Completion--Chaffey College will ensure learning and timely completion of students' educational goals.
- Goal 3: Community Opportunities and Needs--Chaffey College will develop and maintain programs and services that maximize students' opportunities and reflect community needs.
- ✓ Goal 4: Technology--Chaffey College will optimize the use of technological tools and infrastructure to advance institutional efficiency and student learning.
- Goal 5: Efficiency--Chaffey College will efficiently and effectively manage systems, processes, and resources to maximize capacity.
- Goal 6: Agility--Chaffey College will responsively adapt to changes in students' academic and career needs.
- Goal 7: Professional Learning--Chaffey College will prioritize and align professional learning for all employees to support the achievement of Chaffey Goals.

# 4g.3 Explain the rationale that led your program to develop each VIP Goal. How does each VIP Goal align with the Chaffey Goals?

VIP Goal 1--Rationale and how it aligns with the Chaffey Goals VIP Goal 2--Rationale and how it aligns with the Chaffey Goals VIP Goal 3--Rationale and how it aligns with the Chaffey Goals

Goal 1: Equity and Success- The strategic plan for the HVACR department along with the Chaffey community specifies measurable outcomes for equitable education, with a focus on equity for all students, and progress towards achievement can be evaluated and shared with the campus community. Recognizing the "knowledge-gap", the HVACR department is putting the educational resources in place to cultivate the next generation of graduates among the different age, gender, race, and ethnic groups classified as entrants into the labor force and those exiting. In preparation for career success, affordability (distance education and non-credit curricular design focus, and providing low cost and no-cost textbooks), hands-on real-world learning opportunities (internships), and supportiveness has been the dominant theme in making program courses more attractive to students. To further promote support for the program's female students, our goal is to reach a larger number of female students and to share career advice from the industry. Promoting diversity goes well beyond improving gender equality and must include enabling opportunities for underrepresented minority students. To close an identified gap, effort is being made by the program to attract more women and underrepresented minorities with expanded outreach to the community.

- Goal#1 -Equity and Success-By providing our diverse students with a safe ,engaging evironment that will optimize the use of technology and tools for the completion of our students education.
- Goal#2- Learning Completion-By increasing the students enrollment and success rates this ties with Chaffey's goal#2.
- Goal#3- Community and Needs- Based on the LMI data there is an increase in need of HVACR technicians. Training students to be ready to work in the field of HVACR is meeting this growth in community needs.

Goal 2 Learning and Completion- Ensuring learning and timely completion of students' educational goals, we want to offer shortterm, late start classes and also morning and night classes which would fit into the students schedules. We have added Hybrid classes, as well as online classes to the program for students' flexibility. Students can earn their level 1 certificate within one semesters, and their level 2 certificate within one years. We also want to develop an acredited associate degree program, obtaining an associates degree will be an additional process but this will also give our students more career options for the future.

Goal 3 Community Opportunities and Needs- The HVACR program continues to develop and maintain programs and services that maximize students opportunities and reflect community needs. The HVACR program is key to fulling demands in the Inland Empire. https://coeccc.net/inland-empire-desert/2022/03/environmental-control-technology-hvac/.