



**ANNUAL PROGRAM REPORT**

College	Science
Department	Health Sciences
Program	Health Sciences
Reporting for Academic Year	17-18
Last 5-Year Review	2011 - 2012
Next 5-Year Review	2019 - 2020
Department Chair	Jason A. Smith
Date Submitted	2018-10-15

**I. SELF-STUDY** *(suggested length of 1-3 pages)*

**A. Five-Year Review Planning Goals**

1. Develop a healthcare leadership and management course to replace business management.
2. Increase tenure-track faculty from 3 to 8. Change: This goal was updated from 5 tenure track faculty to 8.
3. Develop more electives for Health Sciences students. Change: Specific courses dropped, see goal progress below.
4. Explore creating additional options, or post-baccalaureate certificate programs: Health IT and Global Health
5. Explore making Health Sciences a separate department from Nursing.
6. Develop Concord Campus as health sciences campus.

**B. Progress Toward Five-Year Review Planning Goals**

The Health Sciences program has completed goals 1 – 5.

*Goal 6*

The Department of Health Sciences is no longer planning to offer courses at Concord or to develop a program at that campus. The majority of students in Health Sciences are at Hayward.<sup>1</sup> This is for a number of reasons: low enrollments under conversion; there is no current 2+2 curriculum pathway for transfers in Health Sciences; the logistics and complexities of the new program make it prohibitive to offer classes there. Health Sciences cannot imagine a context that would allow us to offer classes at Concord without dedicated operating funds and support staff that is not contingent on enrollment. Concord is not and will not be part of the Department of Health Sciences objectives outside of a comprehensive support plan including dedicated resources to make such a program function.

### **C. Program Changes and Needs**

#### **Overview:**

Health Sciences' transformed curriculum coupled with being a new Department is challenging and the faculty and staff are stretching to implement the changes in the first year. Over the short term (24 mos), Health Sciences requires additional administrative resources and limited technical support in the development of business processes and operations as a new department. Additionally, the lack of adaptability and flexibility in some systems at CSUEB make management of the curriculum challenging. Over the long term (36 – 60 mos) Health Sciences must focus on building a resilient program and focusing on the development of additional resources for operation.

#### **Curriculum:**

The Health Sciences curriculum has transformed for semesters focusing on an innovative problem-based learning approach. This new approach is proving difficult to administer within the constraints and resources available in terms of scheduling and the workload associated with different courses. The course classification system can produce challenges for implementing problem-based learning. The Department of Health Sciences would like to explore revisions to the way WTU are assigned per course at Cal State East Bay and the relationship of pedagogy and workload.

#### **Students:**

Health Sciences graduated more students than in previous years with increased efforts in advising students before semester conversion. Those advising efforts are not necessarily sustainable. Health Sciences believes that Cal State East Bay must examine the overall advising structure for students.

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<sup>1</sup> APR Data, in Fall 2017, 98% of students were Hayward campus students; only 2% (24 students) are at Concord. Accessed 2018-10-14.

**Faculty:**

While Health Sciences has added tenure-track faculty, the program is still short of necessary faculty to support the program. The program currently has twelve tenure track faculty and is in the process of hiring two more for AY 19-20. The program still has gaps in some areas—health humanities, bioethics, and faculty with strong data analysis backgrounds particularly in the management of large data sets.

**Staff:**

The program currently has one ASC II and .5 ASA shared with the Department of Nursing. Given the size of the Health Sciences program, the program would be better served with a 1.0 ASA rather than a .5.

**Resources:** *(facilities, space, equipment, etc.)*

Health Sciences occupies space for offices in the Student and Faculty Support building and Robinson Hall. Health Sciences lecturers must share offices with the three lecturers per office. With additional hires coming on board next academic year, Health Sciences has no office space to place them. The issue of adequate office space is an urgent issue.

The Health Sciences curriculum requires rooms suited to small seminar and problem-based learning courses with tables to accommodate 8 students, movable furniture and ample whiteboards. There are insufficient rooms of this type to support the Health Sciences curriculum.

**Assessment:**

See Section II.

## II. **SUMMARY OF ASSESSMENT** *(suggested length of 1-2 pages)*

### A. **Program Learning Outcomes (PLO) [under quarter system]**

PLOs: Students graduating with a Health Sciences Bachelor's Degree from California State University, East Bay will be able to:	ILO Alignment
1 Integrate and synthesize knowledge from general education courses and courses in the biological, physical, social and health sciences.	1, 6
2 Communicate effectively to solve problems in health sciences	2
3 Work effectively in teams, partnerships and larger groups toward accomplishing goals in health care.	4

4	Apply ethics and professional standards to interactions with colleagues, supervisors and staff, diverse and multicultural clients, and with the general public.	3, 5
5	Evaluate scientific and policy research to solve problems in the health sciences.	1, 6

## B. Program Learning Outcome(s) Assessed

One PLO was assessed in 2017:

- Work effectively in teams, partnerships and larger groups toward accomplishing goals in health care (PLO 3).

## C. Summary of Assessment Process

**Instrument(s):** CATME Smarter Teamwork Survey (Lowry et al. 2014)

**Sampling Procedure:** 100% survey data

**Sample Characteristics:** Students who completed HSC 3300 and 3350 in AY 2017 – 2018

**Data Collection:** Completed CATME surveys submitted by individuals in these two courses

**Data Analysis:** Means and standard deviation of scores in overall teamwork scores and within five domains (contributing to the team's work, interacting with teammates, keeping the team on track, expecting quality, having related knowledge, skills & abilities) were calculated, along with p-values for one-sided t-tests to determine statistically-significant differences between HSC 3300 (introduction to team work) and HSC 3350 (practice of team skills).

Loughry ML, Ohland MW, Woehr DJ. Assessing teamwork skills for assurance of learning using CATME team tools. *Journal of Marketing Education*. 2014;36(1): 5-19.

## D. Summary of Assessment Results

HSC 3300 (8 sections; n = 253)

	Contributing to the Team's Work	Interacting with Teammates	Keeping the Team on Track	Expecting Quality	Having Related Knowledge, Skills and Abilities	Overall Average
Average Scores	4.14	4.14	4.09	4.17	4.22	4.15
Standard Deviation	1.00	0.87	0.96	0.91	0.88	0.93

HSC 3350 (3 sections; n = 104)

	Contributing to the Team's Work	Interacting with Teammates	Keeping the Team on Track	Expecting Quality	Having Related Knowledge, Skills and Abilities	Overall Average

Average Scores	4.28	4.35	4.25	4.30	4.28	4.29
Standard Deviation	0.85	0.81	0.91	0.84	0.85	0.85

P-Values for one-sided T-Tests, comparing HSC 3300 to HSC 3550, to assess statistically significant improvements in teamwork across different teamwork domains by assuming unequal variances and comparing the two means across classes.

	Contributing to the Team's Work	Interacting with Teammates	Keeping the Team on Track	Expecting Quality	Having Related Knowledge, Skills and Abilities	Overall Average
P-Values	0.105	0.017	0.070	.105	.278	0.09

### **Main Findings**

The Department's goal is to Per the Department aim to increase performance in team work from an introductory course to one where these skills are practiced (part of a three-course sequence); improvements were seen in overall scores from HSC 3300 to HSC 3350, although these differences were not statistically different. Similarly, all scores across the five domains increased. A statistically-significant improvement was observed in how students rated each other in regard to their abilities to interact with teammates ( $p < 0.05$ ). Similarly, students also performed better at keeping the team on track, although this was only statistically significant at  $p < 0.10$ .

### **Recommendations for Program Improvement**

In general, students exhibited high capacity to engage in team work, with baseline scores all above 4 on a 5-point scale; these scores improved as students were able to practice the skills learnt in an introductory course. Because team work is an inherently-valuable skills required of all health professionals, it is important that these attributes be introduced early in the curriculum and be practiced in regular, increasingly-challenging contexts and environments. Accordingly, with the transformation of the Health Sciences curriculum upon semester conversion, the focus on problem-based learning introduces and reinforces such competencies in both theoretical and practical situations as evidence in the three core courses required in the both the first-year seminar (HSC 100) and the third and fourth years of students' enrollment in the major (HSC 315, HSC 400, and HSC 499).

### **Next Step(s) for Closing the Loop**

Assessment of these new courses for this PLO (carried over from the quarter to semester curricula) is critical. The Department of Health Sciences plan to assess this PLO early in the implementation of the transformed curriculum.

### E. **Assessment Plans for Next Year**

*Summarize your assessment plans for the next year, including the PLO(s) you plan to assess, any revisions to the program assessment plan presented in your last five-year plan self-study, and any other relevant information.*

Given the important of assessing team work in the transformed Health Sciences Degree Program, this will be the first PLO assessed in the forthcoming academic year. This is consistent with the five-year plan submitted to the University upon semester conversion.

## III. **DISCUSSION OF PROGRAM DATA & RESOURCE REQUESTS**

### A. **Discussion of Trends & Reflections**

#### **Notable Trends:**

Health Sciences is the largest major at Cal State East Bay (1160 headcount) after Business Administration (2186). Psychology (993) and Criminal Justice (747) follow in terms of headcount. Health Sciences remains a diverse program in terms of race and ethnicity. It is less diverse in terms of gender.

Courses with non-high passing percentages (>15%) are associated with either instructors and/or entry-level courses. Non-passing is particularly high among first generation college students. Health Sciences has steadily improved outcomes in the number of degrees conferred over the past five years.

Health Sciences faculty are more diverse than the faculty of Cal State East Bay as a whole. The faculty are also relatively balanced along gender lines (53% female; 47% male). The tenure-density has increased but remains too low for the program (42%) and is too-low to serve the number of students in Health Sciences. SFR has fallen but remains above 30. FTES have increased.

#### **Reflections on Trends and Program Statistics:**

Health Sciences has made considerable progress in improving student outcomes, diversity and offering classes students for timely graduation. Our focus on diversity in hiring has been particularly effective with a highly-diverse regular faculty. There are three areas of concern for the program: equity gaps, tenure-track density, and administrative resources.

The equity gap in some courses is of concern. This gap seems to either be related to particular instructors, entry-level courses for transfer students, or both. The Department of Health Sciences will make addressing these issues a priority and will explore improved development for faculty and a more rigorous faculty evaluation process for all faculty. The Department will

also review post-conversion data to better understand the relationship between the curriculum and this equity gap.

The number of tenure-track faculty is concerning. First, the number of regular faculty is too low to service the number of students in Health Sciences as compared to the other large programs at Cal State East Bay and remains below the 75% goal of the Academic Senate Principles for Tenure-Track hiring:

Program	FTES	Tenure Density	% of FTEF, Regular Faculty
Business Admin	1939	82%	86%
HSC	642.7	42%	46%
Psych	572.2	50%	52%
Crim. Just.	367	62%	68%

Second, Health Sciences has developed a new curriculum that focuses on problem-based learning and a model of instruction that is reliant on faculty being active in their respective fields of work. Simply, many of the Health Sciences classes will be difficult if not impossible to teach without faculty who are actively engaged in research. While it is possible to hire lecturers in the field, this can be much more difficult than hiring lecturers who work full or near full-time as lecturers. Having a large research-active faculty in Health Sciences is critical to its ability to offer its classes and curriculum.

Finally, Health Sciences needs additional administrative resources in terms of space and administrative support to support both its curriculum and program. Space and advising resources are particularly challenging. The program currently has no free office space to expand faculty.

## **B. Request for Resources** *(suggested length of 1 page)*

### 1. Request for Tenure-Track Hires

Health Sciences is requesting two additional tenure-track faculty hires. We are requesting faculty to strengthen our ability offer classes in the following areas: health humanities/bioethics, public health, and health policy. Within the areas of public health and health policy we continue to seek faculty with training and expertise in the areas of climate change and human health; environmental health; health policy at the state and local level; and data analysis with skills in Python/R.

### 2. Request for Other Resources

Health Sciences needs an additional four tenure-track faculty offices to meet growing demand.