



Program Review All Fields

Aviation [1]

Main

Overview

Academic Year 2022 - 2023

Originator Levy, Lorraine

Division Curriculum Division 50 - Career Technical Education

Department Aviation Maintenance Tech

Program Aviation

Program Type Instructional

Co-Contributors

Contributor

- Aleman, Elizabeth
- Dodd, Susan
- Spenner, Herbert
- Sweeney, Susan

Program Mission and Accomplishments

Gavilan College Mission Statement

Gavilan College actively engages, empowers and enriches students of all backgrounds and abilities to build their full academic, social, and economic potential.

Provide a brief overview of how the program contributes to accomplishing the mission of Gavilan College. In addition to a basic overview of your program's structure and services, be specific in connecting your program's services to elements of the mission statement (300 words or less).

The Aviation program's focus is to provide training for technicians in the aviation field. The program is driven by the FAA requirements which are reflected in the SLO's and PLO's. The department has met or exceeded all FAA requirements. The FAA audits the program every year and the department continues to pass these audits every year. Recent accomplishments include: (1) Completed a new facility in San Martin. (2) Updated classes to reflect industry changes. Updates include electronics, turbine engine simulators, piston engine labs, and composite construction. (3) 85+% completion rate. (4) 95+% passing rate for graduates who take FAA certification test. (5) Created new drone/Unmanned Aerial Systems (UAS) classes/degrees/certificates /programs.

(Suggested changed - Herb) (1) Received certification under new federal law/FAA regulations - biggest changed in 40 years (2) Updated classes to reflect industry changes. Updates include electronics, turbine

engine simulators, piston engine labs, and composite construction. (3) 85+% completion rate. (4) 95+% passing rate for graduates who take FAA certification test. (5.) Taught in-person classes during the pandemic to meet FAA requirements.(end suggestion)

The aviation program's student racial diversity is a good representation of the college's population. These students have the ability to pursue certificates of achievement and A.S. degrees from Gavilan College and can participate in the 2 + 2 Aviation and Technology program between the college and San Jose State University if they wish to earn a B.S. degree. Opportunities for students to enrich their social potential include mentorships between industry groups/employers and students. Picnic tables have been installed so students can meet and eat on campus. For those students that complete the FAA certification tests, there is a 100% employment rate in aviation-related jobs.

On the PIPR website, locate and review your previous program plan and subsequent annual updates. After studying, please list:

Response and follow-up to previous program reviews

- 1.
2. **The department has been working with local employers to help find qualified part-time instructors. To date, no luck. The aviation faculty members have presented, to the administration, plans for developing instructors from alumni. No action has yet been taken by the administration. *We have hired an alum as Program Assistant to help the individual complete the required industry experience required for min quals. The individual is working on completing their BA.* The staff is overloaded; additional qualified staff must be found; the current staff must find the additional staff. *The administration has recruited and hired 6 part-time faculty who met min quals. None of the part-timers' performance has been up to standard as indicated by the full time lead faculty.* This is currently not working. The department is continuing to work with college department chairs and Academic Senate to implement a five-year full-time faculty hiring plan to ensure that 60% to 62% of credit courses are taught by full-time faculty.**
- 3.

Have the services or courses of your program changed over the past three years? Please explain (300 words or less).

In the fall of 2021, the Aviation Maintenance program offered both in-person and online options. *I do not believe it was ever on line.*

(Herb suggestion) - The department has updated all their classes to the new FAA Part 147 standards establish in fall 2022.

Student and Program Outcomes

College Goal for Student Achievement

The following questions refer to data regarding student achievement.

Find your discipline's course success information. Consider your department success rate trends over the last three years. Compare your overall success to the college average.

Are these rates what you expected after comparing with the college average? Are there any large gaps? Is there anything surprising about the data? What trends are suggested by the data?

Fall 2021: AMT Success Rate 87% /College Average 72%;

Fall 2022: AMT Success Rate 96% /College Average 74%;

Fall 2023 AMT Success Rate %??? /College Average 69%.

AMT has a 100% program retention rate - *we have at least 2 drop from first year first semester.*

For those students that take the final FAA certification tests, Gavilan students have a 100% success rate for the oral/practical portion and 95+% on the written portion. This is the first attempt at the tests and is based on FAA data. By Group: Gender – The AMT program's success rate for males was equal to that of the colleges. The success rate for females in the AMT program was 100% (2018-19) and 92% (2017-18) while the college was 70% and 72% respectively. Age – The college appears to be more successful with 18-20 year-olds, while the AMT program shows more success with all other age groups. Ethnicity – Generally, the AMTs program success rates were higher than the colleges for both years. Two groups that were higher are African-Americans and White.

Now find your division persistence information. Consider your retention rate trends over the last three years. Compare your overall retention to the college average.

Are these rates what you expected after comparing with the college average? Are there any large gaps? Is there anything surprising about the data? What trends are suggested by the data.

Path: Tableau - Program Review/ Equity - D2. One Year Persistence Rate

CE Persistence Rate 48%/College Average 48%;

CE Persistence Rate 50%/College Average 47%.

CE Program persistence rates are equal to or slightly above the college's. Eight years ago, we had approximately 1/3 of first-semester students fail or drop out because of academic reasons. The average, for the last three years, is about 10% of first-semester students failed/dropout for academic reasons. This now represents about 1 to 2 first-semester students per semester failed or dropout. Over the past three years, one second-semester student passed the college's standards but didn't meet the FAA's standards. That student is retaking the class. No third or fourth-semester student has failed/dropout for academic reasons.

Success

The following questions refer to data regarding student achievement.

What are your set goals for course success? Do your individual course and department rates meet this goal?

Helpful Question: If your rates for success are lower than your goals, what are your plans to improve them (200 words or less)?

Path: Tableau - Program Review/ Equity - D3. Course Rates by Unit

To meet FAA requirements(70% success rate). In fact,all students who complete the courses exceed FAA

requirements. For those students that take the final FAA certification tests, Gavilan students have 100% success rate for oral/practical portion and 95+% on written portion. This is for first attempts at the tests and based on FAA data

How many students did your area serve (if you don't have an exact count, please provide an estimate)? How did they perform in comparison to those that did not use your services, if applicable? Given this information, how has your service or area supported student success and retention over the past three years (200 words or less)?

See Success and Retention dashboard in Tableau's Program Review section.

2021-2022-87 students

2020-2021 127 students

2019-2021 191 studentns

Students do withdraw because of personal/family reasons. If we can get the students past the first semester, 80% of the students complete both years of the program and that includes those withdrawing for personal/family issues which are out of the college's control. Of those students that successfully complete the first semester, over 85% complete both years of the program. If the student completes two semesters, the number is over 95%. (Data source is semester grade summaries for students still enrolled after the NRS day.)

Equity

Equity

Gavilan College has identified the following populations as experiencing disproportionate outcomes: Males, African American, Native American, Students with Disabilities and Foster Youth.

For EOPS/ CalWORKs, MESA, TRiO, Puente, and VRC: LOCATE Success and Retention dashboard in Tableau's Program Review section. Examine your equity results over the last three years. If there are differences in success rates and/ or retention across groups, comment on any differences in success rates across groups. Helpful Questions: What current factors or potential causes can be connected to these areas of disproportional impact? How might your program or department address student equity gaps (200 words or less)?

For all other areas, how can your area help increase disproportionate student success? Contact your support team for any needed assistance in interpreting these data (200 words or less).

Please find Equity information in Tableau's Success and Retention dashboard.

Contact your support team for any needed assistance in using Tableau.

As is shown in earlier data, the AMT program has been successful with some of the identified populations. Some of the populations, in which the data was reviewed over 3 years, were African Americans, Asians, Foster Youth, Veterans, and Females. For African Americans, the AMT program has gone from 0 in 2016-17 to **+18 I don't think thesis correct** in 2018-19. Unfortunately, for Foster Youth they have gone from +14 in 2016-17 to -15 in 2018-19. While for the Veteran group they have gone from -4 to **+18**. ? And for Females, +14 to +7 to **+18 I don't think this is correct**. The AMT program should continue its outreach into the different sectors of our district communities to target the identified populations. The students enrolled in the aviation program are almost all male and the racial diversity is a good representation of the college's population. The range of students' age is very wide at 17 to 72. (Data source is fall semester grade summary for each first-yearclass.

Our Equal Employment Opportunity (EEO) Plan States

"Ensuring equal employment opportunity involves creating an environment that fosters cooperation, acceptance, democracy, free expression of ideas and is welcoming to persons of all gender expressions, persons with different abilities, and individuals from all ethnic and other groups protected from discrimination."

What is your area doing to support district efforts in creating an inclusive college environment? With what departments are you partnering? Did you identify barriers and institute change? How is you creating/ ensuring diversity in your department or in the classroom?

Some examples might be sponsoring cultural events and diverse speakers on issues dealing with diversity, exploring how to infuse diversity into the classroom and curriculum, integrating diversity into the evaluation of employees, promoting learning opportunities and personal growth in the area of diversity, or evaluating how the physical environment can be responsive to diverse employee and student populations.

The department participates in mentoring programs sponsored by industry groups and employers. Student mentoring can be one avenue to help improve student success.

The department participates in mentoring programs sponsored by industry groups and employers. An example would be NBAA (National Business Aviation Association). As members of the local NBAA mentoring committee, our instructors convinced the organization to put more emphasis on the mechanic shortage. The number of internships offered by the local organization has grown by 150%.

Find your Distance Education success information. If distance education is offered, consider any gaps in success rates between distance education and face-to-face courses. Do you notice any trends? Do these rates differ?

Path: Tableau Program Review/ Equity D9. Course Success Rates Locate your department. Filter by Delivery Methods

Helpful question: If disparity exists, how do you plan on closing the achievement gaps between distance education and face-to-face courses (300 words or less)?

All courses taught face to face

2021-2022 8 Courses

2020-2021 7 Courses

2019-2020 19 Courses- not 19

Statewide Headcount for AMT programs

In 2021 8,272 students statewide

2022 8056 students statewide

Fall 2023 3819 students statewide

Steady enrollment data across the state

2017-2021-58 sections

27 by FT Faculty

28 by PT Faculty

Learning and Area Outcome

Have you reviewed all of your Service Area Outcomes (SAOs) to ensure that they remain relevant for evaluating the performance of your area?

Are your SLOs, PLOs, SAOs, and ILOs mapped in CurriQunet?

Yes

Are your SLOs, PLOs or SAOs up-to-date in CurriQunet?

Yes

Have all of your SLOs, PLOs or SAOs been assessed in the last five years?

Yes

Have you reviewed all of your SLOs/SAOs to ensure that they remain relevant for evaluating the performance of your program?

Yes

If you answered no to any of the above questions, what is your plan to bring SLOs/PLOs/SAOs into compliance?

Continue with new FAA Part 147 standards

Outcome Assessments

Student Learning Outcomes (SLO) or Service Area Outcomes (SAO)

Review the SLOs or SAOs data located in CurriQunet. What is your department's acceptable achievement score goal for each outcome?

AMT 100, 101, 110, 111, 120, and 121 meet FAA requirements(70%).

The department's SLO assessment goal is to exceed FAA requirements.

AMT 100, 101, 110, 111, 120, and 121 meet FAA requirements. In fact, all students who complete the courses exceed FAA requirements.

Institutional Learning Outcomes (ILO)

How do your SLOs/SAOs support the college ILOs or how do your PLOs support the college ILOs? Be specific.

Increase the number of degrees and certificates.

Gavilan does participate in San Jose State University's Aviation and Technology 2 + 2 program where aviation students can use their Gavilan training to help them earn B.S. degrees in aviation at San Jose State University

Are you meeting your SLO/SAO success goals? What patterns stand out in your results? If your SLO/SAO results are lower than your goals, what are your plans to improve them?

Yes, we are meeting our success goals.

Curriculum and Course Offerings Analysis

Are there plans for new courses or educational awards (degrees/certificates) in this program? If so, please describe the new course(s) or award(s) you intend to propose (200 words or less).

Provide your plans to either inactivate or teach each course not taught in the last three years (200 words or less).

Consider and analyze your location, time, and delivery method trends. Are classes offered in the appropriate sequence/ available so students can earn their degree or certificate within two years? Are courses offered face-to-face as well as have distance education offerings? Are they offered on the main campus as well as the off-site areas? Different times of day? (300 words or less).

Program and Resource Analysis

Please list the number of Full and Part Time faculty, staff and/ or managers/ administrator positions in this program over the past three years. Focus on your individual program.

Program and Resource Analysis

1. **2020**

How many students did your area serve in this year (if you don't have an exact count, please provide an estimate)?

50

Full Time Faculty

2

Part Time Faculty

0

Full Time Staff

0

Part Time Staff

1

Full Time Mgr/Admin

1.00

Part Time Mgr/Admin

1.00

2. **2020**

How many students did your area serve in this year (if you don't have an exact count, please provide an estimate)?

100

Full Time Faculty

2

Part Time Faculty

0

Full Time Staff

0

Part Time Staff

0

Full Time Mgr/Admin

1.00

Part Time Mgr/Admin

1.00

3. **How many students did your area serve in this year (if you don't have an exact count, please provide an estimate)?**

50

Full Time Faculty

2

Part Time Faculty

0

Full Time Staff

0

Part Time Staff

0

Full Time Mgr/Admin

1.00

Part Time Mgr/Admin

1.00

Faculty Percentages**Percentage Full to Part Time Faculty**

Year:2020

FT = 100.00%

PT = 0%

How have and will those with reassigned time, grant commitments and activity, projected retirements and sabbaticals affect personnel and load within the past in the next three years? What future impacts do you foresee (200 words or less)?

Worth noting: The full-time instructors have retired from their original careers with Gavilan being their second career. The current instructors will reach retirement age in the next 2 years.

Additional Comments

we had 1 PT faculty in 2020 and 2021. Both didn't workout.

Evaluation of Resource Allocations

List the resource allocations from all sources (e.g., annual college budget request appropriations, Guided Pathways funds, grant funds, etc.) received in the last three years. For annual college budget request appropriations, reference your previous three-year plan and annual updates.

Please evaluate the effectiveness of the resources utilized for your program. How did these resources help student success and completion? For college budget request appropriations, list the result of the evaluation strategy outlined in your previous three-year plan and annual updates. For all other sources of funding, list the results of the evaluation strategy contained within the program or grant plan.

Did you receive additional funds?

Yes

Resource Allocation

1. **VTEA and CE grant funds**

Funding Source

Grant

Academic Year

2021 - 2022

Purpose of Funding

update our labs and their equipment

Result

updated

Program Productivity

Program Productivity Measurements

Determine the number of students you assist annually. Using the data provided by the business office, calculate your average cost effectiveness per student. If you do not have student contact, please fill out **Total allocated budget and Total spending**.

- **2021 - 2022**

Total Number of student contacts

100

Total allocated budget

Total spending

Total cost per student (Student Contact/ Total Spending)

Year and Student count

Evaluate your program costs. Are your costs in alignment with your budget? If not, what improvements can be made? Please explain any trends in spending, inconsistencies and unexpected results.

Integrated Planning and Initiatives

What other areas is your program partnering with (i.e. guided pathways, grant collaboration, etc.) in new ventures to improve student success at Gavilan College? What is the focus of this collaboration? Helpful question: What are the department and your Integrated Planning/ Guided Pathways partners' plans for the next three years (200 words or less)?

To keep students on the aviation path we will continue to update web applications and spreadsheets to track students' academic success.

Gavilan participates in San Jose State University's Aviation and Technology 2 + 2 program where aviation students can use their Gavilan training to help them earn B.S. degrees in aviation at San Jose State University.

Other Opportunities and Threats

Review for opportunities or threats to your program, or an analysis of important subgroups of the college population you serve. Examples may include environmental scans from the Educational Master Plan, changes in matriculation or articulation, student population, community and/ or labor market changes, EMSI data and etc. Helpful Question: What are the departmental plans for the next three years (200 words or less)?

Aviation lab equipment is very expensive and aviation technology is continually moving forward. For example, the smallest new turbine engine is over \$500,000. The department has been creative in using the funds available and seeking donations from industry and aircraft owners. This is the nature of the program and the efforts to obtain the best lab environment with continue for the foreseeable future.

The department has been working with local employers to help find qualified part-time instructors. To date, no luck. The aviation faculty members have presented, to the administration, plans for developing instructors from alumni. No action has yet been taken by the administration. The staff is overloaded; additional qualified staff must be found; the current staff must find additional staff. This is currently not working. The department is continuing to work with college department chairs and the Academic Senate to implement a five-year full-time faculty hiring plan to ensure that 60% to 62% of credit courses are taught by a full-time faculty

What are you discovering about instruction and/or services in a remote environment that you would want to maintain post-pandemic?

What kinds of issues are exacerbated or emerging that are likely to remain, unless addressed?

Additional Questions

Please consider providing answers to the following questions. While these are optional, they provide crucial information about your equity efforts, training, classified professional support, and recruitment.

1. Does your division (or program) provide any training/mentoring for faculty and/ or classified professionals regarding professional development?

The department participates in mentoring programs and employer recruiting committees sponsored by industry groups and employers. During these activities, the department listens to what the community needs from the college and shares how the community can help our students. An example would be NBAA (National Business Aviation Association).

2. If there is a need for more faculty and/ or classified professional support in your area, please provide data to justify request. Indicate how it would support the college mission and college goals for success and completion.

Yes,

Staffing –All the full-time instructors are working close to double the normal load. In addition to their

classroom activities, the instructors are maintaining their lab equipment and actively recruiting additional students. For many years, the college has had openings for part-time instructors but there have been no qualified applicants. Complicating the situation, the full-time instructors have retired from their original careers with Gavilan being their second career.

3. What, if anything, is your program doing to assist the District in attracting and retaining faculty and classified professionals who are sensitive to, and knowledgeable of, the needs of our continually changing constituencies, and reflect the make-up of our student body?

The department has been working with local employers to help find qualified part-time instructors.

4. Are there program accomplishments/ milestones that have not been mentioned that you would like to highlight?

The demand for aviation technicians is very hot. United Airlines, the largest employer of aviation technicians in the bay area, predicts they will need 200 to 400 new technicians per year for the next 8 to 12 years. This high demand is consistent with other employers in the area.

The program is "producing skilled, in-demand technicians who can earn upward of \$72,000 annually, straight out of the two-year program. Work is plentiful, compensation is generous, and there aren't enough candidates to fill positions." (Gilroy Life, October 16-29, 2019)

Please share any recommendations for improvements in the Program Integrated Plan and Review process, analysis, and questions. Your comments will be helpful to the PIPR Committee and will become part of the permanent review record.

We need an Institutional Research Member to provide budget and enrollment data for this report.

Goals

Three-Year Program Plan Goals

1. **Adequate staffing needs**

Connection of Goal to Mission Statement, Strategic Plan (http://www.gavilan.edu/administration/master_plan/docs/SP_GoalsStrategiesDraft-final.pdf) and SAO Results

Implement "adequate staffing needs" to meet our student demands at the Gavilan campus and Airfield.

Proposed Activity to Achieve Goal**

Hire a Full Time Faculty Member

Responsible Party

Dean Susan Sweeny

Fund amount requested. If a collaboration, what % required from each partner?

General funds

Total Three Year Resource Allocation Request

300000

Timeline to Completion Month / Year

1 year

How Will You Evaluate Whether You Achieved Your Goal

Completed the hiring process

2. **Upgrade classes to the new FAA Part 147 standard that is expected to be released 08/2023.**

Connection of Goal to Mission Statement, Strategic Plan (http://www.gavilan.edu/administration/master_plan/docs/SP_GoalsStrategiesDraft-final.pdf) and SAO Results

Ensure that well qualified and trained faculty are teaching courses in accordance with the Strategic Enrollment Management Plan to support student success

Proposed Activity to Achieve Goal**

Issues certification of documentation

Responsible Party

Faculty

Fund amount requested. If a collaboration, what % required from each partner?

50% collaboration

Total Three Year Resource Allocation Request

3000

Timeline to Completion Month / Year

6 months

How Will You Evaluate Whether You Achieved Your Goal

Meeting the deadline of 8/2023

3. Increase achievement

Connection of Goal to Mission Statement, Strategic Plan (http://www.gavilan.edu/administration/master_plan/docs/SP_GoalsStrategiesDraft-final.pdf) and SAO Results

Ensure that well qualified and trained faculty are teaching courses in accordance with the Strategic Enrollment Management Plan to support student success

Proposed Activity to Achieve Goal**

Hold advisory committee meetings every semester.

Responsible Party

Faculty and Advisors

Fund amount requested. If a collaboration, what % required from each partner?

100% participation

Total Three Year Resource Allocation Request

3000

Timeline to Completion Month / Year

Summer of 2024

How Will You Evaluate Whether You Achieved Your Goal

Having and meeting events on the calendar

4. Full Enrollment

Connection of Goal to Mission Statement, Strategic Plan (http://www.gavilan.edu/administration/master_plan/docs/SP_GoalsStrategiesDraft-final.pdf) and SAO Results

Ensure adequate support services are in place to help students enter and stay on their pathway

Implement intentional interventions, such as progress reports, increased touchpoints/nudges, and degree plan mapping, for identified student populations

Proposed Activity to Achieve Goal**

student recruitment activities

Responsible Party

Faculty members

Fund amount requested. If a collaboration, what % required from each partner?

1,000 a year for program fliers to be distributed at schools and the Hollister site

Planned demonstrations and career opportunities for students

Total Three Year Resource Allocation Request

3000

Timeline to Completion Month / Year

6-12 months

How Will You Evaluate Whether You Achieved Your Goal

Enrollment numbers are up and persistence rates are up

Executive Summary

Please provide a brief executive summary regarding program trends and highlights that surfaced in the writing of this report. Summarize, using narrative, your program goals for your next three years. Your audience will be your Peer Review Team, the PIPR Committee, President's Cabinet, Dean's Council, ASGC, Academic Senate, Budget Committee and Board of Trustees (300 words or less).

Pluses:

High completion rate; high retention rate; receiving new FAA certification and updating classes; exceeding SLO's/PLO's; and outstanding job/industry prospects for graduates.

Challenges:

Growing class enrollment to pre-pandemic levels; and difficulty hiring qualified faculty members.

Attach Files

Attached File

Part 147 Certification Process Flowchart.pdf (/Form/Module/_DownloadFile/208/46547?fileId=267)