



2022-23 Instructional Program Review and Planning

OVERVIEW OF PROGRAM REVIEW AND PLANNING FOR INSTRUCTIONAL PROGRAMS

Program Review and Planning is about evaluating and assessing programs and documenting plans for improving student success rates. Through review of and reflection on key program elements, Program Review and Planning identifies program strengths and strategies necessary to improve the academic discipline, program, and/or services to support student success.

The College also uses Program Review and Planning as the conduit to request resources (human, technology, facilities and funding) to further help improve and support programs.

BASIC PROGRAM INFORMATION

Academic Year

2022-23

Are you completing a comprehensive or annual PRP?

Annual

Division Name

Mathematics, Science and Engineering

Department Name

Biology

Choose your department. If you don't see it, you may add it by typing it in the box.

Discipline Name

Biology (BIOL)

Choose your discipline. If you don't see it, you may add it by typing it in the box.

Department Chair Name

Richard Albistegui-DuBois

Department Chair email

radubois@palomar.edu

Please list the names and positions of everyone who helped to complete this document.

Richard Albistegui-DuBois, chair
Krystal Rypien, professor
Sara Krause, professor
Michael Deal, professor
Steve King, ISA
Terhea Williams, ISA
Christina Fuller, ISA
Margarita Vega, ISA

Website address for your discipline

Discipline Mission statement

The mission of the Biology department is to provide students with a foundation in biology that will allow them to understand and appreciate the natural world around them, think critically about biological issues, and make informed personal and societal decisions based on this knowledge. In this preparation we are committed to providing hands on opportunities to students so they can apply their knowledge and build written and oral communication skills to express critical thinking. We intend to make students aware of the diverse disciplines within the biological sciences, how these disciplines are interrelated and the problems and opportunities unique to each discipline. We aim to prepare our majors students for transfer to a University program and/or employment in various biology-related areas by educating them in the fundamental concepts, knowledge, and laboratory/field techniques and skills used the life sciences. In addition, the department offers courses deigned to prepare pre-health professional students for a variety of 2-year and 4-year health professional programs.

[\(Click here for information on how to create a mission statement.\)](#)

Does your discipline have at least one degree or certificate associated with it?

☒ Yes ☐ No

Are any of your programs TOP coded as vocational (CTE/CE)?

☐ Yes ☒ No

List all degrees and certificates offered within this discipline.

Biology AS-T
Biology Preprofessional (AS, CA)
Biology Pre-Allied health (AS, CA)

AA, AS, ADT, Certificates, etc.

BASIC PROGRAM NFORMATION: FACULTY AND STAFFING RESOURCES

In this section, you will identify how many faculty and staff support your discipline's programs. This information is considered when you request permanent staff and faculty hires. It is also useful as you evaluate your program and the human resources and talent you have to support our students.

To help you answer questions in this section, you will need the links shown in red.

Enter the number of permanent or full-time faculty support your discipline (program)?

12

Enter a number.

Link: [Permanent Faculty and Staff Count](#)

For this past fall semester, what was your Full-time FTEF assigned to teach classes?

11.4

Link: [FTEF Data](#)

For this past fall semester, what was your Part-time FTEF assigned to teach classes? (Part-time FTEF = PT hourly and overload.)

23.34

Link: [FTEF Data](#)

List the classified and other permanent staff positions that support this discipline. If possible, include number of months and percentage workload.

Steve King (ISA IV, 100% time)
Margarita Vega (ISA IV, 100% time)
Diep Vu (ISA IV, 100% time)
Christina Fuller (ISA IV, 100% time)
Terhea Williams (ISA IV, 100% time)

Link: [Permanent Faculty and Staff Count](#)

List additional hourly staff that support this discipline and/or department. Include weekly hours.

We have three student employees who help in the lb preparations. All together they work about 40 hours per week.

PROGRAM INFORMATION

In this section, you are asked to consider and evaluate your programs, including their program learning outcomes, the annual number of completions, goals for completions, and enrollment and efficiency trends.

PROGRAM LEARNING OUTCOMES

Begin this section by reviewing the Program Review reports for programs and courses in [Nuventive Improve](#). All active course and program learning outcomes should be systematically assessed over a 3-year cycle. First, look at program learning outcomes.

- **Program** = Leads to a degree or certificate
- **Discipline** = A group of courses within a discipline

*Programs will be able to complete program completion and outcome questions.

How well do your program's learning outcomes communicate the scope and depth of the degree/certificate offered? Please explain.

The program SLOs are quite broad, especially for the Allied Health program. This is indicative of the wide variety of skills needed for entry into nursing. The AS-T and preprofessional program SLOs are more general, reflecting the more general nature of the degree (almost all students earning this degree are planning on transferring into more specialized biology programs).

How do they align with employer and transfer expectations?

Our program SLOs were initially set up to express our own internal goals for these students, but as a result I am not sure that they do align particularly well with employer expectations. Most employers in the biological sciences are looking for credentials higher than an associates' degree, so for two of our programs (AS-T and preprofessional) we are largely oriented around meeting transfer expectations. For the pre-allied health program, the SLOs are intended to prepare students for the requirements of nursing and other allied health programs. In this area, I think our programs are fairly well set. The AS-T curriculum is set by others.

Describe your program's plan for assessing program learning outcomes.

In general, our strategy is to identify course SLOs in key courses and use their assessments as program assessments.

Summarize the major findings of your program outcomes assessments.

For the AS-T, the most recently assessed SLO (scientific method) had a 93% success rate, which we regard as excellent.

For the pre-Allied Health program, assessments during COVID are acceptable if not spectacular, suggesting that student performance on lab safety SLOs is acceptable during COVID. This seems reasonable, given the differences in lab practice during those conditions.

PROGRAM COMPLETIONS

Student success is at the core of what we do in assisting students in achieving their goals.

The Chancellor's Office Vision for Success stresses the importance of Program Completion as a major goal for our students. In addition, transfer and career readiness are key components of Palomar College's mission statement. This year, our funding formula has also changed reflecting this emphasis, providing additional funding as a function of the number of completions.

In this section, you will reflect upon the number of completions students earned for EACH degree/certificate you offer. As required for accreditation, you are also asked to set a standard which represents the lowest acceptable number of completions and a stretch goal for increasing the number of awards.

Link: [Program Completions](#)

Access the link above titled "Program Completions" and copy and paste five years of completion data for each of your discipline's degrees and certificates.

Degree/Cert	16-17	17-18	18-19	19-20	20-21	21-22
Biology: General AS		2	3			3
Biology: Preprofessional AS	3			2	1	1
Pre-Allied Health AS						2
Biology AS-T		9	27		41	53
Biology: General CA		2	3			3
Biology: Preprofessional CA	4			4	1	2
Pre-Allied Health CA						2
AA/AS Total	3	11	32		42	57
Certificate Total	4	2	7		1	5

Have your program completions Increased, decreased, or stayed the same over the last 5 years?

☒ Increased ☐ Stayed the same ☐ Decreased

Choose one

What factors have influenced your completion trends?

We had been showing substantial increases in completions of the Biology AS-T up through the 20-21 academic year. There has been a noticeable drop in the past year, slightly mitigated by having a few completions of the pre-Allied Health degree and certificates. It seems most likely that the decrease is due to state and nationwide trends of decreasing enrollment, though it is interesting that we had not been impacted quite as much until this last year.

The shift back to in-person courses with reduced class sizes may also be important in this trend.

Our accrediting body, ACCJC, and the Federal Department of Education requires that colleges establish standards and goals for student success and completion.

A program-set standard for completion represents the lowest number of program completion you deem acceptable for your program. In other words, if you were to notice a drop below the set standard, you would seek further information to examine why this occurred and strategies to increase completions.

A program stretch goal for completions is the number of completions you aspire to award for each program in your discipline.

To determine your stretch goal, consider the number of annual completions you typically award over time, then consider strategies or efforts you are making to increase completions in your program. Then identify the NUMBER you want to set as your goal.

Program Information Summary

In this section you are asked to evaluate your programs by considering their program learning outcome assessments, the annual number of completions, goals for completions, enrollment and efficiency trends and any other internal or external factors that had an impact on your program.

What factors have contributed to the success of your program(s)? Describe how they have contributed.

Our AS-T program is still quite successful, despite a recent decrease in enrollments and completions. Our majors biology (200 and 201) instructors remind students to file for completion of these programs. In many cases, the students might not bother to do so, since they are not strictly required for transfer, but recent emphasis from the CSUs on AD-T completions may change that in the future.

What factors have presented challenges for your program(s)? Describe the impact of these challenges.

One main challenge is for the pre-Allied Health program. We have many students pursuing careers in this area--many more, in fact, than are interested in the AD-T. However, there is little incentive for students to file for completion of the pre-Allied health degree or certificate, as it does nothing to enhance their admission into nursing or other programs. Thus, most do not bother. Previously, we had considered whether certain courses which were listed as program requirements were really important for these students. Since then, we have removed one (CHEM 104) as a requirement for majors biology, and MATH 56+ is no longer relevant due to changes in our ability to provide math courses below 100 level. We should revise the program requirements to reflect this.

COURSE INFORMATION

In this section, you will review how students perform in the courses you offer as part of your program. The Chancellor's Office Vision for Success goals focus on eliminating equity gaps and increasing timely completions. Examining, reflecting upon, and developing strategies to improve course success rates is one way to help the college meet its Vision for Success Goals and support our students in reaching theirs.

Data are provided to help you examine differences in course success rates (C or better) across student demographic categories (e.g., gender) and course type (e.g., face-to-face, online).

After you complete your review of course success data, you are asked about the assessment of student learning outcomes at the course level, progress you have made in these assessments, and changes you have implemented as a result.

COURSE SUCCESS AND RETENTION

ACCJC also requires that colleges establish institutional and program level standards and stretch goals for course success rates.

Program-set standards for course success rates represent the lowest success rate deemed acceptable by your discipline. In other words, if you were to notice a drop below the rate, you would seek further information to examine why the drop occurred and strategies to address the rate. The College's institution-set standard for course success rates is 70%

Program-set stretch goals for course success rates represent the success rates you aspire your students to achieve.

The data includes overall success (% C or better) and retention rates (% No Ws) . The data tables include course rates by gender, age, ethnicity, special population, location, and modality (You can access the Student Equity Plan on the SSEC website <https://www2.palomar.edu/pages/ssec/>)

What is your program's standard for Discipline COURSE Success Rate?

70.0%

The College's institutional standard for course success rate is 70%. To access college success rates. Click on the link below.

Link: [Course Success Rate Information](#)

UPDATE 9/26/2022: The Course data links are under construction and will be operational shortly. This note will be removed when then link becomes functional again. Apologies for the inconvenience.

Why did you choose this standard?

This aligns with the college's standard.

What is your stretch goal for course success rates?

75.0%

How did you decide upon the goal?

It seems like a reasonable and achievable goal.

COURSE STUDENT LEARNING OUTCOMES (SLOs)

Summarize the major findings of your course level student learning outcomes assessments.

Overall: Recent results are good, updated results are needed in many classes. Considering the impact of COVID on teaching, the fact that most SLOs are still assessing well is a good sign.

Biol 100: Students struggled on the Ecology outcome

Biol 102: Poor performance on a lab assessment of scientific method may be due to online labs during COVID

Biol 110: Good results on all recently assessed SLOs

Biol 130: All SLOs were achieved

Biol 145: Good results on assessed SLOs

Biol 201: Good results on assessed SLOs

Biol 210: Significant variation in results between sections suggests instructor-specific issues

Biol 211: Need to update results, but recent assessments are acceptable.

Biol 212: Good results on assessed SLOs

Course level SLOs can be accessed through [Nuventive Improve](#)

Excluding courses that haven't been offered in the last three years, do you confirm that all of your courses have been assessed in the last three years.

☐ Yes ☒ No

If you answered no, please explain.

We have a number of courses which need to have updated SLO assessments. Attention has been drawn to this within the department and we are planning on making sure that the courses which need updated SLO assessments receive them by next fall.

This section is intentionally blank for annual PRPs. Please click "Next" to continue.

CAREER AND LABOR MARKET DATA

The Chancellor's Office Vision for Success stresses the importance of increasing the percent of exiting students who report being employed in their field of study. It is important for us to consider how all of our programs connect to future careers.

Go to this website <https://www.onetonline.org/> and enter your discipline in the bubble on the top right for ideas about potential occupations. Click on an example to see more detail.

What kinds of careers are available for people who complete your programs (and/or transfer)? (Refer to O*net Link below) Are there any new or emerging careers? If so, how would the new or emerging careers impact your future planning?

Biology encompasses a diverse range of disciplines and careers. The majority of our biology majors aim for medical careers, biomedical research, biotechnology or careers related to zoology, botany or ecology. Unfortunately, there few job opportunities for biology majors with an AS degree, outside of some paying and often temporary positions. Most biology majors realize they need at least a baccalaureate degree, and most likely a graduate or professional degree to achieve their professional goal. So our Biology program for majors is aimed at preparing these students for successful transfer to a four year college, and not for entering a career after completing courses at Palomar College. For the pre-allied health program, the most natural careers are nursing (levels from CNA to nurse practitioner), physical therapy, occupational therapy, dental assistants and hygienists, and medical school. Most of these are existing careers in allied health. While there do seem to be some emerging careers in the O*NET database associated with allied health, they are more technician/vocational, and do not seem particularly well aligned with our pre-allied health program. Given the large demand for the allied health classes (e.g. BIOL 210, 211, 212), we do not see a need to realign our program to accommodate these emerging careers

Link: <https://www.onetonline.org/>

What are the associated knowledge, skills, abilities (KSA's) needed for the occupations listed above? (click examples in the link above to get ideas)

Skills: The most commonly required skills for biology majors include writing and oral communication skills, organizational skills, critical thinking skills, laboratory and field research skills, quantitative skills, basic computer skills (e.g. spreadsheet and databases) and applying scientific methodologies to solve problems..

Knowledge: Basic knowledge of biology, including knowledge of organizational levels, characteristics of life; chemistry, biochemistry, metabolism, genetics, evolution, biodiversity and modern biological laboratory and field research technique. Many careers in biology are highly interdisciplinary, so students benefit by having a broad range of knowledge outside of biology, including but not limited to computer science, math, chemistry, physics and government regulations.

Abilities: Apply biological knowledge and scientific methodologies to answer questions, collect, analyze and present data orally and in written form, apply critical thinking and quantitative skills to solve problems, and to be an independent learner and to work both independently and collaboratively.

How does your program help students build these KSA's?

For skills and abilities, in all of our courses we require students to write, to think critically, to apply scientific methodologies, to develop laboratory skills, to collect and analyze data, to use quantitative methods, to work alone and in groups and to demonstrate an understanding and application of biological information. For knowledge, the CORs for most of our courses require a basic knowledge of biology, including knowledge of organizational levels, characteristics of life, chemistry, biochemistry, metabolism, genetics, evolution, biodiversity and basic biological laboratory technique. Hopefully, by continuing to work on SLOs we can better assess how successful students are at acquiring these KSAs. These KSAs are woven into our biology curriculum, and are fundamental parts of our courses. Computers and Electronics does appear as a KSA for these professions. Our programs do not have an explicit requirement for any programming or technical classes, though our lab work involves the use of computers for data analysis and report preparation. While in theory it might be good to include such a requirement, we cannot do so for the AS-T program (the curriculum is dictated elsewhere) and do not have enough room in terms of required units for the preprofessional program. One of our main goals in stressing these KSAs is to successfully prepare students for transfer to a university program or a professional program,

Work Based Learning

Applied and work-based learning (WBL) allows students to apply classroom content in professional settings while gaining real-world experience. WBL exists on a continuum that reflects the progress of experiences from awareness-building to training. Students often cycle back through the continuum many times throughout college and throughout their career. Faculty play a critical role in ensuring these experiences are embedded into curriculum and support learning.

Have you incorporated work based learning (work experience, internships, and/or service learning) into your program?

☐ Yes ☒ No

Do you want more information about or need assistance integrating work-based learning into your program?

☐ Yes ☒ No

How do you engage with the community to keep them apprised of opportunities in your program?

We have not done a lot of explicit outreach for our programs. The value of nursing jobs is already widely known, and no additional outreach seems necessary. For other biological sciences jobs (which mostly involve transferring), there might be some value in community outreach--to schools, for example, to work with science teachers in elementary or high schools, or to the homeschooling community, to share what we do in our biology majors courses. Some of our courses require local field trips (e.g. San Diego Zoo, Salk Institute, the Scripps Research institute). One problem we face in getting students direct experiences outside of the classroom is the large number of students we have to work with and the ability of local institutions to accommodate that number of students. We have worked closely with CSUSM and UCSD for our majors biology courses to share resources and grants. Many of our students have received lab shadowing opportunities at CSUSM and UCSD, but again, these experiences are limited relative to the large number of our students. But that is not an excuse to not keep trying to extend these types of experiences for students. To really learn science, one has to do science. For this reason we strongly encourage students to apply for summer internships that are offered by hundreds of colleges each summer. And we share with these students how to apply and when to apply for these programs. We should ensure all of our instructors are knowledgeable of these opportunities and share these opportunities with their students.

For example: regular meetings with community partners, connections with local High Schools, dual enrollment, Universities, business partnerships, Palomar events (i.e. Tarde de Familia, House of Humanities), and/or community groups (i.e. chamber, associations, non-profits).

PROGRAM GOALS

Progress on Prior PRP Goals

In the most recent PRP cycle, you identified a set of goals. Provide an update to your most recent PRP goals.

[Click here for previous PRPs with goal information.](#)

Prior PRP Goals

Goal 1

Brief Description

Find a way to capture completions for pre-Nursing students.

Goal Status

☐ Completed ☒ Ongoing ☐ No longer a goal

Add any comments related to your work on prior goal (e.g., success, challenges, reasons for eliminating a goal). Describe Outcomes, if any.

Our thinking on this is reflected earlier in this PRP. While we are seeing a very small number of completions, it is miniscule compared to the number of students we know are pursuing the goals of the pre-Allied Health program. It is our hope that by aligning the required courses more closely with the expectations of nursing programs, so that a student who completes the preparations for applying to Palomar's nursing program will have already completed the pre-Allied Health program, we can encourage these students to file for completion.

Goal 2

Brief Description

Reevaluate course and program SLOs

Goal Status

☐ Completed ☒ Ongoing ☐ No longer a goal

Add any comments related to your work on prior goal (e.g., success, challenges, reasons for eliminating a goal). Describe Outcomes, if any.

We have not had the meetings toward completing this goal that we intended to have. It remains a goal, however; we plan to have this discussion in spring term 2023.

Goal 3

Brief Description

Align programs with local institutional requirements

Goal Status

☐ Completed ☒ Ongoing ☐ No longer a goal

Add any comments related to your work on prior goal (e.g., success, challenges, reasons for eliminating a goal). Describe Outcomes, if any.

This goal is connected to Goal 1, in terms of the pre-Allied Health program. In spring, we plan to review local UC requirements, and to make sure counseling knows the difference between the AD-T and Preprofessional degrees. However, since there is a statewide initiative to unify CSU and UC admissions requirements, this goal may change with circumstances.

Goal 4

Brief Description

Increase and improve course offerings at north and south centers

Goal Status

☐ Completed ☒ Ongoing ☐ No longer a goal

Add any comments related to your work on prior goal (e.g., success, challenges, reasons for

eliminating a goal). Describe Outcomes, if any.

This goal was intended to reflect the ongoing debate as to whether Rancho Bernardo should offer BIOL 200 and BIOL 201 classes, and whether it should add a cadaver lab to enhance BIOL 210 instruction. While the department endorses both of these, we have decided that the implementation of the cadaver lab is the higher priority. Rancho Bernardo does not really have the class/lab space needed to offer additional BIOL classes, especially with intense equipment usage of the sort seen in BIOL 200. Hopefully the site will expand in the future to enable additional lab classes to be offered. The Fallbrook site is waiting on construction of additional facilities; until such time as those are complete, no expansion or addition are really possible there.

Goal 5

Brief Description

Modernize teaching technology

Goal Status

☐ Completed ☒ Ongoing ☐ No longer a goal

Add any comments related to your work on prior goal (e.g., success, challenges, reasons for eliminating a goal). Describe Outcomes, if any.

With the purchase of some additional microscopes, we feel that this goal has had significant progress. There are a few more needs which make it an ongoing process.

The Strategic Plan 2022 includes the College's Vision for Success (VfS) outcomes. Review the VfS goals and reflect on how your unit supports these outcomes. Identify one strategy your unit will implement to help the college meet these outcomes.

Capturing completions for the students who are working towards admission to the nursing program (Goal 1 above, VfS goal 1) would be a substantial gain for the college.

[Click here to access the Strategic Plan 2022.](#)

Describe any changes to your goals or three-year plan as a result of this annual update.

This form does not give us the opportunity to add additional, new goals. If it did, we might change the goal of "Modernizing teaching technology" to "Ensuring that our classrooms and labs have modern and effective technology for teaching), as some of our needs are about ongoing replacements rather than modernization. Our attention is moving towards this, as well as understanding the drop in enrollments. We are moving away from prioritizing adding BIOL 200 at Rancho Bernardo until the cadaver lab has been added.

RESOURCES

Congratulations! You are nearing completion. In this section, you will consider the resources you need to implement your three-year program review plan and/or address any findings from your assessment of your discipline.

The section is organized into the following five parts:

PART 1: Staffing Needs (Faculty and Additional Staff)

PART 2: Budget Review

PART 3: Technology Needs

PART 4: Facilities Needs

PART 5: One Time Request for Other Needs (NonTechnology Equipment, Supplies, Operating Expenses, Travel)

Reflect upon the three year plan you created above, your current operations, and any upcoming factors (retirements, changes in legislation, and changes in policies or procedures) that will impact your unit. How will you allocate resources to implement your plan? Describe additional resources needed to improve the effectiveness of your unit/program. All resource requests must be aligned with the College's [Strategic Plan 2022](#).

Summarize any reallocation/re-organization of resources you are making based upon your three-year plan, your current operations, and any other factors (e.g., legislation). Describe the impact of the reallocation of resources to your unit.

NOTE: All requests listed in the PRP will be reviewed by deans and supervisors, then forwarded to the appropriate review group for prioritization. A resource requests approved to move forward in the review process does NOT guarantee a position or funding.

PART 1: STAFFING NEEDS

Requests for faculty will follow the prioritization process currently in place in the Faculty Position Prioritization committee, which reports to the Education, Equity, and Student Success Council. Requests for new staff positions will be prioritized at the division level and reviewed at Exec.

Are you requesting additional full-time faculty?

☐ Yes ☒ No

Are you requesting AA, CAST for Classified Staff?

☐ Yes ☒ No

PART 2: BUDGET REVIEW

Review your Budget/Expenditure reports for fiscal year 2019, 2020, 2021. Consider your three-year PRP plan.

Click on the link below to access directions to the *Available Budget Report* to complete this section.

[How to Request the Available Budget Report](#)

Reflecting on your three-year PRP plan, are there any budet considerations you would like your dean/supervisor to be aware of for the upcoming year?

☒ Yes ☐ No

What budget considerations would you like your dean/supervisor to be aware of or to consider?

Please be as specific as possible. For example, if you need an increase in the 40000 account and a decrease in the 23000 account, describe what increase your department needs, how much, and a description of why the department needs the adjustment.

San Marcos:

Anatomy & Physiology: Needs an additional \$1000/year for lab supplies which are more expensive, plus no more Prop M money available

General Biology: Needs an additional \$1000/year for lab supplies which are more expensive, plus no more Prop M money available

Microbiology: Needs an additional \$2000/year for cell cultures and lab supplies (these are all direct student use, so probably could be lottery)

Rancho Bernardo:

General office supplies: needs an additional \$100/year

Maintenance of RO water system: needs about \$100/year (filters, o-rings)

Fallbrook

Anatomy & Physiology: needs an extra \$400/year since Prop M money is no longer available

PARTS 3, 4 and 5 – TECHNOLOGY, FACILITIES AND OTHER NEEDS

1. One-Time Fund Requests. Through the PRP process the college implements an approach for prioritizing and allocating one-time needs/requests. Prioritization takes place through the appropriate groups, leadership, and the Budget Committee. The executive team and Resource Allocation Committee consider various sources for funding PRP requests. Resource requests also inform the larger planning process like Scheduled Maintenance Plans, Staffing Plans, and institutional strategic planning.

For more information about funding sources available, see [IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES](#) (on the left menu of the webpage).

If you are a CTE program and think you may qualify for CTE funds for your PRP request(s), you are **STRONGLY** encouraged to answer the call for Perkins/Strong Workforce grant applications in February. Contact the Dean of CTEE for additional information.

Consider submitting one-time requests only if you have verified that you cannot fund the request using your general discretionary funds or other funds.

2. Technology and Facilities Review. Requests for technology and facilities are assessed by the Deans and then, if appropriate forwarded to the proper institutional group (e.g., technology review committee, or facilities) for review and feedback.

PART 3: TECHNOLOGY NEEDS

Will you be requesting any technology (hardware/software) this upcoming year?

☒ Yes ☐ No

Technology Request

Technology Request 1

What are you requesting?

Updates to computers in lab rooms

Is this a request to replace technology or is it a request for new technology?

Replacement of Technology

Who is the current user of the requested replacement technology?

Faculty who teach in the affected rooms

Provide a detailed description of the the request. Include in your response:

a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

Some of the instructor/presentation computers in our lab rooms are quite old, and sometimes have limited compatibility with teaching equipment. We'd like to update them. This is primarily for rooms NS-217, NS-227, and NS-231

b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Students and faculty in those rooms

c. What are the expected outcomes or impacts of implementation?

Improvements in instruction due to ability to use teaching tools and reduced time spent trying to get things to work

d. Timeline of implementation

As soon as possible

What is the anticipated cost for this request? If any, list ongoing costs for the technology (licences, support, maintenance, etc.).

Assuming \$2000 per computer, about \$6000

Do you already have a budget for this request?

No

What PRP plan goal/objective does this request align with?

Goal 5: Modernize teaching technology

What Strategic Plan 2022 Goal/Objective does this request align with?

- | | | | |
|---|------------------------------|---|------------------------------|
| <input type="checkbox"/> 1:1 | <input type="checkbox"/> 1:2 | <input checked="" type="checkbox"/> 1:3 | <input type="checkbox"/> 1:4 |
| <input type="checkbox"/> 1:5 | <input type="checkbox"/> 2:1 | <input type="checkbox"/> 2:2 | <input type="checkbox"/> 2:3 |
| <input checked="" type="checkbox"/> 2:4 | <input type="checkbox"/> 3:1 | <input type="checkbox"/> 3:2 | <input type="checkbox"/> 3:3 |

- | | | | |
|------------------------------|------------------------------|------------------------------|------------------------------|
| <input type="checkbox"/> 3:4 | <input type="checkbox"/> 3:5 | <input type="checkbox"/> 4:1 | <input type="checkbox"/> 4:2 |
| <input type="checkbox"/> 4:3 | <input type="checkbox"/> 5:1 | <input type="checkbox"/> 5:2 | |

Refer to the Palomar College [STRATEGIC PLAN 2022](#)

If you have multiple requests for technology and had to prioritize, what number would you give this? (1 = Highest)

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance, changes to a facility)?

None

Will you accept partial funding?

☒ Yes ☐ No

PART 4: FACILITIES REQUESTS

Do you have resource needs that require physical space or modification to physical space?

☐ Yes ☒ No

Please include only those facilities requests that could be accomplished within a one-year time frame and/or under a \$75,000 estimated amount. Other facilities needs, such as buildings or remodels, should come through the long-range facilities planning process.

PART 5: OTHER ONE-TIME NEEDS

For more information about funding sources available, see [IELM BLOCK GRANT, LOTTERY, PERKINS AND STRONG WORKFORCE GUIDELINES](#). Please check with your department chair on the availability for this cycle.

Do you have one-time requests for other items (e.g., Non-technology equipment, supplies, operating expenses, travel) that your budget or other funding sources will NOT cover?

☒ Yes ☐ No

Requests

Item 1

What are you requesting?

Two tapeworm models for microbiology

Provide a detailed description of the the request. Include in your response:

a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

We would like two tapeworm models for microbiology instruction

b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Students, due to increased access to high-quality visual aids

c. What are the expected outcomes or impacts or implementation?

Improvements n student learning in microbiology

d. Timeline of implementation

Immediate

What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).

\$700

Do you already have a budget for this request?

No

What PRP plan goal/objective does this request align with?

Goal 4: Improve course offerings at north and south center

What Strategic Plan 2022 Goal/Objective does this request align with?

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| <input type="checkbox"/> 3:4 | <input type="checkbox"/> 3:5 | <input type="checkbox"/> 4:1 | <input type="checkbox"/> 4:2 |
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Refer to the Palomar College [STRATEGIC PLAN 2022](#)

If you have multiple requests for facilities and had to prioritize, what number would you give this? (1 = Highest)

5

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance, changes to a facility)?

None

Will you accept partial funding?

☐ Yes ☒ No

Budget Category

Supplies

Please upload a copy of the quote, if available.

Item 2

What are you requesting?

20 elastic artery slides for histology in anatomy classes

Provide a detailed description of the the request. Include in your response:

a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

We would like 20 slides of elastic artery tissue for use in histology teaching in anatomy

b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Students

c. What are the expected outcomes or impacts or implementation?

Improved student learning in anatomy classes

d. Timeline of implementation

Immediate

What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).

\$400 estimated

Do you already have a budget for this request?

No

What PRP plan goal/objective does this request align with?

Goal 4

What Strategic Plan 2022 Goal/Objective does this request align with?

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| <input type="checkbox"/> 4:3 | <input type="checkbox"/> 5:1 | <input type="checkbox"/> 5:2 | |

Refer to the Palomar College [STRATEGIC PLAN 2022](#)

If you have multiple requests for facilities and had to prioritize, what number would you give this? (1 = Highest)

3

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance, changes to a facility)?

none

Will you accept partial funding?

☐ Yes ☒ No

Budget Category

Supplies

Please upload a copy of the quote, if available.

Item 3

What are you requesting?

Refrigerated benchtop centrifuge

Provide a detailed description of the the request. Include in your response:

a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

This is a device in the lab needed for preparing cells in microbiology and BIOL 200 classes

b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Students in microbiology and BIOL 200, lab staff

c. What are the expected outcomes or impacts or implementation?

Additional possibilities for microbiology and majors biology labs, improved lab prep times

d. Timeline of implementation

Immediately upon purchase

What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).

\$8540.98, not including shipping

Do you already have a budget for this request?

No

What PRP plan goal/objective does this request align with?

Goal 5: Modernize teaching technology

What Strategic Plan 2022 Goal/Objective does this request align with?

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Refer to the Palomar College [STRATEGIC PLAN 2022](#)

If you have multiple requests for facilities and had to prioritize, what number would you give this? (1 = Highest)

2

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance, changes to a facility)?

None

Will you accept partial funding?

☐ Yes ☒ No

Budget Category

Non-technology Equipment (acct 600010 and per unit cost is >\$500)

Please upload a copy of the quote, if available.

Item 4

What are you requesting?

6 Hot plates for microbiology labs at Rancho Bernardo

Provide a detailed description of the the request. Include in your response:

a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

These are used in specific microbiology labs, which occupy about 6 weeks in the semester. These additional hot plates will allow students to work independently rather than in groups of 3. The main campus already has enough hot plates for this; adding these hot plates at Rancho Bernardo will make the class experience more equitable between RB and main campus.

b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Students in microbiology classes

c. What are the expected outcomes or impacts or implementation?

Improved student learning of lab techniques, increased equity between campuses.

d. Timeline of implementation

Immediately upon purchase

What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).

Up to \$500 each, total \$3000

Do you already have a budget for this request?

No

What PRP plan goal/objective does this request align with?

Goal 4: Improve course offerings at north and south center

What Strategic Plan 2022 Goal/Objective does this request align with?

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☐ 4:3 ☐ 5:1 ☐ 5:2

Refer to the Palomar College [STRATEGIC PLAN 2022](#)

If you have multiple requests for facilities and had to prioritize, what number would you give this? (1 = Highest)

1

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance, changes to a facility)?

None

Will you accept partial funding?

☒ Yes ☐ No

Budget Category

Supplies

Please upload a copy of the quote, if available.

Item 5

What are you requesting?

Set of 32 microscopes for Fallbrook

Provide a detailed description of the the request. Include in your response:

a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

We currently have one set of microscopes for the Fallbrook campus, but we have begun running classes in two rooms. Right now, the ISA is moving the set back and forth between the rooms, but that will not work if more classes are scheduled. Plus, it's a lot of extra work for her;.

b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Students (possible to schedule more sections), staff (less work needed to move scopes around)

c. What are the expected outcomes or impacts or implementation?

More classes can be scheduled at the same time

d. Timeline of implementation

Beginning the term after purchase

What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).

About \$48,000 for the microscopes, plus some ongoing service costs

Do you already have a budget for this request?

No

What PRP plan goal/objective does this request align with?

Goal 4: Improve course offerings at north and south center

What Strategic Plan 2022 Goal/Objective does this request align with?

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Refer to the Palomar College [STRATEGIC PLAN 2022](#)

If you have multiple requests for facilities and had to prioritize, what number would you give this? (1 = Highest)

6

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance, changes to a facility)?

None

Will you accept partial funding?

☐ Yes ☒ No

Budget Category

Non-technology Equipment (acct 600010 and per unit cost is >\$500)

Please upload a copy of the quote, if available.

Item 6

What are you requesting?

Additional BioPAC system for Fallbrook

Provide a detailed description of the the request. Include in your response:

a. Description of the need? (e.g., SLO/SAO Assessment, PRP data analysis)

We need one replacement BioPAC system for physiology class at Fallbrook

b. Who will be impacted by its implementation? (e.g., individual, groups, members of department)

Students, able to work in smaller lab groups

c. What are the expected outcomes or impacts or implementation?

Improved student learning in Biology 211

d. Timeline of implementation

Immediately on purchase

What is the anticipated cost for this request? If any, list ongoing costs for the request (additional equipment, support, maintenance, etc.).

\$5100.00

Do you already have a budget for this request?

No

What PRP plan goal/objective does this request align with?

Goal 4: Improve course offerings at north and south center

What Strategic Plan 2022 Goal/Objective does this request align with?

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| <input type="checkbox"/> 3:4 | <input type="checkbox"/> 3:5 | <input type="checkbox"/> 4:1 | <input type="checkbox"/> 4:2 |
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Refer to the Palomar College [STRATEGIC PLAN 2022](#)

If you have multiple requests for facilities and had to prioritize, what number would you give this? (1 = Highest)

4

What impacts will this request have on the facilities/institution (e.g., water/electrical/ADA compliance, changes to a facility)?

None

Will you accept partial funding?

☐ Yes ☒ No

Budget Category

Non-technology Equipment (acct 600010 and per unit cost is >\$500)

Please upload a copy of the quote, if available.

☒ I confirm that all full-time faculty in this discipline have reviewed the PRP. The form is complete and ready to be submitted.

Enter your email address to receive a copy of the PRP to keep for your records.

radubois@palomar.edu