

Program Efficacy Report
Spring 2011

Name of Department: Refrigeration

Efficacy Team: Sheri Lillard, Marco Cota, Edward Jones

Overall Recommendation (include rationale): Continuation

Much of this program, run entirely by adjuncts, is satisfactory; however, there are a couple issues that we would like the program to consider as they move forward. As a vocational program that is reporting extremely high retention and success, the committee is curious as to why their success rates are so high. How does the success of their students compare to securing jobs in the field? The second issue is regarding facilities. While they acknowledge that they need more space, they are underutilizing the space that they have, with no defined plans for improvement. Furthermore, they do not acknowledge that some of their equipment is outdated, and provide no component in their planning to improve this situation.

Strategic Initiative	Institutional Expectations	
	Does Not Meet	Meets
Part I: Access		
Demographics	<i>The program does not provide an appropriate analysis regarding identified differences in the program's population compared to that of the general population</i>	<i>The program provides an <u>analysis</u> of the demographic data and provides an interpretation in response to any identified variance. If indicated, plans or activities are in place to recruit and retain underserved populations.</i>

Efficacy Team Analysis and Feedback:

Meets. The program has analyzed the data, and has commented on the discrepancy in the number of women (2.5% vs. 55.7% campus) in their program. There are strong plans in place to step up recruitment, including working with agencies that have programs to increase representation, outreach activities to elementary schools, and participation in campus Science day events. They also have plans to meet and discuss special population students on an ongoing basis, in order to better serve certain demographics. The only other discrepancies are for Hispanic and white students (each about 3 percentage points from the campus average). No plans are in place to address these differences, as they state that this value is within the "VALID" percentage of 11.5% for which there is no explanation," although it is unclear exactly what this statement means.

<p>Pattern of Service</p>	<p><i>The program's pattern of service is not related to the needs of students.</i></p>	<p><i>The program provides evidence that the pattern of service or instruction meets student needs.</i></p> <p><i>If indicated, plans or activities are in place to meet a broader range of needs.</i></p>
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Efficacy Team Analysis and Feedback:

Meets. The pattern of service shows classes mainly taught in the evenings and Saturdays, in order to permit students who are already working in the field to attend school. They have also designed their sequential offerings in such a way that the students can proceed with the next class in a timely manner. In order to expand access to women and other under-represented populations, in less-restricting budgetary times it might be worth considering a daytime track.

Part II: Student Success

<p>Data demonstrating achievement of instructional or service success</p>	<p><i>Program does not provide an adequate analysis of the data provided with respect to relevant program data.</i></p>	<p><i>Program provides an analysis of the data which indicates progress on departmental goals.</i></p> <p><i>If applicable, supplemental data is analyzed.</i></p>
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Efficacy Team Analysis and Feedback:

Meets. The data show an average retention of 93% and an average success rate of 88%, both of which exceed the campus averages significantly. It is not stated what methods are used in the classroom to evaluate student progress, and what level of rigor those methods represent. Supplemental data show an 11 – 13% increase in relevant jobs in San Bernardino County, which seems to indicate a suitable job market. However, one gap is that it is unclear how many of these successful students are actually landing jobs in this field. In other words, does their success in the classroom translate to success in the job market? The report indicates “There is no Job Placement data attached to the e-mail you sent me to complete this document,” however, it is not obvious to whom “you” refers—Program Review Chair, Refrigeration faculty, institutional researcher, or somebody else. Regardless, there should be a solid plan in place to attempt to track the number of students who actually land jobs; helping students send resumes electronically is important, but this practice is simply the application process, and does not represent a plan for assessing job placement success. In addition, a separate tracking system might be useful for students currently in the field who return for updated certification.

Student Learning Outcomes	<i>Program has not submitted student learning outcomes for all courses certificates or degrees. Does not have a three-year plan on file. Program has not analyzed assessment results and implemented changes where appropriate.</i>	<i>Program has submitted student learning outcomes for all courses certificates or degrees. Program has a three-year plan on file. Program has analyzed assessment results and implemented changes where appropriate</i>
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Efficacy Team Analysis and Feedback:

Meets. A 3-year plan is attached, although it is stated that two-thirds of the SLOs have been evaluated, and all SLOs have been defined. One potential concern is that grades (course grades?) are the data used for improvement. While the specific SLO tool is up to the department/instructor, one goal of the SLO assessment is to make sure that all students are meeting the desired outcomes. Since instructors will naturally differ in how they approach material, it seems that an objective and independent measure might give more meaningful results. Is an SLO considered successful if a student receives a passing course grade? How does the final course grade distinguish amongst the different SLOs for a given course?

Part III: Institutional Effectiveness

Mission and Purpose	<i>The program does not have a mission, or it does not clearly link with the institutional mission.</i>	<i>The program has a mission and it links clearly with the institutional mission.</i>
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Efficacy Team Analysis and Feedback:

Meets. The program has a mission and it links with the campus mission.

Productivity	<i>The data does not show an acceptable level of productivity for the program, or the issue of productivity is not adequately addressed.</i>	<i>The data shows the program is productive at an acceptable level.</i>
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Efficacy Team Analysis and Feedback:

Meets. WSCH/Faculty load has consistently increased since '06-07.

<p>Relevance, Currency, Articulation</p>	<p><i>The program does not provide evidence that it is relevant, current, and that courses articulate with CSU/UC, if appropriate.</i></p>	<p><i>The program provides evidence that curriculum review process is up to date. Courses are relevant and current to the mission of the program. Appropriate courses have been articulated with UC/CSU or plans are in place to articulate appropriate courses.</i></p>
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Efficacy Team Analysis and Feedback:

Meets. All courses are up to date in Curricunet, as well as in the catalog. All courses are numbered below 100, and are not articulated.

Part IV: Planning

<p>Trends</p>	<p><i>The program does not identify major trends, or the plans are not supported by the data and information provided.</i></p>	<p><i>The program identifies and describes major trends in the field. Program addresses how trends will affect enrollment and planning. Provides data from internal research or research from the field for support.</i></p>
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Efficacy Team Analysis and Feedback:

Meets. External trends discussed include physically moving their program from old North Hall and a resulting(?) shortage in space, as well as the projected increase of students and activity in their solar installation program. While the move from North Hall most certainly influenced their operation, this is not a trend, but rather, an inconvenience. The expected expansion of their program (due to recent LEED certification and community college green programs), is an important external trend. Given that their solar program is just emerging, capturing job-related data will be especially important for this part of their program.

<p>Accomplishments</p>	<p><i>The program does not incorporate accomplishments and strengths into planning.</i></p>	<p><i>The program incorporates substantial accomplishments and strengths into planning.</i></p>
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Efficacy Team Analysis and Feedback:

Meets. This program is a certified testing site for both North American Technician Excellence (NATE) and Refrigeration Service Engineers Society, and the Department chair is certified to train the students in OSHA material. The OSHA strength will be used in planning to ensure that the students receive 10- or 30-hour training, which is required by HVAC/R contractors. It is unclear how the NATE certification influences planning. Three adjunct faculty have been approved as test proctors, however, what does this mean? Do their students routinely undergo this testing? If so, what type of testing is this? Is there a plan to increase the number of student who take this testing (now that it is convenient to do so onsite)?

Weaknesses/challenges	<i>The program does not incorporate weaknesses and challenges into planning.</i>	<i>The program incorporates weaknesses and challenges into planning.</i>
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Efficacy Team Analysis and Feedback:

Does not meet. The major identified weaknesses are facilities and recruiting. Plans for recruiting underrepresented students have been addressed previously in the demographics section. However, while how many rooms/labs we are provided are essentially out of our direct control, there are no creative solutions proposed (e.g., shared space either on campus or at district facilities). More importantly, they have not addressed specific issues regarding their facilities. A tour of their area reveals essentially one lab, one classroom, and a very small outside area where some work can be done, weather permitting. The main lab room apparently has up-to-date equipment that the students actually use, much of it donated by the adjunct faculty. However, the lab also has maybe 100 ft² of space that is used as storage for old equipment that is not used. If this area was cleaned up and the lab organized differently, they might be able to partially address some of their space issues, but this aspect (which is under their control) is not specifically mentioned in the document, nor is it addressed in planning. The classroom is sufficient, but contains three pieces of old equipment (probably decades old). Is this old equipment suitable for training students to be certified in the year 2011? Do they need updated equipment? If some of their equipment is outdated, this would appear to be a weakness and should be addressed. Are they planning to write grants to acquire new equipment? Given that there are no full-time faculty in this program to handle some of these issues, this appears to be a weakness as well, but is also not addressed. The overall concern here is that there are some clear weaknesses, but they are not incorporated satisfactorily into the planning.

Part V: Technology, Partnerships & Campus Climate

	<p><i>Program does not demonstrate that it incorporates the strategic initiatives of Technology, Partnerships or Campus Climate.</i></p> <p><i>Program does not have plans to implement the strategic initiatives of Technology, Partnerships or Campus Climate</i></p>	<p><i>Program demonstrates that it incorporates the strategic initiatives of Technology, Partnerships and/or Campus Climate.</i></p> <p><i>Program has plans to further implement the strategic initiatives of Technology, Partnerships and/or Campus Climate.</i></p>
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Efficacy Team Analysis and Feedback:

Meets. This program incorporates all three initiatives into their planning. For them, the most notable initiative is that of Partnerships, considering that they are a vocational program whose mission is direct training of students for certification and employment. They cite several partnerships with local agencies, which will potentially lead to increased employment opportunities for students as well as the program being designated as another documented training site.