

Data to use for when developing the faculty request justification

Academic Year	FTEs	FT FTEF	Overload FTEF	PT FTEF	Lg Lec FTEF	Total FTEF	FT FTEF /Total FTEF	FT+Overload FTEF /Total FTEF	PT FTEF /Total FTEF	Total Students (census)	Total Waitlist	# Sections	WSCH	WSCH / FTEF
2014-2015	1,950.93	32.20	19.11	41.59	0.38	93.27	0.35	0.55	0.45	12,734	2,061	320	62,461.88	669.71
2015-2016	2,084.97	31.60	18.80	48.65	0.58	99.63	0.32	0.51	0.49	13,583	1,864	342	66,752.22	669.97
2016-2017	2,138.14	33.55	18.77	49.82	0.33	102.46	0.33	0.51	0.49	13,824	1,614	347	68,456.32	668.14
2017-2018	2,147.62	33.60	20.11	55.00	0.20	108.91	0.31	0.49	0.51	14,055	1,139	374	68,760.70	631.33
2018-2019	1,921.66	34.33	21.07	40.87	0.18	96.44	0.36	0.57	0.42	12,754	658	337	61,526.76	637.95

2018-2019 Data is as of October 7, 2019

Using the data provided by the Office of Institutional Effectiveness, please provide a brief narrative to contextualize your request

Using the ratio of full-time to part-time faculty (FT FTEF / PT FTEF), please give a little more information about the need for the increase in full-time faculty.

Historically from 2001 until June of 2015, the number of math faculty remained consist at 17. The 15/16 academic year saw our first growth position. Over the next two years the math department grew 3 more to a current strength of 21. The trend for the Math Department over the last 4 full years of data (2014 - 2018) shows an increased reliance on part-time faculty to meet the need of our students for math classes even while the department's FT increased 24%. While our full-time faculty FTEF held steady around 33, our part-time FTEF increased from 41.6 (2014) to 55.0 (2018). This represents a 32.2% increase in the usage of part-time faculty in our department over the last 4 years. Also, the Overload FTEF held steady with an average of 19.2 FTEF with current full time faculty. This represents two major pieces of information; 1) on average, each full-time faculty teaches an extra 15-unit course load beyond their yearly contract obligation of 30-units, and 2) if the overload were taught by part-time faculty, then our reliance of this group would increase another 33%. Based on contract obligation, 33% of courses offered by the math department are taught by FT faculty. The FT faculty teach a significant number of OVERLOAD FTEF to raise their classroom presents to 50%. In addition these classroom obligations, the department also has release time totaling 3.05 FTEF coming from a variety of contract and grant sources.

During Fall 2019 86% of STEM classes are being taught by FT, where as 42% of SLAM classes being taught by FT. Our SLAM students are not getting the benefits and support of engagement with FT faculty. STEM accounts for about 1/3 of our offerings and SLAM accounts for the better part of the remaining 2/3 of our offerings.

Using the waitlist per section report (additional tab), please discuss the number of courses ranking high on the college's waitlist per section report. Please also note which CSU General Education requirements these course fulfill.

The math department offers courses that start from 8 am to as late at 7 pm, Monday through Friday and occasionally on Saturday. The variety of times and day patterns offered allows waitlists numbers to be small and spread out across the week. Waitlists for courses fluctuate semester by semester. Over the last 4 years, the math department had 1121 courses with waitlist number between 1 to 45 students. If we select waitlisted values starting at 15 students, a value that often invites the adding of a class to the schedule, we had 26 sections, totaling 479 students that are part of the CSU General Education requirements. The course that required the most added classes (15) is Math 12, Statistics, and this represents 275 of the 479 students. If we select waitlist values starting at 10 to 14 students, we had 46 sections, totaling 530 students that are part of the CSU General Education requirements. Once again, Math 12 was the course with the largest count of sections and students on the waitlist, 14 and 151 respectively. Plus, Math 36, Trigonometry had 10 sections within this range representing 10 sections and 118 students.

Using the efficiency metric based on WSCH/FTEF, discuss the discipline efficiency. How has the efficiency changed over the past few years? What is your discipline doing to increase efficiency? Have you changed course delivery methods (online to face-to-face, evening offerings, etc.) to try and improve efficiency?

The efficiency metric based on WSCH/FTEF for the math department is among the highest of the college. When compared to English, a discipline that teaches roughly the same number of students as the Math Department, English generates around 525 for the last 4 years of full data, while the math department generates 670. However, during 2017/2018 our WSCH/FTEF dropped to 630 due to the winter and summer sessions having lower than expected enrollment. Based on the partial enrollment data provided, the 2018/19 year predicts a return to our 670 WSCH/FTEF average. The math department's main challenge is to keep the high efficiency numbers while we struggle to understand how AB 705 will change the landscape of our courses.

Please discuss any faculty trends (historical and recent changes) which have helped you identify this need.

As a result of our AB705 implementation, there has also been significant changes in what classes our PT faculty are teaching. During the main terms of the 2018-19 school year, 60 sections (out of 116) sections of developmental math were taught by PT faculty, during the Fall 2019 term 0 sections (out of 9) are being taught by our part-timers, now they are all teaching transfer level courses. Many of our PT faculty are great instructors, but many times they teach at multiple institutions and are not required to serve office hours, which means that many students in these transfer level courses do not have the benefit of office hours and other faculty engagement.

Please discuss any specific activities your discipline has participated in with a focus on reducing the student equity gap. This could include serving on the student equity committee, holding office hours in engagement centers, or faculty participating in Champions for Change equity training, attending an equity summit, or attending Center for Urban Excellence training.

The math department has a faculty member that has been chairing the Student Equity Committee for the last two years. A few math faculty members attended the Fall 2018 RCCD Equity Summit and three have attended the CUE Equity-Minded Pedagogy. In addition, we have had people attend various California Acceleration Project (CAP) workshops/institutes and although these trainings have been mainly about restructuring the institution in preparation for AB705 implementation, they have also included a student equity topics in the workshops and keynote speakers. The math departments AB705 coordinators have used the information from these trainings to host local trainings for full-time and part-time faculty that were not able to attend the CAP trainings, some of the topics in these trainings were syllabi and addressing the affective domain.

Please discuss how your discipline is working to ensure your course offerings align with college strategic goals included Guided Pathways, HS/CSU/UC partnerships, accelerated courses, support courses, contextualized education, integrated academic support, etc. Has your discipline developed a Pathways Map? If not, why not?

The Math department was one of the first departments to develop a Pathways Map. Currently the math department's course offerings is under a new model based on the requirements of AB 705. The model consists of offering only college level math courses starting in the fall of 2019. In the past, approximately 60% of offered courses were below college level and 40% were college level. In the fall of 2019, only 9 courses below college courses are available, 7% of all math courses. So, 95% of the courses offered are now college level math. We must still offer a pathway to assist students who come to RCC but do not have the GPA or the high school course work that qualify them for a standalone college level math course. The Math Department has in place 29 support courses that add an extra two hours a week to the college level math course (math 5, 12, 25, and 36). These courses do not simply add extra instructional time to the college level course. The two hours are meant to increase a student's affective domain skills, develop good student habits, foster a growth mind set, among other non-mathematical skills need for a successful accomplishment of the course and college. This change in instruction requires all support course teachers to devote extra time developing new curriculum addressing affective domain topics. This is a new thing for most math teacher, however it is also long overdue.

Participation in the Guided Pathways conversations and AB705 trainings has lead to a reimagining of the math offerings. The math department is now piloting 4 support courses and this has resulted in a significant change in our offerings. During the 2018-19 school year the math had a total of 116 developmental math courses for the Fall and Spring, this number is down to 9 in Fall 2019. The students that are not in these 9 developmental math courses, are now taking standalone transfer level courses and others are in the 29 sections of transfer level courses paired with our 4 newly developed support courses. In addition, during the Fall 2019 3 math faculty members are piloting Statway in a total 5 sections of Statistics classes, where lessons are contextualized by design. These Statway materials are being used in standalone statistics as well as statistics classes pair with a support course.

The department does not receive strong integrated academic support through the SI and embedded tutoring program. Each year the department's membership request this support, however, often students who do join our classes do so around the 5th week of the semester. This is often too late to establish a successful use of this resource. Over the years the number of available SI leaders and embedded tutors shrink making it more unlikely to receive this support.

Have members of your discipline participated in faculty training including 3CSN, AB 705, AVID, CUE, or other training? How is the information learned being implemented within your discipline?

For the last two years the math faculty have attended a variety of workshops/institutes focused on AB705 implementation. These trainings have been hosted by 3CSN, Center of Urban Education, California Acceleration Project, Carnegie Math Pathways, Academic Senate for the California Community Colleges, and others. Participation in the CAP training has led to the creation of the math disciplines support courses that are being piloted. The information learned in these trainings have also been used to offer local trainings on syllabi review and addressing the affective domain, including a self-paced online course on affective domain. Math faculty teaching support courses are participating in communities of practice where they are troubleshooting challenges they encounter while teaching these courses and discussing best practices. The Carnegie Math Pathways trainings have helped faculty learn how to use the Statway materials for use in our statistics classes.

Please discuss your faculty's roles on Leadership Councils, committees, or academic senate.

Besides having math faculty serve on Academic Senate, Curriculum, Assessment, and DLC the math department has faculty members that serve in the Student Access and Support Leadership Council, Faculty Development Committee, and the Distance Education Committee. In addition, there is a math member serving as faculty chair of the Teaching and Learning Leadership Council and as secretary/treasurer for the Academic Senate; and another faculty member is chairing the Student Equity Committee and is a member at large of EPOC.

Please discuss your discipline's assessment activities in the last 2 years. How many SLO's were assessed? What percentage of the scheduled SLO's were assessed? How many PLO's were assessed? Is a faculty from your discipline active on the Assessment Committee?

The math department continues to struggle with SLO assessment. Over the last three years, the majority of CORs received updates to reduce the number of SLOs. This is a slow process involving NCC and MVC math departments. The current files available in TRACDAT do not list the new SLOs for the recently changed courses. For example, Math 1A was updated in November of 2018 reducing the SLOs from 11 to a manageable 4. The four SLOs are not shown.

The last time Math 1A was assessed was in 2015 when every one of the 11 SLOs was accomplished. The evidence in TRACDAT shows this course has not been assessed since 2015. This situation repeats for a few of the 19 courses that were active just before the fall of 2019.

A search of the 19 courses showed only Math 12H, Math 12, and Math 52 was assessed during the last two years and each course recorded 3 SLOs assessed. There is no evidence in TRACDAT about follow-up or dissemination of the assessment to the department at large. No PLOs were assessed.

One faculty member is on the college assessment committee. We are all overwhelmed by the changes to our CORs. Our Assessment rep identifies that with all the COR changes last year, the schedule needs to be updated and current instructors notified of any assessment that needs to occur. The department have "mentors" for each course and it would be best if this person could set up a schedule. Divide and conquer...

Please include any other additional factors which the Leadership Councils should know about (pending accreditation needs, significant curriculum changes, grant funding for the position, specialized faculty expertise needed, etc.)