

**CALIFORNIA STATE UNIVERSITY EAST BAY  
COMMITTEE ON ACADEMIC PLANNING AND REVIEW**

Designation Code: **06-07 CAPR 12**

Date Submitted: May 10, 2007

TO: Academic Senate

FROM: Committee on Academic Program Review

SUBJECT: Five-Year Program Review of the Health Sciences Degree Program

PURPOSE: For Action by the Academic Senate

ACTION REQUESTED: Acceptance of the Five-Year Program Review of the Health Sciences Program of the Department of Nursing and Health Sciences and approval of continuation of the program without modification

**EXECUTIVE SUMMARY**

**Background**

*Overview description of the program:*

In 1996, the departments of Nursing and Health Science within the School of Science were merged. Since that time, the program of Health Science has experienced challenges in staffing and enrollment variability. At the end of summer quarter 2005, the only two tenure track faculty in the program retired leaving the department with the responsibility to find faculty to teach all 18 courses offered in the program. The department was able to offer all the courses, has hired two tenure track faculty, and according to the outside reviewer, the program is "primed to enter a new phase with a new core faculty who bring much needed enthusiasm and energy into a program that has the potential to produce graduates who will make important contributions to improving the health of Californians."

In the 2000 program evaluation, recommendations were made regarding the Health Sciences curriculum. The current 2006-2008 catalogue reflects these recommendations and offers a diverse curriculum that includes options in four areas:

- Administration: Management, Policy, Evaluation, Finance, Marketing (36 units)
- Health Careers/Professions Preparation (36-69 units);
- Education/Training/Facilitation: Community Health Education (37 units); and
- Environmental Health and Safety (36 units).

The department offers a BS degree program in Health Science.

**CAPR Recommendation**

CAPR recommends continuation of the BA in Health Sciences without modification.

**Date of Next Review**

The date of the next five year review of the program is 2010-11.

## CAPR Report

### 1. BACKGROUND

#### 1.1 Overview description of the program:

In 1996, the departments of Nursing and Health Science within the School of Science were merged. Since that time, the program of Health Science has experienced challenges in staffing and enrollment ups and downs. At the end of summer quarter 2005, the only two tenure track faculty in the program retired leaving the department with the responsibility to find faculty to teach all 18 courses offered in the program. The department was able to offer all the courses, has hired two tenure track faculty, and according to the outside reviewer that the program is "primed to enter a new phase with a new core faculty who bring much needed enthusiasm and energy into a program that has the potential to produce graduates who will make important contributions to improving the health of Californians."

In the 2000 program evaluation, recommendations were made regarding the Health Sciences curriculum. The current 2006-2008 catalogue reflects these recommendations and offers a diverse curriculum that includes options in four areas:

- Administration: Management, Policy, Evaluation, Finance, Marketing (36 units)
- Health Careers/Professions Preparation (36-69 units);
- Education/Training/Facilitation: Community Health Education (37 units); and
- Environmental Health and Safety (36 units).

In addition to the options, students take 45-47 units of lower division core courses. In the upper division, students take 51-53 core units of which all but four units are from HSC courses. The major consists of 124-159 units; the B.S. degree requires a total of 180-181 units. A student preparing for certain health professions may exceed 181 units.

Since the previous outside review in 2000, the program added two courses: Introduction to Peer Health Education and Peer Health Education Practicum as part of the Community Health Education option. The 2006 program outside reviewer noted the Environmental Health and Safety option is particularly unique, because it is not offered by any of the other CSU's in the Bay Area. It has the potential to meet a growing demand for people educated in environmental health and safety and in the growing field of emergency preparedness and bioterrorism. Compared to the other two local CSU campuses, San Jose State and San Francisco State, CSU East Bay offers more diverse options.

#### 1.2 Overview of the documents submitted to CAPR:

As required, the report to CAPR included a self study; and a five year planning process document, an outside review, and a departmental response.

### 2. FIVE-YEAR PROGRAM REVIEW/SELF-STUDY (2000-2005) AND FIVE YEAR PLAN (2005-2009)

#### 2.1 Summary of specific areas of the Self-Study

- **Total program evaluation:** Self-Study of the CSUEB Health Sciences Major includes a five year review of curriculum, students, faculty, Mission and Goals and Assessment Elements 2000, and status of goals of the 2000 CAPR report.
- **Curriculum:** The curriculum was revised following the 2000 program evaluation to develop specific tracks in several areas to give the program more focus and a better link between professional education and employment. The program developed and instituted four options discussed above and two courses were added to the Community Health Education option: Introduction to Peer Health Education and Peer Health Education Practicum.
- **Student performance:** The 2000 program evaluation recommended increasing recruitment of students and creating a curriculum which provides the knowledge and skills to prepare students for

specific professional employment. The department made efforts in the intervening years to visit surrounding college campuses to gather information about various programs to apply to the CSUEB program. The curriculum options were revised to help students advance through the program. The program evaluation also recommended that the department create a bulletin board where information relating to student advising and employment could be disseminated, which the department has done. The evaluator also recommended changes in scheduling and advising. The faculty considered this recommendation however at the time of the self-study in 2006, decided to focus more on finding faculty to teach the courses required for the major than on revising their work schedules to accommodate student needs. The department hoped to be able to address the course scheduling issue after the hiring of new faculty. The evaluator also recommended the formation of a student health organization.

- **Faculty:** the retirement of the two tenured faculty, at the end of summer quarter 2005, enabled the department to obtain permission to conduct two tenure track searches. One tenure track position was filled by a current lecturer in the department and the other position remained open. The department had lecturers teach larger sections so that no student would be prevented from graduating as planned. Also, a new chair for the Nursing Department, Carolyn Fong, was hired during this period. She chairs the Nursing and the Health Sciences Programs of the Department and works closely with Pam Parlocha, who coordinates the Health Sciences Program for the Department.

## **2.2 Status of Goals and Plans from the Previous 2000 CAPR Report**

The 2000 CAPR report curriculum goals included the following plans (a 2006 Self-Study status report is listed below each goal):

1. The faculty would provide a rigorous and relevant curriculum that prepared graduates who are health science generalists and also have the knowledge and skills for a career in the health care industry: Graduates of the program would be expected to:
  - Assess their own knowledge and skills through a synthesis of general education, major courses and work experience,
  - Analyze health care systems and organizations,
  - Use at least three technical tools essential for health care occupations and professions,
  - Search and analyze information needed to make decisions related to health services and systems,
  - Prepare and critique program proposals that may be used in health services and systems,
  - Perform a career search and predict their personal leadership in health services and environments.
  - According to the 2006 self-study, the above goals are addressed by completion of the 4000 level courses in the major: Research and Program Evaluation in Health Science, Supervised Field Training and Report Writing, Health Systems Management, and the capstone course of the major, the Senior Seminar.
2. The program will offer a balance of major and general education that will provide optimum access to students and promote timely completion of major requirements:
  - Once the student has declared the major of Health Sciences, according to the program self study report, it takes them an average two years to complete the coursework.
3. The program will complete the development of Assessment Elements:
  - A document entitled, "Assessment Elements, Major in Health Sciences" was created in 2000. The Program was also modified to offer four options. Each option has a list of required courses that must be completed. A roadmap of classes to take to graduate is available on the College of Science website that also includes basic information about the four options.
4. Internships via HSC 4500 will be taken by all Health Science majors:
  - All majors are required to complete HSC 4500 in order to graduate.

### **2.3 Student Goals Set in 2000 CAPR Report**

1. Via HSC 4700 (Senior Seminar), 90% of major students will participate in a survey of their internship experiences, graduation plans and readiness for the world of work in health services:
  - This goal had not been completed as of March 2006 and was carried forward.
2. Seventy five percent of Health Science students will participate in advising sessions during their first course in Health Science:
  - This goal was not completed and was to be carried forward. However, faculty advisors were making efforts to advise both newly declared majors and complete grad checks for students ready to graduate.
3. In a survey of graduates, at least 50% indicated they were prepared for their first post-graduate positions:
  - This survey was not completed and was to be carried forward.

### **2.4 Faculty**

1. Faculty will assist in recruiting an Advisory Board members and attend Advisory Board meetings:
  - This goal was not completed and was to be carried forward.
2. Faculty will analyze course content according to the program's goals, objectives and skill content:
  - Work was begun on this goal before the two tenure track faculty retired. Several new options in the major were considered, based on student requests and input, but they had not been finalized for approval
3. Faculty will discuss the program with outside consultants and reviewers and gather ideas for curriculum innovation and revision:
  - This goal was not completed and was to be carried forward.
4. Faculty will collaborate in the non-instructional work of the program such as faculty meetings, School of Science events and University committee work:
  - This goal was partially met. During academic year 2004-2005, meetings with program faculty and the associate dean were held once per quarter. No meetings of program faculty have been held during academic year 2005-2006. However, several part time Health Sciences lecturers have attended department meetings. Tenure track faculty, who subsequently retired, participated in faculty governance.
  - An examination of their program data in Fall 2004 indicates that the average section size was 26.1 in 2001 and 40.6 in 2004. The number of FTES in the program rose from 78 in 2000 to 92 in 2004. The student faculty ratio (SFR) was 28.30 in 2000 and 40.40 in 2004. The number of majors fluctuated from 190 in 2000 to a low of 131 in 2002 and rose again to 199 by Fall 2005 with 40 degrees awarded in 2004. The number of courses offered was 12 in 2001 and 8 in 2004 (with 10 sections offered)
  - Because of the drop in enrollment experienced between the last CAPR report and 2002, most of the courses in the program are offered only once per academic year. When enrollment increases the Program will consider offering more sections as needed. At the time of the Self Study, none of the courses were taught by regular faculty. That was expected to change in fall 2006 when their new tenure track hire began to teach full time. They also were searching for a second faculty member to fill an open tenure track position.
5. Resources in the department:
  - According to the Nursing program report for the department, fiscal resources have held steady for the past few years, but they were uncertain as to future resource allocations given the current state budget situation. The department has an Administrative Support Coordinator and an administrative support assistant.

### **3. OUTSIDE REVIEWER'S COMMENTS & THE DEPARTMENT'S RESPONSE**

An outside reviewer, Dr. Dan Parelas, San Jose State University, visited the campus on April 27, 2006 and made the following recommendations regarding the program:

#### **Curriculum**

- Utilize an Advisory Board and internal assessment of FTEF to discuss the feasibility of adding options in Gerontology/Eldercare, Biotechnology/Clinical Research Coordination, and Substance Abuse/Mental Health Services as mentioned in the five-year plan.
- The Department and program should consider consolidating some of its introductory courses (possibly HSC 1100 Health: Maintenance and Wellness, HSC 2500 Principles of Personal Nutrition, and HSC 2100 Wellness and Genes) and create a new lower division general education basic health course (at SJSU it is called Understanding Your Health) that can be offered university-wide.
- Utilize an Advisory Board to investigate the development of a Bachelors Degree articulation agreement (similar to an option offered by SJSU's Health Science Department) with local East Bay community colleges that offer allied health profession degrees.
- Utilize an Advisory Board to investigate the development of a satellite Health Sciences Program at the Concord Campus.
- Assess and monitor the developing changes in the accreditation of health education programs.

#### **Faculty**

- Establish a community advisory board of local employers, successful alumni, field experience preceptors, community college partners, and others who can provide advice on program curriculum and direction.
- Host a meeting of field experience preceptors on campus annually, so that students can meet potential preceptors and learn more about internships and vice versa. This meeting can also help to strengthen relationships between the preceptors and the program. Develop and maintain a list of preceptors that can be shared with students prior to their seeking internship sites.
- Develop a formal system of course assessment. The focus of this assessment could be on instructional related assessment such as course content, course materials, or audiovisual aids.
- Conduct an Exit Survey with all graduating students to glean student satisfaction with the program and measure their sense of accomplishment.
- Post student advising forms, course road maps, and frequently asked advising questions on the Department website for easy student access. This will help create advising appointments that are more efficient and effective.
- Conduct group student advising by option, at least twice each academic year. Conduct an assessment of the number of students in each of the options.

#### **Students**

- Establish a Health Sciences Student Association (HSSA) that can serve as the primary communication body between students and faculty, provide leadership for program events, and disseminate a student newsletter.
- Host HS Program meetings (e.g., "Town Forum") at least twice a year, where the program can make announcements, describe accomplishments, introduce new faculty, greet new students, provide group advising, and answer student questions about the coming semester. The HSSA leaders can help facilitate and promote the meeting.
- Host an annual Career Week in the fall where students can listen to and speak with successful HS alumni and learn more about what they can accomplish with their degrees. Alumni could also make presentations in separate classes during the week. This event will also help develop a body of dedicated alumni, some of whom can serve on an Advisory Board.
- Create a student listserv for disseminating program announcements and increasing communication between students.
- Establish a system of awards to recognize outstanding students. For example, awards and recognitions can be given for outstanding service to the program, outstanding writing, outstanding data analyst, outstanding university-wide academic achievement, etc. These types of awards

recognize student accomplishments and provide evidence for the program's high quality instruction and student ability.

### **3.1 Health Science Program's response to the outside reviewer's comments:**

#### **Curriculum**

- Advisory Board: The department is in the process of generating potential members for a Health Sciences Advisory Board. With our new faculty, we have more community contacts and thus more potential for recruiting for this board. Regarding the additional options for the major, we will discuss this with the Advisory Board, and possibly conduct a survey to determine interest and need among the student body.
- Consolidation of courses: Faculty members are discussing creating and offering new Health Science courses, both lower and upper division, which may be approved for General Education credit. Ideas under consideration include either combining the above courses in some manner or revising them for a Health Sciences cluster.
- Articulation agreements: For now, the program's priority is to expand the program to the Concord campus. But they have been approached by Canada College to develop a Bachelor's Degree in Health Sciences with them. This is a potential goal for the future of the program.
- Satellite HS Program at Concord Campus. The pre-requisites for the nursing program are now being offered at the Concord campus, and many of those pre-requisites are the same as the lower division core courses for Health Sciences. The program plans to begin to offer Health Science prefix courses there.
- Accreditation issues and keeping current with trends in health science issues will be addressed through revision and updating of one of the options, Community Health Education.

#### **Faculty**

- Advisory Board. The program is in the process of planning for the creation of an advisory board to address the concerns of program curriculum and direction.
- Hold annual meeting with community partners. The Program agrees with the need to work with community partners, and they plan to work with the Career Development Center on campus so that there are adequate numbers of health-related agencies participating in internship fairs on campus to help students obtain a positive internship experience as this is a requirement of the program..
- Development of assessment tools. They plan to discuss these recommendations with the program faculty. A new professor, Dr. Lois Ritter, has expertise in survey development, and they plan to apply that expertise to the improvement of their program. Professor Wambuguh, who has taught the senior seminar, HSC 4700, has collected course evaluations from students in that course and they will consider the feedback from those students in their curriculum planning.
- Student Advising. The Program is currently in the process of revising the Health Sciences program web site, with plans to incorporate the recommendation to include materials for students to access to assist students in major advising. They are also in the process of revising the student advising system, including planning for group advising. One idea they have is to do advising one of the four options as a way of determining how many students are in each option.

#### **Students**

- The program will look into reviving a student health sciences organization that used to exist and establishing a form for students to keep in communication with each other.  
The program also believes the suggestions for semi-annual programs to inform students about the program and a system of awards to recognize student achievement are excellent suggestions, which they plan to explore.

## **4. HEALTH SCIENCE PROGRAM'S FIVE YEAR PLAN 2006-2010**

### **1. Curriculum changes envisaged during the next five years**

Part of the planning process depends on enrollment trends during the next five years, the program's ability to hire another tenure track faculty person, and the background of the new hire. The Program has proposals for offering additional options to their majors that have not yet been

formalized and submitted to the appropriate committees. They include options in Gerontology/Eldercare, Biotechnology/Clinical Research Coordination, and Substance Abuse/Mental Health Services. The Program's optimism is based on the many job opportunities available as the number of health care careers in general is increasing.

## **2. Students**

In 2000, the number of majors was 190. That number dropped to a low of 131 in fall of 2002. As of fall, 2005, the number is at 199. Thus, their enrollment is on an upswing and they expect it to continue to increase over the next five years. In addition to the increasing opportunities for health care careers in general, the impacted status of our pre-licensure nursing program affords the HS Program a pool of potential majors who, when unable to be admitted to the nursing program, may choose Option B and apply to an accelerated nursing program upon completion of the Health Sciences degree. In terms of outreach and recruitment, they plan to add information on the Health Sciences major to their monthly pre-nursing advising sessions at both the Hayward Hills and Concord campuses. The Health Sciences major will be suggested as an alternative to the nursing major, one that offers a wide array of opportunities in health care careers.

## **3. Faculty**

The department has hired two tenure track assistant professors to replace the retired faculty members. The need to offer all of the Health Sciences prefix courses during the 2005-2006 academic year has resulted in two outcomes. First, several of their part time instructors have agreed to teach additional courses with enrollment over the published cap. Second, the department has been able to recruit instructors to teach courses that have not been covered by regular instructors. Many of these instructors will continue to be available to the HS program in the future to teach already established Health Sciences prefix courses as well as new courses that may be proposed under new options.

## **4. Resources**

The current level of resources, staff, equipment, library resources, etc., has been stable and adequate over this past academic year. The Program has three office staff to serve the three department programs. If Health Sciences enrollment continues to increase, they anticipate they will need to offer some sections more than once, based on student demand. This will involve hiring more faculty to teach the additional sections and perhaps more office staff to process the additional work.

## **5. . CAPR ANALYSIS OF THE PROGRAM'S FIVE-YEAR REVIEW**

### **5.1 Program changes and challenges**

- CAPR praises the revamping of the curriculum and the attempts to serve the demand for the health science field with limited resources and limited tenure track staffing.
- We note the steady growth of the Program's enrollment, which increased from a low of 131 in 2002 to 199 in 2005 and 270 students in Fall 2006. There is a critical need for a variety of health science career paths for students that the HS Program is well positioned to offer. The program appears to have started to address student concerns and more students are coming into the Program which is both exciting and challenging.
- CAPR also appreciates the recognition that the Health Sciences Program has made toward assessment of its degree program. The Program needs to finalize as soon as possible its assessment plan as suggested by the external reviewer. It also needs to follow up on student involvement in the program curriculum through assessment, feedback, and utilization of alumni who can offer suggestions based on their work in the field. Faculty and student cooperation should continue in the future. Evidence of course evaluations should also be presented in a future

report to identify if there is a range of evaluations over time. An evaluation/assessment tool should also be included in the self-study.

- CAPR agrees the Program should schedule more informational programming for its current and potential students. The Program should also update its Program website. Currently, links to the online catalogue are out-of-date. There is not enough information about the four options in the program and the distinct pathways to a degree in Health Science for current or prospective students on the website. This material is in the current 2006-2008 online catalogue but can also be summarized for students on the Program website as well.
- While the establishment and maintenance of a HS student organization is ultimately up to the students in the program, CAPR strongly recommends that a faculty member be assigned to help students get this organization off the ground and mentor its development. Over time, the student organization can serve a vital role connecting with students in the program who will become alumni and continue to give back to the HS program.
- CAPR also supports the recommendation to establish a community advisory board of practitioners, alumni of the program, and other interested parties. This board can serve a variety of roles and provide the H.S. Program with ongoing curriculum feedback, internship placement assistance, and job placement.

### **5.2 Resource challenges and needs**

- While the program has been focused on recruiting and integrating two tenure track faculty to replace its two retired faculty, it is evident by the growth in the number of majors and the large size of sections, that an increase in funding for at least one additional tenure track faculty appointment seems appropriate for the HS program to effectively service the growing demand for health science majors, and the proposed new options in Gerontology/Eldercare, Biotechnology/Clinical Research Coordination, and Substance Abuse/Mental Health Services, and the expansion of the Program to the Contra Costa campus to provide easier accessibility in that region.

Currently, in the HS program, there are only a total of two tenure track faculty, a non-teaching program coordinator, and six lecturers whose duties do not include advisement for majors. This is insufficient for the number of majors, the expansion of options that is envisioned, and the growing size of course sections in the last several years. CAPR recommends the addition of another Tenure Track position to help build a diverse cohort of junior faculty to take this program forward in the coming years. In particular, a new tenure track hire in the field of administration would supplement the two recent hires who are proficient in the fields of environmental health, and health education.

### **6. CAPR RECOMMENDATION FOR CONTINUATION OF THE PROGRAM**

CAPR recommends the continuation of the BS degree program in Health Science without modification.

### **7. DATE OF THE PROGRAM'S NEXT ACADEMIC REVIEW**

The date of the next CAPR five year review will be in 2010-2011.