Program Review Update 2025

Program: Math

Division: STEM

Writer(s): MATH DEPT

SLO/SAO Point-Person: Jennie Graham

Email your completed form to Karin Spirn and your dean by November 3.

Helpful Links:

- ★ Tools for Writers - with contacts and info for help with specific sections.
- ★ Program Review Glossary - defines key terms you can review when writing.
- ★ Discipline Data Packets – institutional research about disciplines and student services
- ★ Course Success Rates Dashboard – allows you to research your program's success rates

Detailed information and instructions appear at the end of this form. For help, please contact Karin Spirn at kspirn@laspositascollege.edu.

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1. Please describe your program's most important **achievements** in year 24-25.

- *Plan and responded to latest AB1705 memo – worked with A&R and Counseling to update Math Sequence and support requirements.*
- *Completed OER content for Math 21*
- *Continued moving towards open source for calculus sequence (continuing to pilot)*
- *Collaborated with Puente to support Fall 2025 Math Jam*
- *Updated Concurrent Support Training*
- *Updated Concurrent Support curriculum*
- *Integrated Calculus into Math Emporium in light of AB 1705 Memo to allow students the flexibility to choose their math level without having to adjust their schedule.*
- *Continued outreach to local High School students.*
- *Continued outreach to local adult schools.*
- *Continued to offer synchronous evening year-long Math 3 to local High Schools – it consistently fills with a waitlist prompting offering a second semester long math 3 that focused on dual enrollment in Fall 2025.*
- *Participated in the honors course pilot by offering an honors Math 7 in Fall 2024 and an honors Math 2 in Spring 2025. Both classes filled with students expressing more interest in classes such as these.*
- *Continued to offer attach concurrent support sections for both Statistics and Calculus for Puente cohort as well as general student population – these continue to fill so Fall 2026 we decided to expand the number of attached concurrent support for calculus.*
- *The department completed preparations for Credit by Exam for Math 1 and 2.*

2. Please describe your most important **challenges** in year 24-25.

- *An overarching challenge is balancing the diverse educational needs with effective course deliveries under limited resources and support structures. Our students continue to be forced into math classes that they aren't prepared for, and we are supposed to say "you can do it!" While this may be true for some students, it is not true for all students, especially given the varying resources they have available to them. Our Concurrent support, Math Jam and our tutorial center can only do so much and only if the students use them. Our faculty and instructional assistants are the primary factor in student success, and they are all stretched thin with college responsibilities in addition to their teaching obligations.*

- *We were unable to find a replacement for our 20-hour/week 10-month evening IA position after posting the position 3 times. Unfortunately, we were not granted permission to update the position's work hours from evening to daytime and post it. This left the position vacant, and our staff, students and faculty under supported.*

- *We submitted a mid-year Classified Position Request for both the vacant 20-hour/week 10-month position and our current Sr. IA position to adjust their hours, but both were denied. Our Emporium classes only run effectively and efficiently with the aid of instructional assistants. Missing an IA and not increasing the hours for our Sr. IA means we've had to reduce the availability of those classes to ease the burden on our remaining support, which can make it challenging for students to continue and complete their math class during the next semester. Our concurrent support classes have never been able to benefit from the aid of instructional assistant support, and this is the point at which the students (and faculty coordinator) really need it. The increased support for our students will not only help them complete their first transfer level math class during their first year of enrollment but also support them through their full pathway.*

- *Two unfilled full-time faculty replacement positions leave holes in the department's productivity and ability to adjust to the continuing changes the state dictates. All our full-time faculty are stretched thin with responsibilities, and our part-time faculty, while helpful, cannot fill in these gaps adequately since their availability to focus on LPC issues and students is limited. Additionally, full-time faculty, contractually, have to give their students more time and support through their office hours whereas it is optional for part-time faculty. Our students are in desperate need of support with their math classes given the expectations laid upon them by the state.*

- *Even though the rationale and target audience for the Math 1 and Math 2 CBE were discussed at curriculum and with CPL liaison, a requirement for eligibility to take a CBE with LPC was missed, making the creation of the CBE materials fruitless.*

- *Coordinating with other STEM disciplines so that students aren't blocked from taking needed classes for their pathways. We make it work, but it is a challenge – we are also not taking the GE classes into account when we plan our schedules. AdAstra *might* help with this issue, but we'll see. One major issue has always been classroom management. It is impossible to know when a room has space and if that space is being used effectively during the scheduling process – AdAstra will not help with that.*

- *Explosion of (student and instructor) use of AI with very little direction from the college to normalize behavior around it has been an issue. Both faculty and students are confused about how it should and could be used to effectively help teach without faculty feeling like students are cheating. Students are, in some cases, scared to use it, and faculty don't know enough to know what tools students have at their fingertips.*

- *While the department wishes to further explore OER and ZCT/LCT options for students, full-time faculty do not have the bandwidth to coordinate that effort, making it challenging to find opportunities to explore these. We also recognize that OER/ZCT/LCT are not always the best option for students, so we have to find the appropriate balance between offering these textbooks and other paid options such as Pearson. Pearson's tiered pricing model continues to present challenges of its own, with students having to pay for access repeatedly in some cases.*

- *Many of our faculty use Ti-83/84 graphing calculators. The department used to rent these out to students during the semester for a small fee. If the calculator was not returned, then a hold was placed on the student's account until it was returned, or they paid a fine for losing it. The department's calculator attrition rate was extremely low to the point where the handful of free calculators we'd get from Texas Instruments for stating that our classes may use them in our schedule was sufficient to cover the loss. However, during the pandemic, the department handed over their supply of calculators to the library for students to check out for free. We never took them back since it was felt that the free calculators were better from an equity standpoint, so we continued to supply the library with calculators from Instructional Equipment Requests and our free TI calculators. However, several factors make this an unsustainable situation:*
    - *The library's attrition rate is higher since they do not put holds on students' accounts for an unreturned calculator. They feel a hold is inequitable, so they do not want to do that.*
    - *The department is nearly offering double the number of statistics classes that it did when the borrowing program started, and Stats is one of the primary classes that uses them.*
    - *TI will no longer give us free calculators.*
    - *IER is not a reliable source of refilling the supply of calculators.*

  The department is going to ask IR to run some data on who is checking out the calculators and for which classes so we can work on modifying some of our own course policies and practices.

- *High waitlists in Fall 2024 and Spring 2025, especially for upper division math classes such as Math 5, 7 and 10 came as a surprise. There just wasn't anywhere for those students to go, and one faculty took an additional 12 students off their waitlist to try to help them out. The number of upper division classes was adjusted for the following year. In general, trying to predict which classes students will want to take given the state mandates has been challenging – there is not a reliable way to guess which students will want to start in trig, pre-calc or calculus given they are all open entry.*

- *HyFlex mode courses are on the decline in the Math Department. While we still believe that it is important to offer our Concurrent Support classes in that mode, there are only a handful of instructors who prefer to teach their lecture classes in that mode. Instructors who have tried to use that mode in*

the past have reported chronically low in-person attendance and lack of stable/good technology as issues.

- *Striking the proper balance between traditional lecture and online classes continues to present a challenge from an enrollment standpoint. While the department understands we cannot return to pre-pandemic levels for distance education, we also cannot give in to the surge in demand because that may not be what is best pedagogically for students in a math class as evidenced by institutional research data showing that student attrition is an issue in online asynchronous instructional modalities even as soon as census. We offered some Hybrid style classes with testing on campus, but the rest of the class online seemed to go well. It filled and did not lose as many students by census. For this academic year, we've increased the number of Hybrid classes, and saw the same results, so for Spring we're going to expand the number again. However, some faculty still feel that it will ultimately hurt our enrollments if we change all the online asynchronous courses into hybrid since we'll lose the non-local students. At the moment, we're letting the faculty teaching the class pick whether to do it asynchronously or hybrid instead of making a department policy, but we did discover at College Day this fall that Chabot Math department only offers Hybrid classes. Nothing is purely online. So, it has us considering something similar.*

- *The lack of funding for paid substitutes creates an undue burden on faculty needing a substitute, but unable to find a suitable trade arrangement since FT faculty all tend to teach at the same times and PT faculty are generally only around for their one or two classes before heading to a different district. Additionally, we are concerned that the compressed calendar will just exacerbate this issue. Right now, faculty can afford to miss a lecture day, but with fewer weeks that will be more of a problem. While we understand it is the same amount of instructional time, just compressed, that means they are losing more instructional time when they miss one class period.*

- *Demand for Honors courses in math (and other disciplines) is high, but not enough being offered since their enrollment numbers are intentionally kept low, so they are not as productive as a non-honors section. However, students are coming to LPC for them, and faculty are willing to teach them.*

- *Lost HSI Funding (Sep 2025)*

- *Losing AB1705 funding (June 2026), which is helping to support extra hours for our instructional assistants and paying for embedded tutoring support in both concurrent support and emporium classrooms.*

3. What SLO(s) or SAO(s) if any did your program assess or discuss since your last program review? Please describe any findings and planned actions.

- *Math has been investigating our Problem Solving and Modeling PLOs and the SLOs that feed them.*
- *We did not use eLumen during the AY 2024-2025 since the school was in the process of transitioning to CurriqunetMeta for assessment, so we did not have disaggregated data, but we did have overall outcomes data to look at. Unfortunately, our participation in data collection*

was not sufficient to review all of the courses for our Program, so we'll just focus on Calculus 1 and Statistics.

STAT C1000		
Fall 2024	Problem Solving	Modeling
	Met SLO	Met SLO
Total:	124	168
Percentage	35.43%	50.30%
Spring 2025	Problem Solving	Modeling
	Met SLO	Met SLO
Total:	206	241
Percentage	53.93%	62.76%

Math 1:		
Fall 2024	Problem Solving	Modeling
	Met SLO	Met SLO
Total:	46	37
Percentage	53.49%	42.05%
Spring 2025	Problem Solving	Modeling
	Met SLO	Met SLO
Total:	75	61
Percentage	46.30%	38.85%

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- Our calculus discussion, Math 1, revolved around the low numbers meeting the SLOs. The problem-solving topic can involve some trigonometry and trick algebra, so while the students might be okay with the U-substitution setup, they aren't meeting it because they either can't start the question or don't remember the prerequisite information to start or complete it. The modeling concept is an application question, and many students are application averse. These also tend to involve trig and algebra to complete. In both cases, these were the same sentiments that came up during the last program review's reflections as well. Faculty who felt they had success with the topic based on their personal SLO data shared some strategies for how to incorporate more review of trig and algebra as if the students have never seen it, which is true of a lot of our incoming students as of Fall 2025. Faculty also shared creative ways to keep the concepts topical throughout the semester, so students feel more comfortable by they time they take their final exam.
- Our Statistics discussion, Math 40 (at the time), was focused mostly on the problem-solving SLO since the modeling SLO is pretty straightforward. For problem-solving, the topic is something that happens about a third of the way through the semester and typically isn't revisited until the final exam. Strategies were discussed for how to incorporate more of that concept through the course so that it isn't thought of as an afterthought. However, many faculty tend to test it, and think of it, in one particular way, so the incorporation was an interesting idea for not only keeping it relevant but also offering an alternate way of assessing that topic.

4. What are your upcoming plans? Please note any ways that these support student achievement and equity.

- *We have changed the Course Outlines of Record for Math 1 and 2 to align with Early transcendentals, which aligns its curriculum with the OER textbook we've chosen. This curriculum update was discussed with the Chabot department as well, and they agreed to make the same curriculum update, so we are in parity. This will make it easy for students to take classes at either school if needed.*
- *We would like to complete the transitioning of the Calculus sequence to OER – free textbooks for three courses (high enrollment), but bandwidth may be an issue. Faculty are currently trying to work as we teach the classes to support each other, but it is challenging without a dedicated coordinating presence. We would like to update our Sr. IAs working hours to go from 32hr/wk to 40 hr/wk. This will give*

coverage on Fridays for help and testing as well as giving the Sr. IA some time to work on their coordinating roles.

- *We would like to update the position hours/months for our currently vacant IA position and repost it. This will give more support to students in Emporium and concurrent support (something we've never been able to do), as well as more support for the Sr. IA so they can work on their coordination piece.*
- *We will deactivate 68C – we do not see offering support for Math 3 returning to concurrent support.*
- *We will deactivate Independent Study Math 29 - this hasn't been used by the department in anyone's memory.*
- *In light of the college's inability to fund MatLab for both math and engineering classes, the math department is rewriting Math 5 and Math 7 curriculum to remove the mention of MatLab. We verified with our articulation officer that its inclusion is not necessary for articulation. We are not sure if we are going to keep the lab component of Math 5 and 7 or switch to purely lecture, but doing so will affect the unit load for our STEM majors (3.5-units to 4.0-units), so we are still discussing. We don't want to inflate students' unit totals, but unless we find a technology alternative that warrants offering a lab period, we aren't sure it makes sense to keep it as a lecture/lab class.*
- *Math 10 research technology for possible addition to curriculum – this course is crosslisted with computer science (CS 17), so it might be fun to find a way to incorporate more of the computer science elements into that class.*
- *No-Unit-Value Lab discussion – we are going to examine our courses that currently have a No-unit value lab attached to decide if we need it or not. We all enjoy having extra time with our students, but in light of some of the discussions surrounding this lab type, we want to be ready to make necessary decisions. It is an extra hour that, while students aren't paying for it, faculty are dictating that they need to successfully complete the course.*
- *Compressed Calendar planning – due to the no-unit labs, our scheduling is a little odd, so we're working on ways to fit it into the blocks with minimal impact to the blocks.*
- *The department would like to offer more Professional Training around Student equity – this coming year, we will have AB 1705 monies to offer paid PD workshops, but this will dry up at the end of the year. Will need to find an alternate funding source or another carrot.*
- *In the process of developing an Embedded Honors Statistics Course for faculty to copy. This will hopefully make it easier for statistics faculty to choose to offer honors projects to students.*

CTE REPORT (CTE DISCIPLINES ONLY)

1. Does this program continue to meet a labor market demand?

- Yes or No:
- Explanation/evidence:

2. Are there similar programs in the area? If yes, list the programs and their institutions.

- Yes or No:
- Explanation/evidence:

3. Has the program demonstrated effectiveness as measured by the employment and completion success of its students? Provide employment and completion success based on Perkins Core Indicator Report.

- Yes or No:
- Explanation/evidence:

4. Does the program provide opportunities for review and comments by local private industries? Attach most recent Advisory Committee meeting minutes.

- Yes or No:
- Explanation/evidence:

Detailed Instructions and Information

Instructions:

1. Please answer each question with enough detail to present your information, but it doesn't have to be long.
2. If the requested information does not apply to your program, write "Not Applicable."
3. Optional/suggested: Communicate with your dean while completing this document.
4. Send an electronic copy of this completed form to Program Review chair Karin Spirn and your Dean by November 3.
5. Even if you don't have much to report, we want to hear from you, so your voice is part of the college planning process.

Audience: Deans, Vice Presidents of Student Services and Academic Services, All Planning and Allocation Committees. This document will be available to the public.

Uses: This Program Review will inform the audience about your program. It is also used in creating division summaries, determining college planning priorities, and determining the allocation of resources. The final use is to document the fulfillment of accreditation requirements.

Please note: Program Review is NOT a vehicle for making requests. All requests should be made through appropriate processes (e.g., Instructional Equipment Request Process) or directed to your dean or supervisor.

Time Frame: This Program Review should reflect your program status during the 24-25 academic year. It should describe plans starting now and continuing through 2025-26. It is okay to include information outside of these time windows as needed.

Program Review Process: Comprehensive Program Reviews will be completed every three years, in alignment with the SLO/SAO cycle. On the other years, programs will complete an update.

SLO/SAO Process: SLOs and SAOs should be assessed according to a three-year plan, with comprehensive reporting on the third year. For more information, contact SLO chair John Rosen: jrosen@laspositascollege.edu

Equity is a guiding principle. Here is the LPC definition:

Las Positas College will achieve equity by changing the impacts of structural racism, ableism, homophobia, and systematic poverty on student success and access to higher education, achieved through continuous evaluation and improvement of all services. We believe in a high-quality education focused on learning and an inclusive, culturally relevant environment that meets the diverse needs of all our students.

LPC Equity Definition: Equity is parity in student educational outcomes. It places student success and belonging for students of color and disproportionately impacted students at the center of focus.