Program Review and/or other justifications. Submit one form for each position requested. For multiple

This form is used by departments and programs to request new or unfilled faculty positions relying on

positions, indicate pr Division Deans by N		ct Position 1, Subject Position 2, etc.). Forms are due to				
Position Requested: Math Position 1						
Contact Person:	Contact Person: Ashley McHale					
Discipline/Division:	Discipline/Division: Math/MSEPS Starting Term: Fall 2018 Spring					
This form requires the use Enrollment Management Tool data, which can be found at the following link: <a href="http://www.laspositascollege.edu/researchandplanning/FacultyPrioritization.php">http://www.laspositascollege.edu/researchandplanning/FacultyPrioritization.php</a> (If you have any questions about the data, please contact Rajinder Samra 925-424-1027 or						

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 3 full-time faculty.						
(If requesting more than one position, see Rajinder Samra to determine the projected numbers).						
Fall 2014 Spring 2015 Fall 2015 Spring 2016 Fall 2016 Spring 2017 Fall 2018 Spring 2019						
Program Characteristics:						
<ul> <li>a. List the courses taught and/or work performed in the discipline.</li> <li>(Be brief and specific. Use your Program Review to complete this section.)</li> </ul>						
We teach all levels of math beginning with Prealgebra through Calculus, Differential Equations, Linear Algebra and Discrete Mathematics. Specifically: Basic Skills: Math 107, 107A, 107B, 71A, 71B, 65, 65A, 65B, 107E, 65E, 55E AA/AS Degree-Applicable: Math 50, 55, 55A, 55B Transfer Level: Math 40, 33, 34, 45, 47, 38/39, 20, 1, 2, 3, 5, 7, 10						
Our courses are taught in a variety of different modes and facility needs: self-accelerated learning lab (Math Emporium), lecture/ hands-on workshops, distance education, TBA assignments where students complete specific curriculum in the Integrated Learning Center/Mathematics Learning Center; lecture/computer lab (statistics, differential equations and linear algebra).						
Non-Classroom activities: The Mu Alpha Theta Honor Society & Math Club encourages students to have fun with and explore math. The AMATYC Student Math League exam is offered and administered each semester to students as a competition. The department runs a graphing calculator rental program for students. The Math Learning Center (housed in the Integrated Learning Center) provides students with just-in-time math help. Math Jam serves students wanting to prepare for their math class or retake the placement exam. All of these activities (and others outside the discipline not mentioned here) require full-time faculty coordination and collaboration with part-time faculty.						
*Several of our current full-time instructors are working alternative duties in conjunction with teaching, including Curriculum Committee Chair, Professional Development Chair, Basic Skills Committee Chair, Coordinator of HSI Title V Grant or BSSOT Grant. Please note that these alternative duties are not reflected in the projected numbers for Question #2. In reality, fall 2018 would have 42.1% of classes taught by full-time faculty, and spring 2019 would have 39.6%.						
b. Total number of primary sections as identified in data taught in the discipline in each of the last six semesters (use data from link above):						
Fall 2014 Spring 2015 Fall 2015 Spring 2016 Fall 2016 Spring 2017						

4.

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

Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
485	476	536	545	538	517

- 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 AA/AS degree, certificate or transfer
  - Discipline provides basic skills courses
  - Discipline provides mandated and specialized services to students
  - Other

Mathematics is a gateway course for our students and some courses serve as prerequisites for multiple science classes. We are continually improving the method and modes for which we offer basic skills courses. We have implemented a more robust use of multiple measures for placement, which means our student profile may change in the next year within our classes.

The Integrated Learning Center was instituted to allow students access to curriculum that is not possible to do during the lecture portion; the assignments are conceptual, in-depth or summative in nature - a lab without chemicals. It is staffed by math faculty members at all times, five days a week for about 40 hours per week.

Math Jam has been offered each Fall and Spring since 2014; an award-winning, intensive one-week program the week prior to the start of Spring and Fall semesters, in January and August. Math Jam is for ALL students, to help them achieve their math goals - from preparing to re-take the Math Placement Test to preparing for their upcoming math courses. Math Jam is designed to help students complete their goal of a degree or transfer faster, while introducing them to a community of support and FREE resources at LPC.

Of our 29 different courses (Including A/B/E courses) offered, 14 courses are approved for UC/CSU transfer; those 14 plus 4 additional are AA/AS degree-applicable and meet general education requirements. The remaining 11 are Basic Skills courses:

Basic Skills: Math 107, 107A, 107B, 71A, 71B, 65, 65A, 65B, 107E, 65E, 55E

AA/AS Degree-Applicable: Math 50, 55, 55A, 55B

Transfer Level: Math 40, 33, 34, 45, 47, 38/39, 20, 1, 2, 3, 5, 7, 10

Special services to students include: Graphing Calculator Rental Program, Math Learning Center for just-in-time math help.

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.)

There are several math courses that serve as a service course/prerequisite for sciences, computer science, engineering and the trades (EMT and automotive). Some of these math courses are infused with applications so that these students are seeing content in multiple classes.

Math courses serve as prerequisites/strongly recommended for the following courses outside of math: BIO 1A, BIO 1B, BIO 1C, BIO 30, CHEM 1A, CHEM 30A, CHEM 31, CS 1, CS 17, ECON 1, ECON 2, ENGR 22, ENGR 25, ENGR 35, ENGR 37, NUTR 1, PHYS 1A, PHYS 1B, PHYS 1C, PHYS 2A, PHYS 10, PHYS 10L, PSYC 25, RADS 40A, SOC 13.

Math courses serve as requirements for the following degrees/certificates:

AA-T: Kinesiology, Journalism, Psychology, Sociology;

AS-T: Administration of Justice, Biology, Business Administration, Geology, Mathematics;

AA: Business Administration, Chemistry Education, Environmental Studies, Liberal Arts & Sciences: Math & Science Emphasis;

AS: Chemistry, Computer Science, Engineering Technology, Environmental Science,

Occupational Safety & Health, Physics, Welding Technology;

Certificate of Achievement: Welding Technology.

Every student wanting an AA/AS degree or transfer who comes to LPC must take at least one math class to satisfy AA/AS or transfer requirements. Most of our students come needing remediation in mathematics requiring from one to three classes. Due to some changes in legislation and placement policies this will change, and the math department will be monitoring student success and persistence carefully with each new initiative.

6.	If this is the first full-time	position in the	discipline,	discuss:	(Be brief a	nd specific.	Use your
	Program Review to comp	plete this section	n.)				

- b. Justification for the position.
- c. Projected start-up costs for equipment, facilities, and support staff for the first three years.
- d. 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.)

Finding, mentoring and evaluating part-time mathematics faculty is a daunting task. We currently have 47 part-time faculty, and every semester we are scrambling to recruit and hire new part-time faculty to teach our classes.

We have several new initiatives to be implemented in fall 2018 including co-requisite courses to support basic skills classes. Multiple measures (High School GPA, last HS math class passed) will be used to place all new students into math courses in fall 2018; core MLC activities (formerly known as TBA lab assignments) will be piloted in many of the courses requiring a TBA lab hour. New courses to support automotive and welding, Technical Elementary Algebra and Technical Intermediate Algebra, are submitted through the Curriculum Committee and anticipated to be offered starting fall 2018. Fast-track courses - two courses offered in one semester, is something our department is very interested in and we would like to explore offering next academic year.

We need consistent leadership and support from our full-time faculty to fulfill and maintain these efforts.

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.

Mathematics is a huge program at LPC. We have served over 33% of the students each semester since Fall 2011. We address basic skill needs and transfer needs. There are several initiatives in the math department that require full-time math attention.

- The Integrated Learning Center is putting stress on all our faculty to try to meet student's needs. This is a wonderful facility and we need to have confident, consistent help available for our students.
- The Math Emporium program (Formerly Math X) is being piloted this year. This requires massive full-time faculty input and analysis of data.
- Closing the loop on Student Learning Outcomes for the multiple levels and variety of math courses we teach is a daunting task without full-time faculty help.
- The Math Department has been participating in TWO grants a Federal Title V HSI grant, and a State Basic Skills Student Outcomes and
- Transformations grant. Initiatives in these grants are being coordinated by full-time faculty, and implementation will take the entire department.

   Math Jam is offered twice a year to students in order to to help them achieve their math goals from preparing to re-take the Math Placement
- Test to preparing for their upcoming math courses. Finding permanent funding sources will require the support of the full time math department.
- Success and retention in mathematics is a constant concern that needs to be addressed by full-time faculty
- Service courses are being developed for the Trades (Automotive and EMT)

The list goes on and on. All the math faculty are working on college and department items aside from their teaching load and we just can't get it all done. As we continue to grow our needs grow as well. As wonderful as our part-time faculty is, many of the things that need doing they cannot do. We need help.

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Sig	ทล	TIII	es:

Requestor

Dean

Vice President

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