Riverside City College

Discipline Requesting: Life Sciences

Faculty Prioritization Worksheet

Faculty Requested 1) Biology (with training in A&P and/or Microbiology)

Data from EMD

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	829.46	20.57	9.33	9.87	2.08	41.84	0.49	0.71	0.24	4,566	1,933	123	26,556.50	634.69
2015-2016	820.11	20.50	8.57	10.27	2.70	42.03	0.49	0.69	0.24	4,505	1,811	123	26,255.99	624.65
2016-2017	933.82	20.33	8.87	14.37	2.63	46.19	0.44	0.63	0.31	5,213	1,661	139	29,897.53	647.25
2017-2018	1,035.26	19.83	10.20	18.10	3.83	51.96	0.38	0.58	0.35	5,904	1,345	152	33,146.38	637.95
2018-2019	1,186.67	24.34	12.77	16.83	3.73	57.66	0.42	0.64	0.29	6,564	828	171	37,991.45	658.90

2018-2019 Data is as of September 30, 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.

As of March 25, 2019, the department was on target to generate 1,183 FTES for the '18-'19 year. This was a 224 FTES increase over '17-'18 and a 44% increase over the '15-'16 AY. The majority of this growth has been due to an increasing and unsustainable reliance on PT faculty. To this point, the PT FTEF increased from 10.3 in '15-'16 to 18.1 in '17-'18; an increase of 75%! Moreover, the FT FTEF/PT FTEF decreased from 1.99 before the expansion in '15-'16, to a 1.1 ratio in '17-'18! Clearly, the LS department has become overly reliant on our adjunct faculty. While this reliance was necessary, in the short-term, to increase student access and minimize course bottlenecks, this reliance is not sustainable because the Life Science adjunct pool is incredibly volatile and has a turnover rate in excess of 50%. Consequently, the LS department needs more tenure-track faculty.

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.

While the increase in course offerings, particularly of Biology 1, has helped to decrease the number of waitlisted students, there is still tremendous demand for Biology 1 which is a critial general education science and lab class and Bio 50A/B and Bio 55 which are needed for nursing prerequisites.

Using the efficieny 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 LS department WSCH/FTEF average ('14-'15 through '18-'19) is well above the 595-efficiency target. Nonetheless, in an attempt to increase efficiency and promote student access, the LS department has increased the number of Biology 1 offerings on Fridays as well increase the caps on many Biology 1 lectures. Specifically, the department has moved away from offering "single" sections (cap of 32) of Biology 1 and now offers more "double" (cap of 64) and "triple" (cap of 96) lectures. One limitation of relying on PT faculty to teach Biology 1 lectures is that they are only assigned a double lecture section so that their part-time load can be filled with lab sections. Therefore, all of our triple lecture sections are taught by FT faculty - so, additional FT faculty will help increase the department's efficiency and, as a result, increase student access to this highly impacted course.

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

Beginning in the fall of 2016, the Life Sciences department made a concerted effort to increase student access to our most impacted courses - Biology 1 (General Biology; Biology 50A/B (Anatomy & Physiology) and Biology 55 (Microbiology). In the first year of growth ('16-'17), the LS department generated an additional 114 FTES over the previous year, primarily by growing our adjunct pool and increasing the number of courses taught by PT faculty. In '18-'19, the LS department added one tenure-track faculty member and was awarded three one-year temporary FT faculty to offset the non-instructional assignments of several department faculty. This was a determining factor in the LS department's increase in 224 FTES over the previous AY. For the current AY ('19-'20), the LS department has brought in two new tenure-track faculty in anatomy/physiology and general biology. However, there is still an opportunity to support growth in our course offerings. If provided an additional FT position, the LS department will continue to expand its offerings in our most impacted courses - assuming commensurate resources are provided in lab support and instructional budget.

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.

Over the past academic year, numerous LS faculty have participated in equity workshops and training. In spring '19, several LS faculty participated in STEM-specific Reading Apprenticeship training, geared towards reducing achievement gaps in science literacy. Additionally, Biology 1 faculty have been deeply involved with the SGL program in order to address equity disparities in this gateway course. During

towards reducing achievement gaps in science literacy. Additionally, Biology 1 faculty have been deeply involved with the SGL program in order to address equity disparities in this gateway course. During the current fall term, the LS department has started holding monthly meetings to address best-practices in biology education - with a specific goal of how we can evaluate our curriculum, view our courses through an equity lens and discuss ways to decrease equity gaps in all of our courses. Recent evidence in the educational literature suggests that students have greater persistence within a major and better success in subsequent courses when the courses are taught by full time faculty (Ran & Xu, 2017. https://capseecenter.org/how-and-why-do-adjunct-instructors-affect-students-academic-outcomes/). Since adjunct faculty are not required to hold office hours and many struggle to communicate with students outside of class time, those students in courses taught by PT faculty do not have access to the same resources (i.e. faculty time) and are at a distinct disadvantage. Consequently, in order to help promote student success and retention with STEM, the LS department strives to increase our ratio of FT to PT faculty.

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 LS department has developed a Biology Pathways Map (with annotations listing differences between CSUs and UCs). Life Science faculty are deeply involved in pathway projects between high schools, RCC and UCR. Specifically, one LS faculty member is the RCC PI on the NIH funded Bridges to the Baccalaureate (B2B) partnership with UC Riverside. The goal of the five-year B2B grant is to increase the number of under-represented STEM transfer students heading to UC Riverside. Moreover, the LS department is integrally involved in a recently funded five-year, $1.8 million STEM/Nursing Fast Track CCAP grant by the state Chancellor's Office. The goal of the STEM/Nursing Fast Track grant is to recruit under-represented high school students at two RUSD sites into dual enrollment courses (i.e. CCAP) throughout their high school years and have them ready to enter RCC's School of Nursing in the spring following their high school graduation. Finally, and independent of the STEM/Nursing Fast Track project, the LS department began offering three sections of Biology 18 (Human Genetics), one at each of three high schools in three different school districts, during the current fall '19 term, as part of the department's participation in RCC's CCAP initiative.

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?

Yes, in the fall of '18 half of the LS department FT faculty participated in a Reading Apprenticeship workshop that was held on the RCC campus. Following this workshop, in spring '19, several of these faculty participated in a STEM focused Reading Apprenticeship online training. Additional department faculty have participated in an AVID workshop held during the spring term. As the department initiates its monthly meetings on pedagogy/teaching practices, the plan is to discuss how these trainings and resources can be utilized to improve student success. At this point, we are in the beginning stages of planning these monthly brown-bag meetings having just held our first discussion during week three of the current fall term.

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

The Life Science Faculty are very involved in shared campus governance. Several members serve on Leadership Councils (TLLC/ACTPIS); one has been the chair of Program Review; representatives serve on Assessment, Curriculum, Guided Pathways and Enrollment Management committees as well as the Academic Senate. Moreover, three LS faculty were instrumental in starting RCC's Career Closet during the '18-'19 AY. The RCC Career Closet is an invaluable resource and has been exceedingly popular with students.

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 LS department has had faculty representation on the Assessment Committee for at least the past seven years. Currently, Dr. Rana Tayyar is in her third year as the LS department representative on the Assessment Committee and, this fall, will be joined on the committee by Dr. Mona Jazayeri who is in her second year in the LS department. Prior to Dr. Tayyar's service on the committee, Kathy Brooks served as the department representative. As of this fall, the LS department has six courses that are scheduled for SLO assessment. One of these six courses is Health Science (HES-1), which is currently taught entirely by PT faculty. Coordinating SLO assessment with adjunct faculty is challenging and further reason why the department needs additional FT faculty.

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.)

At the moment, there are 14 tenured or tenure-track faculty in the Life Sciences Department. Since many of our faculty are deeply involved in campus committees and initiatives, several LS faculty have reassign/release time. Collectively, the LS faculty have 2.35 FTE in cumulative reassign time per semester. Consequently, this release/reassign time is the equivalent of taking more than two FT faculty out of the classroom and replacing them with adjunct faculty. Going forward, the LS department STILL has the capacity/space to increase FTES over the next few years. However, for this growth to be sustainable and best serve our students, we must add FT faculty. This is particularly true in light of current CCAP agreements and obligations. Taken together, with the justifications cited above, there is an immediate and glaring need for additional full-time faculty in the Life Sciences Department. Consequently, during the current cycle we are requesting an additional position.