



NEW FACULTY POSITION PROPOSAL

Click in the shaded fields and start typing your response.

DISCIPLINE: BIOLOGY

A. How does the proposed position align with specific objectives within the college's strategic plans and initiatives? <http://www.canadacollege.edu/plans/index.php>

The Biological & Health Sciences program offers three categories of courses: general education (45%), majors (5%), and allied health (50%). Our program proposes that the college invest a new fulltime tenure-track biology faculty member to focus on our General Education (GE) courses and to augment our existing fulltime faculty in other subdisciplines. For example, a potentially good fit might be a person with expertise in ecology and nutrition, two fields of biology that are typically of interest to GE students and can lead to career positions. This is our fifth request for this position since spring 2014.

This position will directly support the creation and sustainability of pathways that attract students to our college, more fully engage them in their studies and increase their completion rates. This goal dovetails with EMP Strategic Initiative 1.1 "Develop academic pathways and provide integrated support services that begin in high school, transition to college and complete with a certificate, degree and/or transfer."

We are seeking an additional fulltime faculty member to support the creation and sustainability of biology-related pathways within the College for Working Adults (CWA), the GE Pathways initiative and the Honors Transfer Program (HTP). We currently contribute to these programs primarily through the actions of adjunct faculty. We teach a life science laboratory course (meets CSU GE area B2 and B3) within the CWA as well as for the Sustainability GE Pathway, and a lifelong learning course (meets CSU GE area E1) for the Social Justice GE Pathway. We also offer a 200-level lab science course (dual-CRN) as well as honors contracts for the Honors Transfer Program. At the encouragement of the HTP Advisory Committee, we would like to expand our offerings to include honors-level GE science courses. Customizing curricula to the structure and themes of the CWA, GE Pathways and Honors pathways requires substantial investments of faculty time and creativity. By relying primarily upon adjunct faculty to teach these courses, we are not ensuring a consistent learning experience, nor are we creating a sustainable way for the program to support these pathways. For more than a decade, the Biological Sciences Program has gained crucial input and service from many talented adjunct faculty in nonmajors courses. However, we have repeatedly lost these valuable human resources and colleagues to other institutions that have offered them fulltime positions. By hiring a dedicated fulltime faculty to focus on GE courses the college can provide the human capital to institutionalize our curricular investments and ensure sustainable opportunity for students in these pathway programs.

If this proposal is funded, some of our current FT faculty will be free to entrust our GE program to the new faculty member and to focus their efforts on our 2016-17 program review goal of collaborating with University of California, San Francisco to establish a new CTE program in Neurodiagnostic Technology. This activity directly supports EMP Strategic Initiative 3.7 "Enhance and invest in 2+2 relationships with 4-year universities." As this program is developed, we hope to collaborate with ACES and the STEM Center to investigate opportunities for integrating academic support strategies to improve retention and completion and reduce the equity gaps in our allied health courses.

B. How does the proposed position address the program's strategic action plans and long-term goals? Please refer to specific elements of the most recent program review.

This proposal addresses three incomplete goals from our 2014-15 program review: (a) to renovate our non-majors GE courses to attract and benefit more non-majors, (b) to develop honors addenda for non-majors GE courses, and (c) to address the inconsistent SLO analysis in courses that lack a dedicated fulltime faculty. We have already explained in part A of this proposal how a fulltime biology faculty would enable us to achieve

goals (a) and (b). Goal (c) articulates the need for deeper and more consistent assessment of the teaching and learning that occurs in our non-majors courses. Such analyses permit reflection and long-term planning, and often inspire faculty to experiment with new teaching methodologies. A fulltime faculty member dedicated to GE courses can experiment with curricular changes and/or alternative pedagogies that require longitudinal data to determine the optimal approaches to improving retention and success.

C. How does the proposed position support program vitality and viability?

1. How far is the program from achieving the legislative goal of having 75% of instructional hours taught by full-time faculty?
 - a. %CRNs that are taught by FT faculty: 41% previous semester 40% current semester not applicable
2. If this proposal is not funded, will there remain a minimum of one existing full-time faculty in the discipline? Yes No

D. What is the evidence of student demand to justify the proposed position?

1. Number (headcount) of full-time faculty in the discipline: 4 current semester
2. Total FTE of course offerings: 8.4 previous semester 8.60 current semester not applicable
3. Percent of "Total FTE of course offerings" comprised by FT faculty: 41% previous semester 48% current semester not applicable
4. Average departmental Fill Rate: 90% previous semester 89% current semester not applicable
5. Enrollment history – qualitatively and quantitatively describe student demand/course enrollments within this discipline, especially for those courses that will be assigned to the proposed faculty member.

The Biology program's enrollment has declined from its peak in 2011-12 of 3000 students/year to approximately 2000, a trend roughly paralleling the enrollment of the college as a whole over this same period. Around 2014-15, we discontinued/banked ten non-majors courses for reasons of consistently insufficient enrollment, regulatory compliance concerns, or loss of specialized adjunct faculty. Enrollment in our remaining GE non-majors courses, as well as our majors courses, has actually been relatively stable these last six years; in 2016-17, there were 900 students in 6 FTEF worth of GE course offerings. The balance of our enrollment decline occurred between 2011-2014 within our allied health courses. This decline is not unexpected. It was most likely due to the softening of the nursing job market and the overall reduction in unemployed workers looking for a career change. The good news is that enrollment in allied health courses has stabilized at close to 1000 students/year and been maintained since 2014-15.

Despite these trends, there remains substantial student demand for courses in the biology program culminating in 131 associates degrees over the past 5 years. In 2016-17, we taught 2000 students which account for over 10,000 weekly student contact hours. That makes biology the third largest department in the college in terms of the number of students served. Last year we offered 71 sections with an average fill rate of 86% and a high productivity load of 536; the college load was only 483. Our program can support 19.2 full-time equivalent faculty (FTEF) annually, that means at least 8 full-timers per semester, and yet we have only 4 full-timers on staff. These statistics demonstrate that there is ample student demand and workload capacity to justify the addition of one fulltime Biology faculty member.

Beyond the lens of enrollment, another argument in favor of this proposal can be seen by looking at relative staffing among departments. In recent years the college invested new FT faculty in its Math (2015) and English (2013, 2016) programs due, in part, to the argument that they serve the greatest number of students on campus. These programs currently have 7 and 8 full-time faculty respectively. While biology is the third largest department in the college by the number of students served, it has disproportionately fewer full-time faculty (4). Despite being only 33% smaller (by FTEF) than the Math and English programs, Biology has 45-50% fewer FT faculty. By the same measure, Biology has 33% fewer FT faculty than ESL despite being only 8% smaller in FTEF. We don't know what the ideal fraction FT faculty should comprise of a program's total FTEF, but the college ought to consider equity as it makes its strategic investments.