



GAVILAN COLLEGE

*Research, Planning, and
Institutional Effectiveness*

Program Integrated Planning and Review

Instruction

Program Name:	Biology
Academic Year:	2019-20

Gavilan College

Program Integrated Planning and Review

Instruction

Academic Year 2019-20

Contents

Purpose, Standards and Resources.....	3
Purpose	3
Resources:.....	3
Program Plan and Review Timeline	4
A. Executive Summary	5
B. Program Mission and Accomplishments.....	6
Gavilan College Mission Statement	6
Response and follow-up to previous program reviews.....	6
C. Program Overview	8
D. Student and Program Outcomes	9
College Goal for Student Achievement.....	9
Success	9
Equity	10
Conferred Award Trends.....	11
curriQunet.....	11
Learning and Outcomes Assessment.....	12
E. Curriculum and Course Offerings Analysis.....	14
Curriculum Analysis.....	14
Course Time, Location and Delivery Method Analysis.....	14
F. Program and Resource Analysis	15
Program Personnel.....	15
Departmental Productivity Measurements	15
Evaluation of Resource Allocations.....	16
Integrated Planning and Initiatives	16
Other Opportunities and Threats.....	17
G. Career Education Questions	18
Appendix	19
Optional Questions.....	19
Review Process Feedback.....	19
Example Three-Year Program Plan Goal Setting Worksheet.....	20
Three-Year Program Plan Goal Setting Worksheet.....	21

Purpose, Standards and Resources

Purpose

The fundamental purpose of ongoing, Program Integrated Planning and Review (PIPR) is to maintain and if possible improve the effectiveness of every College program and service, and of the institution as a whole, based on the results of regular, systematic assessment. The ultimate beneficiaries of program integrated planning and review are our students and the community we serve.

Specifically, program review facilitates:

- Creation of a three-year plan for each program
- Institutional & program improvement through the comprehensive self-study, peer review, and planning process
- Development of a three-year budget request plan, including data to support annual budget requests
- Creation of a living document that provides all basic information and forward planning for each program; can be referenced by stakeholders via public website
- Program leadership continuity of expertise (e.g., a department chair change)
- A baseline for the integrated planning process and cycle
- Assessment of program viability
- Accreditation compliance; board policy / administrative procedure compliance (c.f. [BP/AP 4020](#))

Another purpose of the process is to focus available resources—staff time, budget, technology, space - on the achievement of goals and objectives intended to maintain or improve effectiveness of the program itself, but also the programs' contribution to the College's Strategic Plan. Achieving some objectives requires resources over and above what is available, which means that a resource request is necessary. But achieving others requires no extra resources—only the reallocation of existing ones.



Whenever this symbol appears, consider creating a goal on this topic in your three year planning grid at the end of the document.

Resources:

Please refer to the accompanying PIPR Handbook which you can find [here](#). In addition, there are links and paths to information throughout the document.

Program Plan and Review Timeline

When	Description	Participation
2019 Aug	Program Lead training, including website 'tour', GavDATA and other data site overview.	PIPR Chair All Program Leads in Review Cycle
Sept	Program Lead provides budget codes to PIPR for submission to Business Office (Sept 20).	Program Lead
Sept - Nov	Program Lead seeks assistance from support team, department faculty, Dean, others to gather information for report (on-going, as needed). Write Program Report draft (Sept 2 – Nov 15).	Program Lead
Nov	Initial draft due (Nov 15). Peers review report, make suggestions, and identify areas of improvement. Sign off on last page of report (No later than Nov. 22). First Draft revision begins (Nov. 19).	Program Lead Peer Review Team
Dec	2nd draft due to Dean to review, request additions/ clarifications (Finals Week).	Program Lead Supervising Admin
2020 Feb	Dean-reviewed document returned to Program Lead with revision and planning recommendations, if needed. If report is complete and approved, Dean signs and forwards completed report to PIPR (Jan 27-31). If report needs revision, Dean returns to Program Lead.	Program Lead PIPR Supervising Admin
Feb - March	If needed , Program Lead makes edits as needed to report (Feb 3-28). Final report sent to Dean for approval and signature (March 2-6). Dean forwards approved document to PIPR (March 13).	Program Lead Supervising Admin
Feb - May	PIPR reviews final documents. Approves final report (Feb 3 – May 22).	PIPR
June	PIPR Chair presents annual report to Board	PIPR Chair, Board
June-Aug	Final reports submitted to President's Cabinet as information item.	Deans Council, Cabinet
Sept	Final documents to Academic Senate and ASGC as information item.	Academic Senate, ASGC

A. Executive Summary

(Complete this section last).

1. 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).

The Biology program has higher success rates (84% vs. 71%) and persistence rates (57% vs. 47%) than the College average. It also has a much lower average cost per FTES than the College average (\$2,475 vs \$7,203), exclusive of services funded through STEM III.

The main trend appears to be increasing demand for Biology courses. Any successful lab science program has three absolute requirements to best serve students:

1. *facilities*, i.e. wet lab classrooms;
2. *lab tech support*, i.e. staff to set up and prepare lab reagents, equipment, etc.;
3. *full-time faculty* to anchor the program and provide administrative and institutional support

We have set forth these program goals:

1. Increase one-year persistence rates by 3% to 60%
2. Map all biology course SLOs to PLOs and ILOs and update course SLOs
3. Decrease average class size by 10%

Goals 1 and 3 will improve student achievement and equitable access to resources. Goal 2 will help ensure students enroll in quality courses.

It is our sincere hope that the College provide adequate support to help the Biology program meet these goals, and to serve students well in their education.

B. 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.

1. 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).

A basic understanding of life is essential. The Biology program offers courses in understanding how living things work. This understanding informs many personal decisions related to one's health, career, and family (**social and economic potential**). Inherent in this learning is becoming familiar with the scientific process and logical thinking (**academic potential**).

The Biology program provides students with opportunities to build on all these areas. We offer courses for the **non-majors** who need the GE, the **majors** who may want to transfer to a 4-year campus, and the **health science** students who seek a career in the nursing/allied health fields.

Some of our courses have Service Learning components, which help students learn through meaningful civic engagement (**academic, social, and economic potential**).

Additionally, the STEM III grant has supported our efforts in several ways:

- Supplemental Instruction for many biology courses (**academic and social potential**)
- Faculty mentors who meet with students through the semester to advise them on academic and career matters (**academic and economic potential**)
- a STEM Center to serve as a space for learning and collaboration with other students and faculty (**academic and social potential**)

Response and follow-up to previous program reviews

On the [PIPR website](#), locate and review your previous program plan and review (self-study) and subsequent program plan updates. After studying, please complete the following questions:

2. Briefly describe the activities and accomplishments of the department with respect to
- a) Each goal since the last program plan and review and
 - b) PIPR recommendations.

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

IEC Recommendation or PIPR Program Goal	Accomplishment
Continue working with Reading Apprenticeship and assess effectiveness of this interdisciplinary approach	Some work with RA has been done through collaboration with English department. RA workshop between Biology and English faculty planned for Spring 2020 Flex Day.
Develop AS-T for Biology	AS-T for Biology approved by CA Chancellor's office in Spring 2019
Update and assess Biotechnology curriculum	It has been difficult to sustain interest in the Biotech certificate. Enrollment in Biot 103 and 104 declined until they stopped being offered in 2013.
Work, develop, and assess SI Program for Biology	The Biology SI program continues to be an important service for our students. SI leaders improve their communication skills and understanding, and students have access to more help for their coursework.

	Our SI program was at its strongest when we were able to find and hire students with a bachelor's degree in biology and could work ~20 hrs/wk to anchor the program.
Hire full time instructor and two lab technicians	We have hired a third FT instructor. We also recently hired a 35 hr/wk lab technician, contingent on adding course sections. We are still operating at a deficit of lab tech hours.

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

No, there have been no significant changes in what our program provides.

C. Program Overview

1. List program degrees and certificates under this department according to the [college catalog](#).

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

Biological Science AS
Liberal Arts: Natural Science Emphasis AA
Effective Fall 20: Biology AS-T

2. List any collaboration you have had with external community stakeholders, for example – advisory committees, articulation agreements, community partnerships, etc. If this does not apply, enter N/A. (200 words or less).

As with all AD-Ts, the Biology AS-T required course articulation with the TMC.

Some of our courses with Service Learning components involve partnerships with local organizations, e.g. installing and monitoring bird nesting boxes at county parks, habitat reclamation cleanups with CHEER (<http://cheercentral.org/projects>).

D. Student and Program Outcomes

College Goal for Student Achievement

Increase Scorecard Completion Rate for Degree and Transfer

The College has a primary aspirational goal of increasing the Completion rate from 46% to 53.5% on the **CCCCO Scorecard Completion Rate for Degree and Transfer [view] by 2022**. The completion rates in the Scorecard refers to the percentage of degree, certificate and/or transfer-seeking students tracked for six years who completed a **degree, certificate, or transfer-related outcomes (60 transfer units)**.

As you answer the questions below, please consider how your program is helping the college complete this aspirational goal of increasing the Gavilan College Degree, Certificate, and Transfer Completion rate by 7.5 percentage points on the CCCC Scorecard by 2022.

Success

The following questions refer to data regarding student achievement.

Path: [GavDATA](#) → Program Review/ Equity → D1. Course Success Rates by Group

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.

1. 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 (200 words or less)?

2018-19: 84% vs. 71% (13% higher)
2017-18: 80% vs. 71% (9% higher)

Frankly this is surprising, given the rigor of typical STEM programs.
The trend seems to be increasing over time.

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

Path: [GavDATA](#) → Program Review/ Equity → D2. One Year Persistence Rate

2. 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 (200 words or less)?

Area: Fall 15, Fall 16, Fall 17
Natural Science: 61%, 57%, 57%
Gavilan: 45%, 48%, 47%

On average, persistence rates for the past three years are 12% higher than the college overall. This trend seems to be consistent going forward.

This is not too surprising. STEM majors are perceived to (and may actually) lead more directly to career pathways.
This may motivate students to keep progressing towards a degree.

3. 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: [GavDATA](#) → Program Review/ Equity → D3. Course Rates by Unit

We are setting a goal of 85% course success. We are currently at 84% (see D1), so almost there! Plans for improving:

- increased use of online resources (LMS, textbook ancillaries, videos)
- reaching out to part-time faculty to standardize expectations

4 – 6: N/A



Consider addressing success goals in your Three-Year Program Plan at the end of this document.

Equity

Gavilan College has identified the following populations as experiencing disproportionate outcomes: Males (African American, Asian, White, Two or More Races, and First Generation), Students with Disabilities, Veterans and Foster Youth.

7. Using the path above, locate your program in GavDATA. 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)?

Path: [GavDATA](#) → Program Review/Equity → D7. Disproportionate Impact with Margin of Error by Year. Locate your department. Filter by Year

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

The largest outliers:

2016-17

African American -19% (n = 23)

Asian +6% (n = 57)

Native American -5% (n = 12)

Pacific Islander +20% (n = 3)

Current/former foster youth -5% (n = 27)

Veterans -15% (n = 14)

2017-18

African American +2% (n = 34)

Asian +15% (n = 39)

Native American -16% (n = 11)

Pacific Islander +20% (n = 5)

Current/former foster youth -19% (n = 33)

Veterans -10% (n = 27)

2018-19

African American -26% (n = 14)

Asian +14% (n = 47)

Native American +16% (n = 2)

Pacific Islander +16% (n = 1)

Current/former foster youth 0% (n = 30)

Veterans +8% (n = 24)

The success rate for African American students has fluctuated, but seems to be below average for Biology. We are unsure why they have not done as well as other groups. If we can identify the causes/factors, we can address this equity gap.

8. [BP 3420](#) (Equal Employment Opportunity) states:

The Board supports the intent set forth by the California Legislature to assure that effort is made to build a community in which opportunity is equalized, and community colleges foster a climate of acceptance, with the inclusion of faculty and staff from a wide variety of backgrounds. It agrees that diversity in the academic environment fosters cultural awareness, mutual understanding and respect, harmony and respect, and suitable role models for all students. The Board therefore commits itself to promote the total realization of equal employment through a continuing equal employment opportunity program.

How does your department align with the District's Equal Opportunity Board Policy? Helpful Question: How do you plan to address EEO outcomes in your employee hires (300 words or less)?

- the hires over which we have most influence are PT faculty
- we design the interview questions for PT faculty, and have input for the FT faculty interview questions
- we value diversity in our program/department very highly
- however, demand > supply for faculty/staff
- so, we often lack the ability to consider diversity in our hiring (i.e. we have to take whomever we can get)

9. 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: [GavDATA](#) → 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)?

Our DE success rates for Fall 16, 17, and 18: 70%, 67%, 50%.
Our overall success rates for Fall 16, 17, 18: 83%, 83%, 83%.

Closing the gap – ensure online instructors have:

- similar expectations in their courses
- experience in delivering a high-quality online course

10. N/A

Conferred Award Trends

11. Review the number of certificates and/ or associate degrees awarded in your program. Please supply the number of degrees and certificates awarded for the past three years. For reference, review the "[Majors by Program, 2008-2019](#)" for declared majors by year, unduplicated headcount.

Path: [GavDATA](#) → Program Review and Equity → D11. Count of Degrees and Certificates Awarded

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

Year	Degree/ Certificate	Goal for Completion	Actual Degree Completion
18-19	Biology AS	20?	13
17-18	Biology AS	18??	13
16-17	Biology AS	16???	11

12. What is your set goal for degrees and certificates awarded? Do your totals meet this goal? Helpful question: If your totals for degrees/ certificates awarded are lower than your goals, what are you plans to improve them (200 words or less)?

The premise of this question is confusing:

- Are we reviewing the unduplicated headcount declared majors to set goals for completion?
- Why are we setting completion goals retroactively (i.e. for previous years)?
- This seems arbitrary.

Plans for improving completion/student success:

- first we need to better identify the reason(s) for the low completion rate
- perhaps helpful: more tutoring/SI for our courses
- perhaps helpful: more support services in general for STEM students



If your totals for degrees/ certificates awarded are lower than your goals, consider addressing this in your Three-Year Program Plan at the end of this document.

[curriQunet](#)

Click Link above and go to Intranet page in My.Gav

13. Are your SLOs, PLOs and ILOs mapped in [curriQunet](#)?

Yes: **No:**

14. Are your SLOs and PLOs up to date in [curriQunet](#) AND on the [reporting website](#) (←requires your email log-on)?

Yes: **No:**

15. Have all of your SLOs and PLOs been assessed in the last five years?

Yes:

No:

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

Yes:

No:

17. If you answered no to any of the above questions, what is your plan to bring SLOs/ PLOs into compliance (200 words or less)?

- #13: Dept Chair will map SLOs, PLOs, and ILOs in Curricunet
- #14: Dept Chair will update SLOs and PLOs in Curricunet
- #15: Next time SLOs/PLOs are assessed, Dept Chair will assure that previously unassessed outcomes are first to be newly assessed
- #16: Dept Chair will reach out to appropriate faculty to review SLOs



Consider addressing this in your Three-Year Program Plan at the end of this document.

Learning and Outcomes Assessment

Review Learning Outcomes data located in the Course and Program Reports for your area (path below).

After you have examined your results, reflect on the data you encountered. Please address the student learning outcomes (SLO), program outcomes (PLO), and institutional outcomes (ILO) in your analysis.

Student Learning Outcomes (SLO)

Path: Gavilan College Intranet → [curriQunet](#)

18. What are your individual course goals for SLO success? If you don't have set goals, what should they be? Helpful question: If your SLO results are lower than your goals, what are your plans to improve them (200 words or less)?

Not sure that we have set goals. Overall, our course goals for SLO success should probably be at least 70%.

Looking at SLOs assessed in prior years, success ranged from low 60s to 100%. Average looked to be in the 80s.

SLO Disaggregation

19. How do your SLO results vary across your courses? Are there any patterns that stand out (200 words or less)?

Major sequence: Bio 1 (83%), Bio 4 (67%), Bio 5 (64%)

GEs: Bio 10 (71%), Bio 12 (72%)

Pre-Nursing: Bio 7 (83%), Bio 8 (71%), Bio 9 (80%), Bio 15 (90%)

Pre-nursing SLO success seems higher than the majors courses and GEs.

Program Learning Outcomes (PLO)

Path: [Gavilan College Intranet](#) → Program Planning → Student Learning Outcomes Assessment Reporting → Program Level SLO (Far left) → Instructional → Select program

20. What is your set goal for PLO success? Helpful question: If your PLO results are lower than your goals, what are your plans to improve them (200 words or less)?

Not sure that we have set goals. Overall, our course goals for PLO success should probably be at least 70%.

Institutional Learning Outcomes (ILO)

21. How aligned are your SLOs and PLOs to the ILOs (200 words or less)?

Our PLOs seem well-aligned to ILOs (except the last one).
Our SLOs seem fairly well-aligned to our PLOs, but they could use a little work.

22. N/A



Consider addressing LOs in your Three-Year Program Plan at the end of this document.

E. Curriculum and Course Offerings Analysis

Curriculum Analysis

1. 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).

The Biology Program underwent an update in 2018-19:

- The Chancellor's office approved our Biology AS-T on 10 April 2019. Program Control #37750. Banner Code is BIO_AS_T.
- Bio 2 (Organismal Biology) was approved as a new majors course to replace Bio 4 and 5 in the AS-T and our local AS.

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

- Biot 103 (Biotech Lab Skills): no plans to teach this course; will likely inactivate
- Biot 104 (Biotech Seminar): no plans to teach this course; will likely inactivate
- Bio 21 (Field Ecology): no plans to teach this course; if it is not updated soon, will likely inactivate

Course Time, Location and Delivery Method Analysis

Using the copy of the Master Schedule from [Argos](#), find the information regarding when, where, and in which method the courses in this program are taught.

Path: Gavilan Intranet→Argos→Gavilan Schedule→Schedule by Division and Department→Select term, division and your department then press 'run dashboard'.

To Create a PDF of your results above: After obtaining results, go to the top of the screen: Reports→Schedule Reports by Division and Dept svc→Run

Location/Times/Delivery Method Trend Analysis:

3. 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).

- Nearly all Biology courses are only offered F2F at Gilroy, except for Bio 10 and Bio 15 hybrid sections
- Bio 10 is offered at many times of day and night because there is demand
- Majors courses are offered every semester
- Biology must very carefully coordinate with Math, Chemistry, and Physics to ensure students can earn their degree in two years
- That said, it is **highly** unlikely that students begin at a level of Math, Chemistry, and Biology to feasibly earn their degree in two years



Consider goal creation around more efficient and beneficial locations, delivery method and/or time of day trends in your Three-Year Program Plan at the end of this document.

F. Program and Resource Analysis

Program Personnel

1. Please list the **number** of Full and Part Time faculty in this program for the past **two** years

* **Path:** [GavDATA](#) → Program Review/ Equity → F1. Faculty workload (FTEF) by Full-time/ Part-time → Find Program

Academic Year	Number of Full Time faculty	Number of Part Time faculty	Faculty Workload* FT PT	Overall FTEF*
Example	3	7	FT: 7.2 or 39.9% PT: 10.4 or 57.6%	8.63
2018-19	2	12	FT: 7.7 or 30.6% PT: 17.1 or 67.7%	25.2
2017-18	2	10	FT: 6.5 or 34.6% PT: 11.8 or 62.4%	18.9

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

- 2 of 3 current FT Biology faculty have 20% reassign time
- they will likely continue to have it through Spr 2021
- this results in overloads which taxes faculty, or causes more reliance on PT faculty to teach (or both)

Departmental Productivity Measurements

2. Use the Enrollment Trends section of your Program Review Data Sheet to determine information for below. Please review and enter data for the past three years.

* **Path:** [GavDATA](#) → Program Review/ Equity → F2. Enrollment Variables and Trends → Find Program

Year	Total FTEF	Total FTES*	Productivity *(WSCH/FTEF)	Total Dept. Allocated Budget	Total Departmental Spending
Ex: 1999	7.1	153	377	\$385,462	\$366,273
2018-19	25.2	268	178	\$567,266.75	\$628,041.67
2017-18	18.9	216	191	\$420,449	\$570,037.03

Your Program Cost per FTES average is: **\$2,475.37**

College-wide Cost per FTES average is: \$7,203.44

Statewide Funding per FTES: \$3,727.00

3. Evaluate your program cost per FTES. Is your cost in alignment with your FTES generation? If not, what improvements can be made (200 words or less)?

If this is correct, our cost per FTES is very low compared to both statewide funding and college-wide cost! Our cost is very much in alignment with our FTES generation.

However! This does not take into account STEM III, from which we get funding for SI leaders, one of our lab techs, certain lab equipment/supplies, and other things. See F4.

Evaluation of Resource Allocations

4. 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.

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

Resource Allocated	Funding Source	Academic Year	Purpose of Funding	Result
Ex: \$10,000	Equity	2017-18	Purchase text for students in Math 5	83% of students turned homework in on time, an increase from 72% in 2016-17
\$30,000 annually	STEM III	2018-19	Lab tech position at 20 hrs/wk	Biology labs are prepped and set up for teaching lab classes The campus meets local, state, and federal safety regulations
\$10,000	STEM III	2017-18	Lab equipment and supplies	Lab classes have the equipment they need to be taught
\$7,500 annually	STEM III	2018-19	SI leaders for Biology courses	Regular participation in SI improves student success by roughly one letter grade
\$2,500 annually	UCSC ACCESS	2018-19	SI leaders for majors courses	Regular participation in SI improves student success by roughly one letter grade
\$100,000 annually	General fund	2018-19	2 lab tech positions at 35 hrs/wk	Biology labs are prepped and set up for teaching lab classes The campus meets local, state, and federal safety regulations

Integrated Planning and Initiatives

5. What other areas is your program partnering with (i.e. guided pathways, grant collaboration) 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)?

- Biology has always worked closely with Math and the other Natural Sciences to develop a STEM cohort at Gavilan
- in 2018 Biology submitted an AD-T program, and 2-year and 3-year program maps for completing the degree
- our department has used STEM III to partner with English faculty to offer STEM-themed English courses



Consider addressing this in your Three-Year Program Plan at the end of this document.

Other Opportunities and Threats

6. 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, etc. Helpful Question: What are the departmental plans for the next three years (200 words or less)?

- Biology is *somewhat* understaffed to meet current student needs
- We will be **severely** understaffed if EMP is implemented
- EMP, p. 16 #3:
"The distinctive mix of advanced manufacturing, information and communications technologies, and research and development businesses places a premium on Science, Technology, Engineering, Mathematics, and Medicine (STEMM) fields of study. *The College has well-established programs of study in these disciplines but will be called upon to increase the numbers of graduates.*"
- We want to expand but need sufficient **facilities, lab tech support**, and **full-time faculty** to anchor the program and ensure a successful expansion



Consider addressing this in your Three-Year Program Plan at the end of this document.

G. Career Education Questions

External Regulations

1. Does your program have external regulations and/ or accreditation requirements? If yes, list the regulatory body. What is your current status? When is your next renewal **(200 words or less)?**

None of which we are aware.

Employment

The following questions can be answered using the labor data from Cal-PASS Plus on [Launchboard](#). **You will need to create an account before accessing [Launchboard](#).**

Path: Once you have a Launchboard account, go to the main page, hover over the Community College tab, and from the drop down menu select 'Launchboard'. On the next screen, scroll down to 'Doing What Matters' and press on the 'Explore' button under Strong Workforce Program. Now enter Gavilan College, your program TOP code, and the latest academic year in the cells provided to gather information regarding your program.

2. Are students obtaining and keeping gainful employment in their field **(100 words or less)?**

Path: Under the Strong Workforce Program Metrics page (path listed above), click 'Job Closely Related to Field of Study' AND 'Employed in the Fourth Fiscal Quarter after Exit' for information.

Although the new Biology AS-T is listed with TOP code 040100 (general biology), our local AS degree does have a TOP code listed on Curricunet.

Perhaps this is why **"Jobs Closely Related"** says **"there are insufficient data to calculate this metric"** and **"Employed"** says **"due to time lags in receiving data, employment information is not yet available."**

3. What percentage of students is attaining a living wage **(100 words or less)?**

Path: Under the Strong Workforce Program Metrics page (path listed above), click 'Attained a Living Wage' for information.

"Attained a Living Wage" says **"due to time lags in receiving data, employment information is not yet available."**

Appendix

Optional 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. **All replies should consist of 100 words or less.**

1. What training does your program provide for faculty and/ or classified professionals regarding professional development?

Little to no discipline-specific PD.

2. Is there a need for more faculty and/ or classified professional support in your area? Please provide data to justify this request. Is there a need for expanded support services (i.e. counseling, security, tutoring or math lab at the off-sites, in the evening, etc.) in your area? Indicate how it would support the college mission and college goals for success, and completion.

Yes, yes, and yes! Data to justify this request:

- per GavDATA F1, campus %FT load is **38.4%**
- for Biology, it is **30.6%**
- ergo, more FT biology faculty needed!

Expanded support services would definitely support student success and completion:

- institutionalize SI leaders for Biology (currently funded by STEM III)
- institutionalize a FT STEM counselor (currently funded by STEM III)

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

We participate in hiring committees for classified and faculty positions in our program. Everyone in the Biology program values having staff who understand the nature of our student body and can work to nurture their growth and development.

We just hired a FT faculty who grew up and currently lives in the community, who wants to work with outreach to underrepresented groups on campus.

4. Provide any additional information that has not been mentioned elsewhere in this program plan, if necessary.

Review Process Feedback

1. 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.

I would like to see some **rationale** and **bigger picture** for these questions/sections as we complete the review, i.e. provide the "why" as we go through it.

Example Three-Year Program Plan Goal Setting Worksheet

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

E
X
A
M
P
L
E
S

Goal One sentence limit.	Connection of Goal to Mission Statement, Strategic Plan and SAO Results. Use one sentence for each item.	Proposed Activity to Achieve Goal One sentence limit.	Responsible Party One sentence limit.	Fund amount requested. If a collaboration, what % required from each partner? If applicable, list each budget partner / source separately	Timeline to Completion Month / Year	How Will You Evaluate Whether You Achieved Your Goal Two sentence limit.
Increase proportion of EOPS students completing degrees by five percentage points	Mission statement: engages students of all backgrounds. Strategic Plan: Goal 4 SAO Results: Outcome 1; 76% of students completed 3 counseling visits	Increase counseling touch points from three times per semester to five times per semester by restructuring appointment and communication schedule	Dean, Special Programs	None	December 2021	In three years, compare EOPS student graduation rates from before the touchpoint increase to graduation rates after the increase
Eliminate ENGL1A course success rate achievement gap between Foster Youth and general student population	Mission statement: Supports innovate practices Strategic Plan: Goal 4: Improve Equity SLO Results: No direct connection	Partner with EOPS to create a Foster Youth ENGL1A intervention team	Chair, Department of English	None	September 2020	Compare foster youth success rates in ENGL1A before the intervention and after implementation of the intervention

Three-Year Program Plan Goal Setting Worksheet

Biology

****Personnel-related requests must follow the hiring practices of the appropriate area and will not be considered through Program Review**

To add additional rows, click in the bottom cell on the right and push 'tab' on the keyboard.

Goal One sentence limit.	Connection of Goal to Mission Statement, Strategic Plan and SAO Results. Use one sentence for each item.	Proposed Activity to Achieve Goal** One sentence limit.	Responsible Party One sentence limit.	Fund amount requested. If a collaboration, what % required from each partner? If applicable, list each budget partner / source separately	Timeline to Completion Month / Year	How Will You Evaluate Whether You Achieved Your Goal Two sentence limit.
Increase one-year persistence rates by 3% to 60%	Mission Statement: working towards an environment where all students are achieving their goals Strategic Plan: Goal 1 SLO Results: no direct connection	Survey students in biology courses on their plans? Open to ideas...	Dean, STEM Dept Chair, Natural Science	None	June 2021	Compare one-year persistence rates in 19-20 and 20-21 to current rates.
Map all biology course SLOs to PLOs and ILOs and update course SLOs	Mission Statement: advancement of knowledge through innovative teaching and learning, effective communication	Take the time to do it	Dept Chair, Natural Science FT Biology faculty	None	December 2020	Curricunet will have the updated SLOs and they will be mapped to PLOs and ILOs

	Strategic Plan: Goal 1 SLO Results: no direct connection					
Decrease average class size by 10%	Mission Statement: equitable access to resources, recognition and security Strategic Plan: Goal 1, 4 SLO Results: no direct connection	Increase course offerings	College President	None	December 2022	Compare class sizes to in 19-20, 20-21, and 21-22 with current class sizes

This page left intentionally blank

Signature Page

Program being reviewed: **Biology**

Date: [Click here to enter text.](#)

How to use form:

Sign off after final review and no later than:
Peer Reviewers: Nov. 27, 2019
Dean: Mar. 6, 2020

Role	Name	Assignments/ research assigned, if any	Initial and Date upon final review
Team Lead/ Chair	Patrick Yuh		
Dean			
Peer Reviewer			
Peer Reviewer			
Student			
PIPR Support Team			
PIPR Support Team			