

Proposal to hire two additional full-time LIFE SCIENCE faculty in the Math & Science Department at Kapi`olani Community College

Introduction

The Math & Science (M/S) Department at Kapi`olani Community College (KCC) proposes that the College create two additional full-time Life Science faculty positions to teach in biology, botany, microbiology and ecology. In the past three years the M/S Department has consistently taught 18 or more lecture sections and 13 or more laboratory sections in the life sciences. These classes have fulfilled the teaching load requirement of 3 full-time, 9-month faculty (John Berestecky, Nelda Quensell, and Robert Snider) who are required to teach 33 contact hours per year. The remaining and majority of the life science classes offered at the College are taught by part-time lecturers.

Part-time lecturers fulfill an essential teaching need at the College, but are often unable to fully engage in campus wide initiatives, commit to support student activities outside the classroom and/or participate in faculty development opportunities because of other employment commitments. With the developing Science, Technology, Engineering and Mathematics (STEM) program, the proposed A.S. degree in Natural Science, and the potential growth in enrollment in the M/S department due to UH system wide initiatives in sustainability, ecology & biotechnology, it is important that the department begin the process of hiring new life science faculty to support current course offerings with the intention of generating greater faculty commitment to departmental and campus activities.

Further, the department's offering of new, more advanced life science courses require continuity and consistency afforded by full-time faculty service. The department has recently added three new advanced courses to the microbiology discipline to support the biotechnology certificate. In addition, the Faculty Senate Curriculum Committee has approved two new courses for students majoring in life science and anticipating transfer to a four year institution.. These include an ecology course (BIOL 265) and an additional botany course (BOT 201). It is essential that that the department hires committed full-time faculty to teach these and the foundational, pre-requisite courses that support the future growth of our program.

Justification

Data obtained from the last seven semesters (Fall 2003 through Fall 2006 and excluding Summer session) from the College's Office of Institutional Research, unmistakably supports the notion that two new full-time life science positions can be incorporated into the existing class loads. Highlighting a few of the analyzed data in Table 1 will help clarify. Please note that the blue cells contain data for the three full-time faculty mentioned above, and the yellow cells represent data for part-time faculty. Calculations are based on load for full-time faculty being 18 contact hours per semester, or 36 contact hours per year less 3 hours for reassigned time (or 33) and for a full time equivalent of part-time faculty being 15 credit hours per semester or 30 credit hours per year. The total contact hours/yr taught by the three full-time faculty is 82.9. When divided by 33, the full-time equivalent positions are 2.5. This suggests that on average, one-half positions

out of three represent an additional amount of reassigned time shared among the three faculty members each year. The total of full-time equivalents positions for part-time faculty is 3.1. To appropriately gauge the impact of the full time faculty's reassigned time, 0.5 is subtracted from 3.1. Thus 2.6 part-time positions are available for conversion to full-time positions. The proposed addition of 2 full-time positions within the life sciences is fiscally reasonable on this basis. Class load would remain available for part-time faculty, estimated to be equivalent to about 2 part-time positions working full time if the new course offerings are included (the department intends to offer the new ecology and botany courses once per year).

Conclusion:

The increasing depth of course offerings by the M/S department require additional full-time faculty who are able to commit to their classroom responsibilities and at the same time contribute to the growing student, departmental and campus activities. The increased participation beyond the classroom is crucial to sustaining the growth of the STEM program at KCC. Conversion of existing part-time teaching load within the life sciences to full-time teaching positions will minimize the budgetary impact of establishing the new positions. The M/S Department respectfully submits this proposal for two new positions in Biology/Microbiology and Biology/Ecology to begin Fall 2007.

Review of Full Time and Part Time Teaching Loads In Biology, Botany and Microbiology

	Full Time						Part Time							
	Lecture		Lab		Total Cntct Hrs	FTE-18	Lecture		Lab		Total Cntct Hrs	FTE-15	FTE-18	
Semester	Sections	Crdt Hrs	Sections	Cntct Hrs			Sections	Crdt Hrs	Sections	Crdt Hrs				Cntct Hrs
Fall 2003	8	23	5	15	38	2.1	12	36	9	14	42	78	3.3	4.3
Spring 2004	8	23	4	12	35	1.9	12	36	12	17	51	87	3.5	4.8
Fall 2004	9	26	5	15	41	2.3	11	33	10	15	45	78	3.2	4.3
Spring 2005	9	26	5	15	41	2.3	9	27	9	14	42	69	2.7	3.8
Fall 2005	9	26	4	12	38	2.1	10	30	10	15	45	75	3.0	4.2
Spring 2006	8	23	5	18	41	2.3	11	33	8	12	36	69	3.0	3.8
Fall 2006	10	29	7	27	56	3.1	10	30	6	9	18	48	2.6	2.7
Totals	61	176	35	114	290	16.1	75	225	64	96	279	504	21.4	28.0
Averages	8.7	25.1	5.0	16.3	41.4	2.3	10.7	32.1	9.1	13.7	39.9	72.0	3.1	4.0
Cntct Hrs/Yr		50.3		32.6	82.9	2.5		64.3			79.7	144.0		4.4
						NOTE: This value calculated using reassigned time adjustment								NOTE: This value calculated using reassigned time adjustment

Table 1 provides pertinent information about number of life science classes offered each semester and their relationship to work load for the faculty. The number of lecture and lab sections of courses taught by both full-time and part-time faculty in biology (excluding BIOL 130, an anatomy and physiology class), botany and microbiology are listed for each semester. Summarized credit hours and contact hours are assigned for each semester. Most lecture classes are three credits, though some are two. Similarly, most lab classes are 1 credit, some are two. Contact hours are calculated 1 for 1 for lectures and 1 for 3 for labs. FTE-18 in blue represents the calculated load for the three full-time positions in life sciences, whereas the FTE-18 in yellow represents the number of positions if the classes taught by part-time faculty were instead taught by full-time faculty. FTE-15 calculates the number of part-time positions that would exist if each were to teach full time.