## Program Outcomes Assessment Follow-Up 2022-2023 Program Outcome (PO) Year End Reporting Form

In response to SACSCOC 8.2, "The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of seeking improvement based on analysis of the results ..."

Name of Program: Air Conditioning, Heating, and Refrigeration Technology

Outcome #1: Enrollment (unduplicated)

### **Action Items from Program Review:**

Item #	Action Items: (Action item identified in the	<b>Results / Use of Results:</b> (Provide results of the action
	2021-22 program review.)	item identified. Was the action item successful? If not,
		did you want to continue this action item going
		forward? If so, please include this action item in the
		2023-2025 action items table below.)
1	Attending more recruitment events.	By being present and more active at recruitment
	(Assessed by: Check enrollment numbers	events we were able to increase our enrollment
	to see if it increases after events)	numbers.
2	Increased program presence on social	We increased our social media post from different
	media (Assessed by: Check enrollment	events as well as program specific post has helped
	numbers after social media post to	increase enrollment numbers.
	determine interest to post.)	

**Baseline:** 18 # (Average of total enrollment for the last three years – 2018-19; 2019-20; 2020-21)

Standard: 19 # Target: 20 #

#### **Program Enrollment**

Program Enrollment (unduplicated)				
Academic Year (Fall, Spring, Summer)	Enrollment			
2019-2020	21			
2020-2021	12			
2021-2022	23			

All Levels

# **Enrollment by Ethnicity, Gender, and Age**

	2019-2020		2020-2021		2021-	-2022
Ethnicity & Gender	N	%	N	%	N	%
African American, Female American Indian/Alaskan Native,	0	0.0%	0	0.0%	0	0.0%
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female Hawaiian/Other Pacific Islander,	0	0.0%	0	0.0%	0	0.0%
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	0	0.0%
African American, Male American Indian/Alaskan Native,	7	33.3%	4	33.3%	6	26.1%
Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	4.8%	1	8.3%	0	0.0%
Caucasian, Male Hawaiian/Other Pacific Islander,	9	42.9%	5	41.7%	11	47.8%
Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	3	14.3%	2	16.7%	5	21.7%
Two or More Races, Male	0	0.0%	0	0.0%	1	4.3%
Unknown, Male	1	4.8%	0	0.0%	0	0.0%
Male Total	21	100.0%	12	100.0%	23	100.0%
Total	21	100.0%	12	100.0%	23	100.0%

	2019-2020		2020-2021		2021-2022	
Ethnicity & Age Range	2019-20 N	20 %	2020-2021 N %		2021-2022 N %	
African American, Under the age of	14	70	14	70	14	70
18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,						
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,		0.00/		0.00/		0.00/
Under the age of 18 Hispanic/Latino, Under the age of	0	0.0%	0	0.0%	0	0.0%
118	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Under the age	Ü	0.070		0.070		0.070
of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	0	0.0%	0	0.0%	0	0.0%
African American, 18-24	5	23.8%	2	16.7%	1	4.3%
American Indian/Alaskan Native,						
18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	5	23.8%	4	33.3%	7	30.4%
Hawaiian/Other Pacific Islander, 18-		0.007	_	0.007		0.007
24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	3	14.3%	2	16.7%	5	21.7%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	13	61.9%	8	66.7%	13	56.5%
African American, 25-44 American Indian/Alaskan Native,	1	4.8%	2	16.7%	5	21.7%
25-44	0	0.0%	0	0.0%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	3	14.3%	1	8.3%	2	8.7%
Hawaiian/Other Pacific Islander, 25-	Ü	11.070		0.070	_	0.1 70
44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	1	4.3%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	4	19.0%	3	25.0%	8	34.8%
African American, 45-64	1	4.8%	0	0.0%	0	0.0%
American Indian/Alaskan Native,						
45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	1	8.3%	0	0.0%
Caucasian, 45-64	1	4.8%	0	0.0%	2	8.7%
Hawaiian/Other Pacific Islander, 45-64		0.00/	0	0.00/	0	0.00/
	0	0.0% 0.0%	0	0.0% 0.0%	0	0.0%
Hispanic/Latino, 45-64 Two or More Races, 45-64	0		0	0.0%	0	0.0%
Unknown, 45-64	0 1	0.0% 4.8%	0	0.0%	0	0.0% 0.0%
	3				2	
African American, 65+	0	14.3% 0.0%	0	8.3% 0.0%	0	8.7% 0.0%
American Indian/Alaskan Native, 65+						
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
· ·	1	4.8%	0	0.0%	0	0.0%
Caucasian, 65+ Hawaiian/Other Pacific Islander,	0	0.0%	0	0.0%	0	0.0%
65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	1	4.8%	0	0.0%	0	0.0%
Total	21	100.0%	12	100.0%	23	100.0%
iotal	<b>4</b> 1	100.070	14	100.070	20	100.070

**Provide narrative for analysis of program enrollment.** (Is enrollment increasing or decreasing? What are possible reasons for increase/decrease? Describe any action plans to improve or increase program enrollment.)

The HVAC Program has shown an increase in enrollment due to the increase in recruitment events and more advertising on social media. We also updated our program flyers and them seem to help our enrollment as well.

### 2023-2025 Action Items:

Item	Action Items (What actions can be taken	<b>Assessment of Action Items</b> (How will you assess the
	to increase enrollment in your program?)	results of action items?)
1	Schedule more engagement opportunities	Compare numbers from previous years and compare to
	with local high schools, campus tours,	see if enrollment increases
	recruitment events.	
2	Increase the number of local HVAC	This should give students a better understanding of
	companies to come speak to students to	what companies are looking for to help students
	increase their knowledge of the HVAC	transition into the workforce with more success.
	industry.	

#### Outcome #2: Retention

**Action Items from Program Review:** 

Item#	Action Items: (Action item identified in the	<b>Results / Use of Results:</b> (Provide results of the action
	2021-22 program review.)	item identified. Was the action item successful? If not,
		did you want to continue this action item going
		forward? If so, please include this action item in the
		2023-2025 action items table below.)
1	Implement activities for student	After interviewing students, they gave positive
	engagement (Assessed by: Interview	feedback regarding the activities and said it helped to
	students towards the end of semester to	keep them focused and made class more enjoyable.
	see if activities were effective)	They enjoyed group related activities the best.
2	Offer more 1 on 1 training for students.	After offering more 1 on 1 training some students
	(Assessed by: Offer students 1 on 1 training	didn't take advantage but the ones that did were
	so they can better understand the	found to have better scores and overall knowledge
	material, which will lead to better	compared to the ones who did not.
	retention numbers.)	

**Baseline:** 75.9 **%** (Average of last three years – 2018-19; 2019-20; 2020-21; program retention)

 Standard:
 80 %

 Target:
 85 %

Fall to Fall	Retention Rate
Fall 2019 to Fall 2020	62.5%
Fall 2020 to Fall 2021	71.4%
Fall 2021 to Fall 2022	65.0%

All Levels

# Retention by Ethnicity, Gender, and Age

			Fall 2020 to Fall		Fall 2021 to Fall	
	Fall 2019 to Fall 2020		2021		2022	
Ethnicity & Gender	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native,						
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,						
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	0	0.0%
African American, Male	2	20.0%	1	20.0%	3	27.3%
American Indian/Alaskan Native,						
Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	10.0%	0	0.0%	0	0.0%
Caucasian, Male	6	60.0%	3	60.0%	7	63.6%
Hawaiian/Other Pacific Islander,						
Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	1	10.0%	1	20.0%	1	9.1%
Two or More Races, Male	0	0.0%	0	0.0%	0	0.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	10	100.0%	5	100.0%	11	100.0%
Total	10	100.0%	5	100.0%	11	100.0%

			Fall 2020 to Fall		Fall 2021 to Fall		
	Fall 2019 to F			2021		2022	
Ethnicity & Age Range	N	%	N	%	N	%	
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%	
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%	
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%	
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%	
Hawaiian/Other Pacific Islander,	U	0.070	O	0.070	0	0.070	
Under the age of 18 Hispanic/Latino, Under the age of	0	0.0%	0	0.0%	0	0.0%	
18	0	0.0%	0	0.0%	0	0.0%	
Two or More Races, Under the	•	0.00/		0.00/		0.00/	
age of 18	0	0.0%	0	0.0%	0	0.0%	
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%	
Under the age of 18 Total		0.0%	0	0.0%	0	0.0%	
African American, 18-24 American Indian/Alaskan Native,	2	20.0%	1	20.0%	0	0.0%	
18-24	0	0.0%	0	0.0%	0	0.0%	
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%	
Caucasian, 18-24 Hawaiian/Other Pacific Islander,	3	30.0%	2	40.0%	4	36.4%	
18-24	0	0.0%	0	0.0%	0	0.0%	
Hispanic/Latino, 18-24	1	10.0%	1	20.0%	1	9.1%	
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%	
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%	
18-24 Total	6	60.0%	4	80.0%	5	45.5%	
African American, 25-44 American Indian/Alaskan Native,	0	0.0%	0	0.0%	3	27.3%	
25-44	0	0.0%	0	0.0%	0	0.0%	
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%	
Caucasian, 25-44	2	20.0%	1	20.0%	1	9.1%	
Hawaiian/Other Pacific Islander,							
25-44	0	0.0%	0	0.0%	0	0.0%	
Hispanic/Latino, 25-44	0	0.0%	0	0.0%	0	0.0%	
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%	
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%	
25-44 Total		20.0%	1	20.0%	4	36.4%	
African American, 45-64 American Indian/Alaskan Native,	0	0.0%	0	0.0%	0	0.0%	
45-64	0	0.0%	0	0.0%	0	0.0%	
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%	
Caucasian, 45-64 Hawaiian/Other Pacific Islander,	1	10.0%	0	0.0%	2	18.2%	
45-64	0	0.0%	0	0.0%	0	0.0%	
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%	
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%	
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%	
45-64 Total	1	10.0%	0	0.0%	2	18.2%	
African American, 65+	0	0.0%	0	0.0%	0	0.0%	
American Indian/Alaskan Native,							
65+	0	0.0%	0	0.0%	0	0.0%	
Asian, 65+	1	10.0%	0	0.0%	0	0.0%	
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%	
Hawaiian/Other Pacific Islander,	_	0.00/	•	0.007	_	0.007	
65+	0	0.0%	0	0.0%	0	0.0%	
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%	
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%	
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%	
65+ Total		10.0%	0	0.0%	0	0.0%	
Total	10	100.0%	5	100.0%	11	100.0%	

**Provide narrative for analysis of program retention data.** (Based on the data, provide a narrative of your analysis of retention. Indicate factors that may have affected your retention. State any changes you plan to make to improve retention.)

The HVAC program retention rate didn't reach our target of 85% but overall, our retention rate is good, but we can improve. If we increase more 1 on1 training with students and keep the students more engaged, I believe we can hit our target numbers.

### 2023-2025 Action Items:

Item	Action Items (What actions can be taken	Assessment of Action Items (How will you assess the
	to increase program retention?)	results of action items?)
1	Identify struggling students and give them extra resources and lab time.	Some students struggle at first and become overwhelmed by identifying them quicker and giving them extra resources and lab time, this should lead to a higher retention rate
2	Provide more after class review opportunities for the students	Set up more after class time for students that show signs of struggling to help them catch up and not fall behind. This should increase our retention numbers.

# Outcome #3: Completers (unduplicated by highest level of attainment)

### **Action Items from Program Review:**

Item #	Action Items: (Action item identified in the	Results / Use of Results: (Provide results of the action
	2021-22 program review.)	item identified. Was the action item successful? If not,
		did you want to continue this action item going
		forward? If so, please include this action item in the
		2023-2025 action items table below.)
1	Meet with students weekly to review their progress. (Assessed by: Seeing if we have an increase in completers at the end of the	By meeting with students weekly it helped identify why the student was struggling and allowed us to give students the necessary resources to help learn the
	semester.)	material.

**Baseline: 21** # (*Average of total completers for the last three years – 2019-20; 2020-21; 2021-22*)

Standard: 22 #
Target: 23 #

Number of Completers (unduplicated) – Graduation Year – Summer, Fall, Spring					
<b>Graduation Year</b>	Total Completers				
2020-2021	15				
2021-2022	20				
2022-2023	18				

All Levels

# Completers by Ethnicity, Gender, and Age

	2020-2021		2021-2022		2022-2023	
Ethnicity & Gender	N	%	N	%	N	%
African American, Female American Indian/Alaskan Native,	0	0.0%	0	0.0%	0	0.0%
Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female Hawaiian/Other Pacific Islander,	0	0.0%	0	0.0%	0	0.0%
Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	0	0.0%
African American, Male	3	20.0%	4	20.0%	5	27.8%
American Indian/Alaskan Native, Male	0	0.0%	0	0.0%	0	0.0%
Asian, Male	1	6.7%	1	5.0%	0	0.0%
Caucasian, Male	8	53.3%	12	60.0%	10	55.6%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	3	20.0%	3	15.0%	1	5.6%
Two or More Races, Male	0	0.0%	0	0.0%	1	5.6%
Unknown, Male	0	0.0%	0	0.0%	1	5.6%
Male Total	15	100.0%	20	100.0%	18	100.0%
Total	15	100.0%	20	100.0%	18	100.0%

		-2021		-2022		-2023
Ethnicity & Age Range Table	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander,	Ü	0.070	Ŭ	0.070	Ŭ	0.070
Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18 Two or More Races, Under the age of	1	6.7%	0	0.0%	0	0.0%
18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	1	6.7%	0	0.0%	0	0.0%
African American, 18-24	2	13.3%	1	5.0%	1	5.6%
American Indian/Alaskan Native, 18-						
24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	3	20.0%	7	35.0%	7	38.9%
Hawaiian/Other Pacific Islander, 18- 24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	2	13.3%	3	15.0%	1	5.6%
Two or More Races, 18-24	0	0.0%	0	0.0%	0	0.0%
Unknown, 18-24	0	0.0%	0	0.0%	1	5.6%
18-24 Total	7	46.7%	11	55.0%	10	55.6%
African American, 25-44	1	6.7%	3	15.0%	4	22.2%
American Indian/Alaskan Native, 25- 44	0	0.00/	0	0.00/	0	0.0%
Asian, 25-44	0 4	0.0% 26.7%	1	0.0% 5.0%	0	0.0%
Caucasian, 25-44	0	0.0%	3	15.0%	1	5.6%
Hawaiian/Other Pacific Islander, 25-	U	0.076	3	13.070	I	3.070
44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	1	5.6%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	5	33.3%	7	35.0%	6	33.3%
African American, 45-64 American Indian/Alaskan Native, 45-	0	0.0%	0	0.0%	0	0.0%
64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	1	6.7%	2	10.0%	2	11.1%
Hawaiian/Other Pacific Islander, 45-						
64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	1	6.7%	2	10.0%	2	11.1%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	1	6.7%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	1	6.7%	0	0.0%	0	0.0%
Total	15	100.0%	20	100.0%	18	100.0%

**Provide narrative for analysis of completers.** (Based on the data, provide a narrative of your analysis of completions. Indicate factors that may have affected your completions. How might you increase the number of completers in your program?)

Even though we are happy with our number of completers we did not meet our target of 23. We attribute that to students only taking a few classes to see if they like it and others have schedule conflicts that arise, and they must leave the program. Outside of that we have a very high completion rate

#### 2023-2025 Action Items:

Item	Action Items (What actions can be taken to increase student completion in your program?)	Assessment of Action Items (How will you assess the results of action items?)
1	Help students better schedule their classes to avoid schedule conflicts later.	Compare the numbers from previous years and see there is an increase in completers.
2	Discuss with the students the importance of completing the diploma.	Compare the numbers from previous years and see if there is an increase in completers.

#### **Approvals**

- 1. Using DocuSign (electronic signature), the Office of Institutional Effectiveness (IE) will review and approve the Program/Service Outcome Assessment when completed by the responsible program/service personnel.
- 2. Using DocuSign (electronic signature), appropriate Department Chair, Division Dean, Director, and/or AVP is asked to read and approve the Program/Service Outcome Assessment.

	11/28/2023
Steven Reese	11/28/2023
	Steven Reese