This form is used by departments and programs to request new or unfilled faculty positions relying on Program Review and/or other justifications. Submit one form for each position requested. For multiple positions, indicate priority of request (e.g., Subject Position 1, Subject Position 2, etc.). Forms are due to Division Deans by September 16, 2022.

Position Requested:
Math - Position 3
Contact Person: Jennie Graham
Discipline/Division: Math/STEM Starting Term: Fall 2023 Spring $\square$
This form requires the use Enrollment Management Tool data, which can be found at the following link: http://www.laspositascollege.edu/researchandplanning/FacultyPrioritization.php (If you have any questions about the data, please contact Rajinder Samra 925-424-1027 or rsamra@laspositascollege.edu) or your Dean. The data will be verified by the Dean. Do not attach data spreadsheets.

Check if position is a: Replacement $\square$ or New
If replacement: What is the position code? (see Dean)
Name of the person being replaced:
Length of time position(s) unfilled:
Date Retirement/Resignation is Board Approved:
If position is categorically funded, indicate source and duration of funding:

## CRITERIA

1. Number of Full-Time Faculty currently in Discipline:

## 15

If requesting more than one position, add 1 to this number for each subsequent position requested.
2. Percentage of FTEF taught by full-time faculty as load for the past six semesters, and projected for one year assuming a successful hire. (Use data from link above. If requesting more than one position, see Rajinder Samra to determine the projected numbers.)
Projected
Fall 2019 Spring 2020 Fall 2020 Spring 2021 Fall 2021 Spring 2022 Fall 2023 Spring 2024

3. a. For Instructional Faculty: WSCH per FTEF for the past six semesters (use data from link above):

| Fall 2019 | Spring 2020 | Fall 2020 | Spring 2021 | Fall 2021 | Spring 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 476.6 | 417.7 | 459.9 | 408.7 | 399.0 | 354.4 |

b. For non-instructional faculty (librarians and counselors): Student/Faculty ratio for the past six semesters, and projected for one year assuming a successful hire. Divide headcount by number of full-time faculty. For example: 8000 students divided by $\mathbf{3}$ full-time faculty.
(If requesting more than one position, see Rajinder Samra to determine the projected numbers). Projected

Fall 2019 Spring 2020 Fall 2020 Spring 2021 Fall 2021 Spring 2022 Fall 2023 Spring2024
$\square$


## 4. Program Characteristics:

a. List the courses taught and/or work performed in the discipline. (Be brief and specific. Use your Program Review to complete this section.)

| Courses taught: |
| :--- |
| - Math 1, Math 2, Math 3: Calculus sequence |
| - Math 5, Math 7, Math 10: Post Calculus courses. |
| - Math 27, Math 29, Math 156, Math 55, Math 55C: Specific population classes |
| - Math 30, Math 34, Math 39: First level Transfer Courses for BSTEM |
| - Math 33, Math 40, Math 47: First Level Transfer Courses for SLAM |
| - Math 66-68: Math Jam for Calculus I-III |
| - NMAT 264, NMAT 264: Math Jam for SLAM and BSTEM Preparation |
| - Math 66C-68C, Math 101C, 100C, NMAT202C: Concurrent Support |
| Work performed in the discipline in addition to normal obligations: |
| - Math Jam Coordination: One-week program prior to the start of each semester to prepare students for their classes. Each semester a math faculty member leads its implementation. |
| - Math Emporium Coordination: A faculty member coordinates constant iteration on process, content and student engagement every semester for 8 sections of cross-listed of Math 30, |
| 39, 40, and 47. |
| - Course Coordination: Work with part-time faculty, update course information sheets, update course outlines, and distribute course materials to new faculty. Each course has at least |
| one. |
| - Smart shop coordination for math: Creates, teach, and communicate out to SmartShop coordinator. |
| - Campus Engagement: --- Committee Chairs --- Academic Senate leadership---- Leadership roles in campus initiatives such as Guided Pathways, UndocuAlly, Puente, and Umoja--- |
| Club advisors for AGS(honor society), Girls Who Code, Dreamers Thriving Not Surviving, Math Club. ---- Members of the SEA committee and MLEA subcommittee. |
| - AMATYC Competition Coordination: advertise, administer, send in, and report out for this national math competition. |
| - Work towards lowering costs for students each semester. This includes: |
| --- submitting requests for graphing calculators from Texas Instruments. |
| --- submitting requests through RAC for instructional equipment in order to support the library's free calculator loaner program. |
| -- coordinating communities of practice for Math 30, Math 39, Math 40, Math 47, and Emporium to research and build Open Education Textbook options and online homework platforms |
| that students can use at no charge. |
| - AB 705/1705 Implementation and Coordination: create/update support courses, train faculty, coordinate for consistency of supports, work with A\&R/Counseling/District IT on |
| enrollment changes and strategies, and attend state level meetings/conferences related to the bills. |
| - Local High School Coordination: Meet with feeder high school math faculty to discuss modes of offering and sequences of classes at LPC. This is in addition to the once or twice a |
| year alignment meetings. |
| and |

b. Total number of primary sections as identified in data taught in the discipline in each of the last six semesters (use data link from page 1):

| Fall 2019 | Spring 2020 | Fall 2020 | Spring 2021 | Fall 2021 | Spring 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 128 | 120 | 91 | 102 | 99 | 89 |

c. Student enrollments (FTES) in the classes taught (use data link from page 1)or number of students served in each of the last six semesters:

| Fall 2019 | Spring 2020 | Fall 2020 | Spring 2021 | Fall 2021 | Spring 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 512 | 424 | 393 | 388 | 362 | 287 |

d. List special characteristics of the discipline such as: (Be brief and specific. Use your Program Review to complete this section.)

- Mandated class size limits due to state, contract, and accreditation standards.
- Facilities
- Number of courses out of the total number of courses in the discipline that meet General Education Requirements
- Number of courses out of the total number of courses offered that are required as part of an associates degree, certificate or transfer
- Discipline provides basic skills courses
- Discipline provides mandated and specialized services to students
- If position is categorically funded please add source and duration of funding
- Other
- Every student who wants to transfer to a university from LPC must take at least one math class to satisfy transfer requirements, and many students take a math course to satisfy AA/AS degree requirements. Of our 25 different courses offered, 13 courses are approved for UC/CSU transfer. 14 are AA/AS degree-applicable and meets general education requirements. The remainder are support courses.
- While AB 705 has mostly eliminated them, we still offer a basic skills class (Math 55) for Middle College Students.
- AB 705 does not directly mandate concurrent support courses, but it is the right thing to do for placing under-prepared students into transfer courses. Many, many hours have been put into their creation and coordination.
- Concurrent support extends its resources to offer tutoring to local high school students.
- Our class sizes are typically 35, though we do often have to limit general enrollment due to saving space for various learning communities in order for the cohorts to enroll together.
- Rooms 601 (Math Learning Center, currently used for concurrent support) and 607
(Emporium Lab for self-paced classes) are specialized classrooms, specific to the needs of some of our students.
- Full-time faculty are leading a faculty learning community through a private grant from SJSU (APEX) to incorporate computing into beginning biology and statistics classes. Most faculty participants in the grant are part-time, but full-time participation is necessary for collaborating and coordinating efforts with the biology department, SJSU, and the other local groups also leading FLCs.

Full-Time Faculty Request Form 2022-202:B FHPC Revisions May 3, 2012, Sept. 18, 2012, April 30, 2013, December 4, 2015, March 21, 2018; Presented to Academic Senate-January 27, 2016, April 11, 2018, April 29, 2019, May 13, 2020, May 4, 2021, May 14, 2022
5. Describe how courses and/or services in this discipline impact other disciplines and programs. (Be brief and specific. Use your Program Review to complete this section.)
Math's BSTEM track: Math 30 (College Algebra), 39 (Trigonometry), followed by the Calculus sequence and beyond, offers the foundation for STEM majors. Math 34 (Calculus for Business and Social Sciences) is list among the requirements for business and economics degrees.

Math's SLAM classes: Math 40 (Statistics), Math 33 (Finite Math), and Math 47 (Math for Liberal Arts) are important for students in popular majors such as Nursing and Psychology, as well as providing mathematical literacy, quantitative reasoning and critical thinking.

Our faculty work closely with the Tutoring Center to coordinate embedded tutoring in our Concurrent support classes, Math Emporium, and select in-person lecture classes. Faculty regularly recommend students to apply as tutors each semester. Prior to the pandemic, math faculty routinely volunteered to hold their office hours in the tutorial center to not only help their students become comfortable with the environment, but to also help any student who came for drop-in math help.

The math department makes an effort to meet the needs of students in every field of study and will often coordinate with other faculty and services to create new courses or adapt old ones to fit a need:
-- Math 27 (Number Systems for Educators) was created for ECE
-- Math 156 (Geometry) was created for High School students
-- Math 55 (Intermediate Algebra) and Math 55C(support) were adapted for Middle College and will continue to shift towards a more common core curriculum now that we can no longer offer it to high school graduates.
-- Math 40 (statistics) was adapted to FCI Dublin as part of an outreach opportunity. Math 33 (Discrete Math) is soon to follow.
-- Math 30 (College Algebra), Math 39 (Trigonometry), and Math 40 (Statistics) are all adapted to be cohort classes for Engineering Tech/Veterans and Puente/Umoja. In addition to our faculty being leaders in the creation of these communities, many have participated in professional development/training in order to teach these classes.
--Workshops during Math Jam include discussion of Financial Aid, Career Center, and other soft skills that translate to all classes, not just math.

Math has had plans in the works to offer Math centered Smart Shops that will target skills needed in other STEM courses, but no one has had the bandwidth to tackle their creation, let alone promote and offer them.

Full-time faculty are leading a faculty learning community through a private grant from SJSU (APEX) to incorporate computing into beginning biology and statistics classes. Collaboration and coordinating efforts with the biology department, SJSU, and the other local groups also leading FLCs.
6. If this is the first full-time position in the discipline, discuss: (Be brief and specific. Use your Program Review to complete this section.)
a. Justification for the position.
b. Projected start-up costs for equipment, facilities, and support staff for the first three years.
c. Projected enrollment growth for the next three years, starting with the first semester of the projected faculty hire.
N/A
7. What are the impacts on students, the discipline and the college of NOT filling this faculty position? What are the programs/courses/services that have not been or cannot be offered due to the vacancy? (Be brief and specific. Use your Program Review to complete this section.)

Of the last seven hires, only one has been a new position. All other positions requests stemmed retirements. At one time, we had 15 full-time faculty who were already feeling the effects of their workloads plus changes coming down the pipeline to the point where only a few were taking the time to learn and innovate. While there was interest, the willingness to take the time to make changes was lacking.

If we do not regularly hire new full-time faculty we miss the opportunity to bring in people with fresh perspectives and different experiences in pedagogy, curriculum development and serving our ever-evolving student population. The injection of the new faculty from 2018 added so much to not only the department, but the college as well. Both new hires jumped in to help with college initiatives including Guided Pathways, Undocually, and Puente, just to name a few areas.
As outlined in earlier questions, FT math department faculty are spread too thin addressing all of the changes brought about by state mandates, college mandates, and the desire to help students succeed. This leads to faculty burnout, which will only exacerbate the issue. As we temporarily lose our current FT faculty to college projects, sabbaticals, and workload banking, the remaining faculty have to pick up where they left off and the cycle of burnout starts all over. While we do have a large number of part-time faculty, they are not a reliable source of departmental aid and consistency since they are often spending time traveling between schools, inconsistently teaching for us, and are in no way required to attend training and professional development activities that the department hosts. Along those lines, as we lose PT faculty to other colleges we have to find more and start over in their training. The act of finding, mentoring and evaluating so many part-time mathematics faculty is a daunting task that adds even more to the FT faculty to-do lists nearly every semester. As it currently stands, the burnout will cause the students to lose good teachers, the discipline to lose support to implement all of the necessary and desired changes that were among the list of work done by the discipline, and the college to lose valuable personnel.
8. Any additional information that addresses justification of the position. If multiple positions are being requested, this is an opportunity to differentiate the justifications for additional positions.

We would like to note that we were set to begin the process for a replacement hire during Spring 2020 (recognizing the need for the position), though ultimately we were not able to move forward with the process. In Spring of 2022, we were ranked fth. The 6 positions above us were filled, making ours the only request for replacement that was not.
Only one of our past seven hires has been a "new" faculty - the other six have been replacements for retirees. In addition to helping spread out the day-to-day running of the department, this replacement position could take on the task of becoming a guided pathways guru, a liaison with counseling, a liaison with admissions and records/district IT for continued issues with placement, and focus on the updates that need to occur due to state mandates. As of now, these tasks are being overseen with compensation from Guided Pathways funds, AB 705 coordination, and donated time from math faculty members. Neither of the compensation sources are going to last much longer and the work will need to be absorbed into the department. This is just one of the many items that could be taken on by this new position.
With our projected 2023/2024 FTEF of 58.7/65.7\%, assuming the replacements are hired, still being well below the state's $75 \%$ goal. We believe that adding the valuable resource that is a new position to the department would truly allow us to work towards the goal of creating materials, supports, and resources, all with an eye towards creating equitable student succeed in a subject that is a gateway to so many of their next steps.

Signatures:

$9 / 16 / 22$ Dean
$9 / 14 / 2022$
Date


Vice President

