

ANNUAL PROGRAM REVIEW AND PLANNING: Instructional Support and Other Units

Includes: Instructional Services Office, Division Dean's Offices, Occupational & Noncredit Administrative Office, Workforce and Community Development and Extended Education (Centers and Site Operations), KKSM, PCTV, Library, Telescope, Boehm Gallery, Academic Technology, Tutoring, Planetarium, Service Learning, Wellness Center, Women's Studies, STEM Center, Teaching & Learning Center, etc.



Program Review & Planning (PRP)

PART 1: BASIC PROGRAM INFORMATION

Program Review and Planning is the means by which faculty, staff, and/or administrators complete a self-evaluation of an academic discipline, program, or service. The self-evaluation includes an analysis of both quantitative and qualitative data on how the academic discipline, program, or service is supporting the mission and strategic planning of Palomar College in meeting the educational and career interests of students.

Service Area:	Mathematics Learning Center
Department Name:	Mathematics Department
Division Name:	MNHS

Please list all participants in this Program Review:

Name	Position
Fari Towfiq	Mathematics Learning Center Director
Cindy Anfinson	Mathematics Learning Center Assistant Director
Jay Wiestling	Mathematics Department Chair

Number of Full Time Staff	2	Number of Part Time Staff	33
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Please list the Classified positions (and their FTE) that support this discipline:

- Tutoring Center Coordinator, FTE=40 hours, 11 months:** the Tutorial Center Coordinator helps with all aspects of tutoring in the Mathematics Learning Center, from scheduling tutors; tutoring students; assisting with payroll and hiring forms; coordinating tutoring services provided by the Math Center in math classes (embedded tutoring), the Escondido TLC, the Math Center, and other district locations; participating in selecting and training of tutors, and monitoring program compliance and expenditures, among other activities. This position will help to continue to meet the Math Center SAO of providing effective tutoring support for mathematics students, provide continuity to the program, and help meet the Math Department's plan of providing supplemental instruction. The Tutoring Center Coordinator will also assist in coordinating workshop for mathematics students. This position will increase the effectiveness of all services provided by the Math Center.
- Instructional Support Assistant II, FTE=40 hours, 11 months:** the Instructional Support Assistant helps with preparing materials for the Math Center's hybrid program; provides tutoring to mathematics students; reviews the work of the hybrid students and monitors their progress; administers tests to students; creates test keys for hybrid students; corrects exams for the hybrid students, thereby increasing student feedback; updates the Math Center and Math Department websites; keeps a database of the textbooks in reserve at the Math Center; works with online math instructors to ensure their students have knowledge of and receive access to online tutoring; and assists at the front counter in the Math Center. This position will help meet the Math Center SAO of providing effective tutoring support for mathematics students, provides continuity to the program, and helps meet the Math Department's plan of providing supplemental instruction. Due to increased grading turnaround and student feedback, this position helps to increase the retention and success of hybrid students.

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What additional hourly staff support this discipline and/or department:

26 hourly tutors and 7 student tutors, for a total of 33 tutors.

PART 2: PROGRAM REFLECTION

Describe your proudest moments or achievements related to student success and outcomes.

1. In March 2016 we applied for Student Equity funding. We requested and received research that showed the DI groups at Palomar College were well-represented at the Math Center.
2. In 2010, 3.3% of Palomar College students were using the Math Center. By spring 2016, 8.5% of Palomar College students were using the Math Center.
3. Recent data from IRP over the time period of 2010-2016 show that mathematics students who receive tutoring at the Math Center have higher success by an average of 3.25% in mathematics courses than students who do not receive tutoring at the Math Center.
4. The Math Center has helped so many students over the years. We can think of students who have had cancer, who have had open heart surgery, who have had MS, who have had various learning disabilities, and many students who struggle with math who have come to the Center and received support that allowed them to be successful.

What areas or activities are you working on this year to improve your program/service area? Please respond to new data as well as feedback from last year's program review.

Note: we never received new data nor feedback from last year's PRP.

However, our plans to improve the Math Center include the following:

1. After looking at declining enrollment in the hybrid Math 15 class, the decision has been made to deactivate this course starting Fall 2018. This is also a result of AB 705.
2. In Fall 2018 we will pilot a Math 110 hybrid course in the Math Center. This is also a result of AB 705.
3. We are reviewing the on-campus attendance requirements for hybrid Math Center students. We are discussing introducing two-patterns for the hybrid courses. This will decrease the number of on-campus hours and increase the number of online hours. We feel this will increase enrollment and retention of the hybrid students.
4. We are providing an on-going series of workshops regarding best practices of using embedded tutors in the classroom. This will increase retention and success.
5. We added a subject-specific session to Tutor Training for math and STEM tutors. This includes presentations by math and STEM faculty, which allows tutors to understand the experiences of the students they tutor. This will also increase retention.
6. The Math Center supported the STEM Academies through tutors, workgroup participation by the Director and Assistant Director, and peer mentors for the STEM Academies students. This includes both the Summer and Winter Institutes.
7. During fall 2016 an extensive review was made of the orientation process and materials for hybrid students. A new orientation was developed; in this new orientation students took a quiz to see if the hybrid course format was right for them.
8. All of the Math Center exams hybrid students were updated. A particular focus of this update was to make the instructions and questions clearer for students.
9. We trained the Assessment Center staff for using the Accuplacer backup placement test for the College.
10. We worked with Suzanne Sebring's office to ensure a successful rollout of CASAS testing for math students.

Have there been any unanticipated factors that have affected the progress of your previous plan?

1. The Math Center's Classified Staff are funded by soft money. Student Equity funds will support these positions only through Spring 2019. Without the classified positions, we will have to roll back our program to what it was 15 years ago. We will not be able to support online classes' testing needs, embedded tutors, tutors in the TLC Escondido, STEM

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Academies (including both the Summer Institute and Winter Institute), tutors in Camp Pendleton, and tutors in the new proposed co-requisite courses. The Math Center will no longer be able to coordinate with online instructors regarding the access to and availability of online tutoring. We will not be able to offer one-to-one tutoring, which is primarily aimed at our DRC population. We would not be able to serve the 8.5% of the Palomar College students who require math tutoring if we lose these positions.

2. The Math Center's hourly staff and tutors are funded by soft money. We are currently funded by Student Equity for a three-year time period. At the start of fall 2017, the State had not informed the College the Student Equity budget for the year. So the Math Center started the year with a 20% cut. We were understaffed for the volume of students and faculty that we serve. Seven weeks into the semester we were informed our cut was only 2%, but by the time we knew that, it was difficult to increase the number of tutors, as the tutors had their academic and work schedules set for the semester. Also, hiring a new tutor takes at least a month.
3. The Math Center supports the largest department on campus (the Math Department) and is invaluable in guaranteeing student success in mathematics. With the number of students and faculty served, the Math Center's funding should be under the General Fund.

What are your Service Area Outcomes (SAO)?

1. Students who use the Math Center during the semester will pass their mathematics class at a rate higher than the department pass rate.
2. 75% of mathematics faculty are pleased to very pleased with the services provided by the Math Center.

Summarize your planned Service Area Outcomes (SAO) results from last year and your implemented or planned follow-up:

We requested data from IRP to complete our first SAO, received the data early fall 2017 and noticed that the data was missing some headcounts. We informed IRP about the missing students in the data and have not received updated data as of this writing.

Summarize your planned Service Area Outcomes (SAO) assessment activities for the current academic year:

We need to assess SAO #2 this academic year.

PART 3: PROGRAM GOALS

1. Progress on Previous Year's Goals: Please list discipline goals from the previous year's reviews and provide an update by placing an "X" the appropriate status box .

Goal	Completed	Ongoing	No longer a goal
The program goal for the Math Center is to increase the success and retention rate for students of diverse origins, experiences, needs, abilities, and goals who are both in the Math Center hybrid courses and mathematics courses in general.	x	x	
To continue outreach to DI groups with information regarding the services and support offered in the Math Center; to support to DI groups once they are in the Math Center.		x	
To increase access of Camp Pendleton students to mathematics tutoring and equipment/technology that supports tutoring and mathematics instruction.	x	x	

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2. New Goals: Please list all goals for this three-year planning cycle (including those continued from previous planning cycle):	
Goal #1	
Goal	The program goal for the Math Center is to increase the success and retention rate for students of diverse origins, experiences, needs, abilities, and goals who are both in the Math Center hybrid courses and mathematics courses in general.
Strategies for implementation	<ol style="list-style-type: none"> 1. In Fall 2018 we will pilot a Math 110 hybrid course in the Math Center. 2. We are reviewing the on-campus attendance requirements for hybrid Math Center students. We are discussing introducing two-patterns for the hybrid courses. This will decrease the number of on-campus hours and increase the number of online hours. We feel this will increase enrollment and retention of the hybrid students. 3. We are providing an on-going series of workshops regarding best practices of using embedded tutors in the classroom. This will increase retention and success. 4. We added a subject-specific session to Tutor Training for math and STEM tutors. This includes presentations by math and STEM faculty, which allows tutors to understand the experiences of the students they tutor. This will also increase retention. 5. The Math Center supported the STEM Academies through tutors, workgroup participation by the Director and Assistant Director, and peer mentors for the STEM Academies students. This includes both the Summer and Winter Institutes. 6. During fall 2016 an extensive review was made of the orientation process and materials for hybrid students. A new orientation was developed; in this new orientation students took a quiz to see if the hybrid course format was right for them. 7. All of the Math Center exams hybrid students were updated. A particular focus of this update was to make the instructions and questions clearer for students. 8. We trained the Assessment Center staff for using the Accuplacer backup placement test for the College. 9. We worked with Suzanne Sebring's office to ensure a successful rollout of CASAS testing for math students. 10. The Math Center will participate in the Math Department's potential development of a co-requisite sequence of math courses.
Timeline for implementation	This year and on-going.
Outcome(s) expected (qualitative/quantitative)	Increase in success, retention and persistence for all math students. This will also have a positive impact on enrollment.
Goal #2	
Goal	To continue outreach to DI groups with information regarding the services and support offered in the Math Center; to support to DI groups once they are in the Math Center.
Strategies for implementation	<ol style="list-style-type: none"> 1. The Math Center Director, Assistant Director, some hourly staff, and Classified Staff will continue to attend training to support DI groups. In the past we have attended the Military Ally Training and

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	<p>Cultural Competency and Intelligence series of workshops.</p> <p>2. Tutor training components include support and retention of DI groups. All tutors participate in a cultural simulation exercise and discuss the impact of culture in learning.</p> <p>3.</p>
Timeline for implementation	This year and on-going.
Outcome(s) expected (qualitative/quantitative)	Increase success and retention for DI groups in mathematics courses.
Goal #3	
Goal	To have the Math Center embedded in the Math Department in a new building. The Math Center will be larger to accommodate an increasing number of students and higher faculty use (as we will be located within the department). The new Math Center will include a larger testing facility to accommodate an increasing number of online students; small study rooms for students and tutors to meet in; a room for one-to-one tutoring; a quiet study room for students; and space for adjunct faculty can hold office hours and meetings with their students.
Strategies for implementation	Continue to advocate for the Math Department and Math Center on campus committees and participate in planning campus-wide.
Timeline for implementation	We hope very soon.
Outcome(s) expected (qualitative/quantitative)	Improved success, retention and persistence for Palomar College mathematics students. Create a positive learning environment that supports faculty and students.

PART 4: FEEDBACK AND FOLLOW-UP

This section is for confirming completing and providing feedback.

Confirmation of Completion by Department Chair

Department Chair	Jay Wiestling
Date	11/2/2017

***Please email your Dean to inform them that the PRP has been completed and is ready for their review**

Reviewed by Dean

Reviewer(s)	Margie Fritch
Date	March 13, 2018

1. Strengths and successes of the discipline as evidenced by the data and analysis:

Excellent job on the PRP.

2. Areas of Concern, if any:

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3. Recommendations for improvement:

***Please email your VP to inform them that the PRP has been completed and is ready for their review**

Reviewed by: Vice President	
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Reviewer(s)	Jack S. Kahn Ph.D.
Date	1/18/18

1. Strengths and successes of the discipline as evidenced by the data and analysis:
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1. Proud moments (including data!) are excellent
2. Odd you didn't receive feedback on the PRP.
3. I'm very excited to see what Math will do with AB 705 overall- excited to hear about these offerings and decisions vis the MATH center
4. You are one of the few areas that have SAOs that are actually SAOS
5. Goals make good sense to me- fits well with narrative above-- also looking FWD to meeting soon to discuss issues
6. Your hybrid idea is really interesting – have you spoken with Richard Loucks?
7. The CASAS work that was done is also incredibly impressive (and appreciated)
8. The math center is a wonderful resource on campus- thank you for this thoughtful review

2. Areas of Concern, if any:

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3. Recommendations for improvement:
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