| This form is used by  | departments and programs  | to request new or unf      | illed faculty positi            | ons relying on                        |
|-----------------------|---|----------------------------|---------------------------------|---------------------------------------|
| Program Review and    | d/or other justifications. Sub  | mit one form for each      | position requeste               | ed. For multiple                      |
| positions, indicate p | priority of request (e.g., Subje  | ect Position 1, Subject    | Position 2, etc.). I            | Forms are due                         |
| to Division Deans b   | y September 11, 2020.   | •                          | ,                               |                                       |
|                       |   |                            |                                 | $\neg$                                |
| Position Requested:   | Math Faculty - Replac   | ement                      |                                 |                                       |
| 1                     |   |                            |                                 |                                       |
| Contact Person:       | Howard Blumenfeld   |                            |                                 |                                       |
| Discipline/Division   | :STEM   | Starting Term: Fall        | 2021 Spring                     |                                       |
| This form requires t  | he use Enrollment Managen   | nent Tool data, which      | can be found at th              | he following link:                    |
| _                     | scollege.edu/researchandplann   |                            |                                 | 0                                     |
|                       | e contact Rajinder Samra 925-4  | _ ·                        |                                 | • •                                   |
|                       | fied by the Dean. Do not attach   |                            | ispositasconege.eu              | iu) or your Dean.                     |
| The data will be vern | hed by the Dean. Do not attach  | i data spreadsneets.       |                                 |                                       |
| -                     | a: Replacement or New   |                            |                                 |                                       |
| If replacement: Wh    | at is the position code? (see I   | Dean) 3FSM26               |                                 |                                       |
| Name of the person    | being replaced: Craig Kutil   |                            |                                 |                                       |
| Length of time posi   | trian(s) unfilled: Craig Kutil  |                            |                                 |                                       |
| Data Datinamant/Da    | coignation is Possel American   | 1. 2 years unfilled        |                                 |                                       |
| Date Retirement/Re    | esignation is Board Approved  | 1: Lyears urinileu         | 1'                              |                                       |
| it position is catego | rically funded, indicate sourc  |                            | nng:                            |                                       |
|                       | <u>C</u>  | <u>CRITERIA</u>            |                                 |                                       |
|                       |   | Disciplina 14              |                                 |                                       |
| 1. Number of F        | Full-Time Faculty currently in  | n Discipline:              |                                 |                                       |
| If requesting         | more than one position, add   | l 1 to this number for e   | each subsequent p               | osition requested.                    |
| _                     |   |                            |                                 | · · · · · · · · · · · · · · · · · · · |
|                       | 2. Percentage of FTEF taught by full-time faculty as load for the past six semesters, and projected for |                            |                                 |                                       |
|                       | ıming a successful hire. (Use   |                            |                                 | ore than one                          |
| position, see         | Rajinder Samra to determine   | e the projected numbe      | rs.)                            |                                       |
|                       |   |                            | <b>Projec</b>                   | <u>:ted</u>                           |
| Fall 2017 Sp          | oring 2018 Fall 2018 Spring 2   | 2019 Fall 2019 Spring 2    | 2020 Fall 20 <mark>21 Sp</mark> | ring 2022                             |
|                       | 30.4% 36.9% 37.2  |                            |                                 | 49.2%                                 |
| O J . I . CO     1    | JU.4 /0    JU.3 /0    J/.2  | _ /o    4   .   /o    42.2 | /0   <b>         40.</b> 5 /0   | サン.と /0                               |

Fall 2018

544.0

Fall 2017

555.8

Spring 2018

524.8

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

493.9

Spring 2019

Fall 2019

476.7

Spring 2020

417.6

| 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 2017 Spring 2018 Fall 2018 Spring 2019 Fall 2019 Spring 2020 Fall 2021 Spring2022   |
| 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.)   |
| We teach all levels of math beginning with Prealgebra through Calculus, Differential Equations, Linear Algebra and Discrete Mathematics. We also teach Concurrent Support courses, Math Jam intersession, and self-paced (Math Emporium) classes. We also offer basic skills classes and some of our concurrent support courses in both a credit or non-credit (NMAT) format.  |
| Specifically: Basic Skills: Math 107/NMAT 207, 107A, 107B, Math 110,NMAT 210, 110A, 110B Associates Degree and Foundational Level Math Courses: Math 50/NMAT 250, Math 55/NMAT 255, 55A, 55B, Math 156/NMAT 256 Transfer-Level: Math 1, 2, 3, 5, 7, 10, 27, 30, 33, 34, 39, 40, 47 Math Jam and Concurrent Support Courses: NMAT 261, NMAT 262, NMAT 263, NMAT 264, NMAT 265, Math 66, 67, 68, Math 100C/NMAT 200C, Math 101C/NMAT 201C, NMAT 202C, Math 110C/NMAT 210C, Math 55C/NMAT 255C, Math 66C, 67C, 68C 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, concurrent support classes, 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  |

outside the discipline not mentioned here) require full-time faculty coordination and collaboration with part-time faculty.

4.

mentioned nere) 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, or Coordinator of HSI Title V Grant. Please note that these alternative duties are not reflected in the projected numbers for Question #2.

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 provides students with just-in-time math help (through Concurrent Support classes). Math Jam serves students wanting to prepare for their math class or retake the placement exam. All of these activities (and others

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 2017 | <b>Spring 2018</b> | Fall 2018 | Spring 2019 | Fall 2019 | <b>Spring 2020</b> |
|-----------|--------------------|-----------|-------------|-----------|--------------------|
| 88        | 91                 | 102       | 102         | 128       | 120                |

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 2017 | Spring 2018 | Fall 2018 | Spring 2019 | Fall 2019 | Spring 2020 |
|-----------|-------------|-----------|-------------|-----------|-------------|
| 549       | 531         | 525       | 448         | 498       | 412         |

- 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

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 all of our courses. We have implemented a more robust use of multiple measures and guided self-placement for placement.

Math is offering mirrored and full noncredit support courses, math jam, and mirrored noncredit basic skills courses in conjunction with our regularly scheduled classes to allow students flexibility and affordability in their learning.

Due to the shelter in place order, we have adapted all of our classes to an online format, giving synchronous, asynchronous, and combination options. All courses are, or will be, DE-approved by the end of the Fall 2020 semester. 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 (the intersession), in January and August. Math Jam is for ALL students.

to help them achieve their math goals - to prepare 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. During the shelter in place order, Math Jam offerings may be limited or reduced. Of our 40 different courses offered, \*13\* courses are approved for UC/CSU transfer; those \*\*13 plus 12 \*\* additional are AA/AS degree-applicable and meet general education requirements. 12 are Basic Skills courses, and \*\*7\*\* others are support courses:

Basic Skills: Math 107, 110

AA/AS Degree-Applicable: Math 50, 55, 72A, 72B, 72C, 72D, 53A, 53B

Transfer Level: Math 40, 33, 34, 47, 39, 30, 1, 2, 3, 5, 7, 10, 27\*

Special services to students include: Graphing Calculator Rental Program, Tutoring Program for local high school students\*\*

Notes: \*Math 27 will be offered once the ECD program is ready for it.

\*\*The Math Tutoring Program for High School students is not active during the pandemic.

Full-Time Faculty Request Form 2021-2022: 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

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 (ECE, welding, 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 to transfer to a university who comes to 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. Most of our students come needing remediation in mathematics requiring from one to three classes. Due to some changes in legislation (AB 705) 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 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.)

Finding, mentoring and evaluating part-time mathematics faculty is a daunting task. We currently have 35 part-time faculty, and most semesters, we are scrambling to recruit and hire new part-time faculty to teach our classes, since many of them teach at multiple colleges

and their schedules are limited very quickly with classes elsewhere.

When the shleter in place mandate was enacted in spring 2020 we were in the process of implementing several new initiatives specifically AB 705, which requires CA community colleges to allow students to enroll in transfer-level mathematics. Multiple measures (High School GPA, last HS math class passed) is now used to place all new students into math courses from fall 2019; ACCUPLACER is no longer approved at the state level for placing our students into classes.

Even though the Math Department has received seven new faculty in the past four years, only ONE of those seven is a "new" faculty -

other six are replacements for retirees. Our department is consistently offering more sections each year to accommodate our ever-growing

student population. As our student population grows and our course offerings grow and department faculty work other assignments, our

department becomes stretched thin with many department initiatives.

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

|                        | addresses justification of the position. If multiple positions are ortunity to differentiate the justifications for additional positions. |
|------------------------|---|
|                        | vere approved for a replacement hire last year (recognizing the litimately the college chose not to move forward with the                 |
|                        |   |
|                        |   |
|                        |   |
| ignatures:             |   |
| -<br>Howard Blumenfeld | 9/22/2020   |
| equestor               | Date  |
| Man H 9/23/20          |   |
| ean                    | Vice President  |