



# Faculty Hire Proposal Form

SCHOOL/DIVISION: Science, Engineering, & Mathematics

POSITION: Instructor of Mathematics

## Type of Position:

Replacement

Announced by Sept. 30  YES  NO

### This section to be completed by the dean:

Who is being replaced with this position?  
(Must have been FT Tenure Track faculty counted in Fall 2021)

Heidi Meyer

Has the position been filled by FT Temp in 22-23?  YES  NO If yes, name:

**Instructional Outlook Report** (All positions that are not replacements)

**Emergency** (If accepted these will become one-year temporary positions)

**Legally mandated or required.**  YES  NO If yes, please explain below.

1. Justify the need for this position based on your Program Review and/or the Data Sheet provided by the PRIE Office, including success rates, retention rates, full-time and part-time faculty counts, and equity data. \*Also address the separate curriculum compliance data provided in the Excel sheet.

From 2017 to 2021, the Math Department has restructured its courses and improved its one-year transfer-level throughput rates from 10.7% to 57%, exceeding the state average. All student ethnicity groups are benefiting, with Hispanic and Black/African American students quadrupling their throughput rates; and eliminating equity gaps for DSPS and EOPS student groups. These gains may be lost if sufficient sections are not offered and throughput rates decline. The two unfilled retirements from 2019, plus a new retirement this year will surely impact the number courses that can be offered. Nearly one third of the course offerings in Fall 2022 were co-requisite courses, of which 81% are being taught by full-time faculty members due to the extensive training and obligation required to teach these accelerated courses. With the announcement of recent retirements, our department will have immense voids in Math 101/32 courses, Math 105, and Tutor 120 (Introduction to Tutoring Mathematics). With five retirements since 2019 and gaining only two full-time hires in 2022, there is still an immediate need to hire full-time mathematics instructors with more students needing to access transfer-level courses with co-requisite support.

2. Justify this position based on our community, projected demographic change, workforce and community need.

According to the US Bureau of Statistics, the top 5 fastest growing occupations requiring a Bachelor's degree or higher are:

1. Nurse Practitioner with projected 46% growth resulting in 112,700 new jobs
2. Data Scientists with projected 26% growth resulting in 40,500 new jobs
3. Information Security Analyst with projected growth 35% resulting in 56,500 new jobs
4. Statistician with projected 33% growth resulting in 11,200 new jobs
5. Web Developer with projected 30% growth resulting in 28,900 new jobs

Note: each one of these majors has a proficiency requirements in math

Due to remote teaching, newly-hired part-time instructors in distant locations have filled in the gaps left by unfilled F/T positions, but as we transition back to campus, most may not be able to commute to Modesto, resulting in their services lost and fewer sections of courses being offered in the future. Additionally, there is no local graduate math programs to replenish our part-time faculty pool.

3. Justify the significance and role of this position in terms of completion of Certificates, Associate Degrees, majors, student success, transfers, job attainment, and advancement. Counseling and library continue to contribute to college-wide numbers so they can use the college-wide data set.\*

Every student at MJC must successfully complete math requirements for their degree, certificate, or transfer agreement. Math courses support all programs including Math, Science, and Engineering majors and all degrees with a Math GE requirement, including degrees in Agriculture, Arts, Performance & Humanities, Behavioral & Social Sciences, Business & Computing, Fitness & Health, Industry & Trades, Language Arts & Education, and Public Safety. It is important that the department be able to serve the student body with enough open sections to ensure timely completion of degrees and to optimize the student funding formula which looks for math completion within the first year of course work.

Additionally, in 2015, MJC had only 312 math majors, but in 2021 this number grew to 500 math majors with 21 degrees conferred. With a newly added engineering program at our college, we expect the demand for math courses to increase further.

4. Include other elements from Program Review and/or the IOR Priorities to justify this position.

The mathematics department has great momentum in the implementation of AB705. The equity and completion gains seen over the last three years, in the midst of a pandemic, is notable and the wonderful result is student completion of transfer and program goals. It is incredibly important that we fill the retirement of Heidi Meyer with a full time faculty member, as she was instrumental in the success of our curriculum shift to co-requisite teaching and learning. Additionally, she provides a pivotal role in the department with the exceptional training she provides our mathematics tutors and her dedication to teaching up and coming primary teachers in Math 105. This work cannot be filled in by part-time faculty. In an effort to support students and the institutional goals of the college, we request the replacement of Heidi with a full-time faculty member.

5. Is there a history of this position that the HPC should be aware of? (e.g. Previously ranked but not hired, lateral move, promotion, previous emergency hire).

\* Programs involving non-instructional functions can also use collegewide-numbers, guided pathways data, state requirements or best practices, etc. to make their case understood.