Program Efficacy Report
Spring 2016

Name of Department: Aeronautics

Efficacy Team: Paula Ferri-Milligan, Joel Lamore, Kay Weiss

Overall Recommendation (include rationale): Conditional

The team notes that the Aeronautics Department has been at a disadvantage without a full-time faculty member, and the lack of such does explain some lapses in the department. The team commends the department for its recruitment of women and its overall success and retention rates. The department adequately addresses the trends in the field and cites its success rates on FAA certifications as a strength. The team has identified several areas that the department needs to address. The pattern of service is limited, and there is no analysis as to whether the current pattern of service meets student needs—analysis of fill rates, etc. The program provides evidence of substantial SLO assessment and review; however, there is no evidence of three-year course summary reports, and there is no evidence that departmental dialogue has occurred between the faculty. A completed map shows that the department's courses are tied to the PLOs within the different AERO programs, but plans for a three-year review are not included. The department does not provide an indepth analysis of enrollment data to fully address enrollment patterns and to assist in departmental planning. There is no evidence that challenges have been addressed in planning for the department.

The department needs to address the does not meet categories and submit a revised report to the Program Review Committee by October 14, 2016, that gives direction to the program and improves program viability as it moves forward. If the report does not adequately address the does not meet categories, the department will receive probational status.

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

Efficacy Team Analysis and Feedback: Meets

The team commends the department for its recruitment of women. The department attributes this to increased outreach and recruitment towards this targeted population. The department acknowledges most areas that deviate from the campus demographics. The difference between the campus demographics (61.8%) and the department demographics (43.0%) is addressed as "in line with [Inland Empire demographics]. The department's "continued recruitment efforts within…[the] community is making them more aware of the opportunities afforded to them" in this field. Overall, the department has addressed the demographics; however, it could provide details about the recruitment process on future reports.

Pattern of Service	*The program's pattern of service is not related to the needs of students.*	*The program provides <u>evidence</u> that the pattern of service or instruction meets student needs.* *If warranted, plans or activities are in place to meet a broader range of needs.*

Efficacy Team Analysis and Feedback: Does Not Meet

The department indicates that it is only able to offer services Monday through Thursday during the daytime, with an extra class (AERO 900) on Fridays, which allows students to complete the mandated hours for FAA certification. The department cites lack of lab space and equipment as the reasons for not extending the program into the evening. This is not adequately explained. The department further addresses the limited service patterns to a lack of qualified instructors but provides no evidence of any search for additional faculty. There is no analysis as to whether the current pattern of service meets student needs—analysis of fill rates, etc.

Part II: Student Success		
Data demonstrating achievement of instructional or service success	*Program does not provide an adequate analysis of the data provided with respect to relevant program data.*	*Program provides an <u>analysis</u> of the data which indicates progress on departmental goals.* *If applicable, supplemental data is analyzed.*

Efficacy Team Analysis and Feedback: Meets

The team commends the department for its overall success and retention rates. Although the success and retention rates have trended upwards over the past four years, with a dip this year from the 100% retention in 2013-14 to 90%, this is still strong. The department consistently awards 2-3 degrees (AS) and 36-42 certificates annually. The certificates are "stackable," with students receiving 3-4 certificates, so approximately 13 students per year receive those certificates. The department submitted an incomplete version of the EMP, which does not include current data showing only four certificates were awarded in 2014-15. The division attributes the decrease to the loss of the full-time faculty member who prompted students to apply for the certificates. The department reports that 96% of students passed the FAA exams over the past four years.

The department identifies other programs in the area as comparison colleges, but it does not address how these colleges compare to the SBVC program. Although the document provides statewide labor statistics, it does not provide data specific to the college's service area.

Student Learning Outcomes and/or Student Achievement Outcomes	*Program has not demonstrated that they have made progress on Student Learning Outcomes (SLOs) and/or Service Area Outcomes (SAOs) based on the plans of the college since their last program efficacy.*	*Program has demonstrated that they have made progress on Student Learning Outcomes (SLOs) and/or Service Area Outcomes (SAOs) based on the plans of the college since their last program efficacy.*

Efficacy Team Analysis and Feedback: Does Not Meet

SLOs: The program provides evidence of substantial SLO assessment and review; however, there is no evidence of three-year course summary reports. It does appear that data has been collected within the SLO Cloud, and faculty are submitting substantial reflection. Overall, there is no evidence that departmental dialogue has occurred between the faculty. And trends have not been identified from the data.

PLOs: A completed map shows that courses are tied to the PLOs within the different AERO programs. The department indicates that faculty assess primarily in conjunction with FAA standards and modifies instruction to improve success on FAA certifications. Plans for a three-year review are not included.

Part III: Institutional Effectiveness		
Mission and Purpose	*The program does not have a mission, or it does not clearly link with the institutional mission.*	*The program has a mission, and it links clearly with the institutional mission.*

Efficacy Team Analysis and Feedback: Meets

The program has a mission that is clearly tied to the college's mission.

Productivity	*The data does not show an acceptable level of productivity for the program, or the issue of productivity is not adequately addressed.*	*The data shows the program is productive at an acceptable level.*

Efficacy Team Analysis and Feedback: Does Not Meet

The program has a dramatic drop in WSCH/FTEF over the past year (458 to 323). Enrollment was inconsistent over the three prior years (402-387-445). The department attributes this drop in productivity to the loss of a full-time faculty who retired in spring 2014. While the most dramatic drop in productivity happened at that timeframe, it does not fully explain this significant drop rate. Fill rates fell from 87% in fall 2014 to 62% in spring 2015. This occurred a year after the retirement. Fill rates in fall 2015 were at 82% and are at 87% during the current semester. So the department appears to be experiencing growth, and it would be expected that WSCH/FTEF would go up again in the current year; however, current data shows another drop to 318.55 (2015-16). The department needs to provide an indepth analysis of enrollment data to fully address enrollment patterns and to assist in departmental planning. The department needs to develop a plan to improve enrollments and productivity.

Relevance, Currency, Articulation	*The program does not provide evidence that it is relevant, current, and that courses articulate with CSU/UC, if appropriate.* *Out of date course(s) that are not launched into Curricunet by Oct. 1 may result in an overall recommendation no higher than Conditional.*	*The program provides evidence that the curriculum review process is up to date. Courses are relevant and current to the mission of the program. Appropriate courses have been articulated or transfer with UC/CSU, or plans are in place to articulate appropriate courses.*

Efficacy Team Analysis and Feedback: Meets

Curriculum is up-to-date. The department states, "Our courses are accepted for credit at various institutions" and lists Cal Poly, Pomona, San Jose State, Southern Illinois University, and Embry-Riddle Aeronautical University specifically as recognizing its AERO courses. The committee suggests that the department's articulation explanation be clearer—indicating whether these are the only schools that have articulation agreements or if those agreements extend further—for example, generally to the Cal States.

Part IV: Planning		
Trends	*The program does not identify major trends, or the plans are not supported by the data and information provided.*	*The program identifies and describes major trends in the field. Program addresses how trends will affect enrollment and planning. Provide data or research from the field for support.*

Efficacy Team Analysis and Feedback: Meets

The department adequately addresses the trends in the field, which includes the anticipated retirement of 45% of the workforce in the next ten years. The department notes that the current program is unable to support the anticipated training needs for pilots, but it has plans to re-vitalize the pilot training component. The department also notes the need for skilled labor in carbon fiber technology. This will require additional curriculum development and is very expensive, but grant funding is currently being sought to address these needs.

Accomplishments	*The program does not incorporate accomplishments and strengths into planning.*	*The program incorporates substantial accomplishments and strengths into planning.*

Efficacy Team Analysis and Feedback: Meets

The department cites its success rates on FAA certifications as a strength. It cites the FAA reporting that monitors student test results for FAA certification, which indicates that SBVC students have performed at a rate of 92%--a higher rate than the national average. The committee suggests that the department address the strengths with further analysis—how do the strengths drive planning?

Weaknesses/challenges	The program does not incorporate weaknesses and challenges into planning.	The program incorporates weaknesses and challenges into planning.

Efficacy Team Analysis and Feedback: Meets

Although the department identifies various challenges—loss of faculty, loss of a lab assistant, safety issues, etc.—there is no evidence that these challenges have been addressed in planning for the department. The department does cite planning and networking with industry to procure needed equipment through donations, but it does not address other issues in a comprehensive plan.

A comprehensive plan needs to be developed that addresses how the pilot training program will be revitalized while building a program around new technology. Since the program will require equipment that is not currently available in the department, a plan also needs to include the specific pathway that the department will follow in order to obtain the equipment.

Part V: Technology, Partnerships & Campus Climate		
	Program does not demonstrate that it incorporates the strategic initiatives of Technology, Partnerships, or Campus Climate. Program does not have plans to implement the strategic initiatives of Technology, Partnerships, or Campus Climate.	Program demonstrates that it incorporates the strategic initiatives of Technology, Partnerships and/or Campus Climate. Program has plans to further implement the strategic initiatives of Technology, Partnerships and/or Campus Climate.

Efficacy Team Analysis and Feedback: Meets

The department enlists a variety of technologies within the classroom and the Technical Learning Resource Center. Emerging technologies--such as carbon fiber composite structure technologies, newer Powerplant technogies (FADEC), etc.--are being introduced into the program.

Part VI: Previous Does Not Meets Categories	
Program does not show that previous deficiencies have been adequately remedied.	Program describes how previous deficiencies have been adequately remedied.

Efficacy Team Analysis and Feedback (N/A if there were no "Does not Meets" in the previous efficacy review):

Program Review 2012 team efficacy report does not identify any department deficiencies.