TO: The Academic Senate
FROM: Committee on Instruction and Curriculum (CIC)
SUBJECT: 15-16 CIC 71: Revision request for B.S. Health Sciences
PURPOSE: Information to the Academic Senate
ACTION REQUESTED: That the Senate accept the information that the revision request for B.S. Health Sciences has been approved by CIC.

BACKGROUND INFORMATION:
The Senate process for approving transformed degree programs for the semester calendar is defined by 14-15 CIC 36. The Committee discussed the B.S. Health Sciences program at its June 6 meeting, which was attended by representatives from the Department of Nursing and Health Sciences. It was approved by CIC unanimously with the acknowledgement that some non-substantive changes may occur in the Catalog copy. The proposal may be viewed within Curriculog; the summary is attached as a PDF document per ExCom’s request.
B.S. in Health Sciences

2. Semester Conversion Request for Approval of Revision of the Undergraduate Degree Program/Major

General Catalog Information

***READ BEFORE YOU BEGIN***

Use this form to request a revision to your Undergraduate Degree Program/Major and its concentration(s).

1. To change the title of your degree program, a narrative will need to be submitted to APGS for review by CIC and the state chancellor's office. Click here to submit your narrative.

2. To move an existing degree to online, complete form #7. Semester Conversion Request for Online/Hybrid Program Modification.

3. To elevate an option to a degree or change the degree type, a narrative will need to be submitted to APGS for review by CIC and the state chancellor's office, Click here to submit your narrative.

4. Turn on Help Text by clicking the Show Help Text icon above this section of the form.

Effective Term: Fall 2018

Select Shared Core unless otherwise instructed by APGS

Select Shared Core*  
- Program
- Shared Core

Notes: If you want to move an existing degree program to online (i.e. 50% or more of the program can be completed online (a hybrid course counts as .50 online), elevate an option to a degree, or change the degree type, please e-mail Donna Wiley, Interim Associate Vice President, Academic Programs and Graduate Studies; and copy Sarah Aubert, Catalog and Curriculum Specialist, Academic Programs and Graduate Studies, for additional instructions as soon as possible.
Program Description

Health Sciences is an interdisciplinary field that focuses on the application of physical, biological, and social sciences to understand and to improve health in human beings. It is an applied science that focuses on knowledge necessary to practice in both clinical and population health settings.

Our program helps students to understand health at the individual level, the community level and the population level. In addition to the biomedical model of health, we ask students to think critically and to explore health from a variety of perspectives and to understand the role that culture has in constructing health.

The program also emphasizes problem-based learning. Our goal is to help students develop strong critical thinking skills, team work, and strong problem-solving skills rooted in a population perspective.

Our program emphasizes the environmental factors that impact human health. The effects of climate change have an immediate and long-term effect on human health and the communities of California. Our program focuses on helping students develop the skills to face some of these health challenges.

The BS in Health Sciences without a concentration is designed to prepare students to enter directly into careers in health care or to enter into post-graduate professional programs such as medicine, physician assistant, occupational therapy, nursing, radiation technician, and other clinical fields.

The program also offers concentrations in Health Policy and in Public Health.
Career Opportunities

The health care field is the second largest industry in the United States and employs millions of workers. The demand for highly trained health care workers is high.

There are a number of career opportunities working in health sciences. There is a high demand for workers in clinical fields such as medicine, nursing, occupational therapy, physical therapy, laboratory technology, and other clinical fields.

In addition to clinical fields, there are opportunities in research, technology, administration, finance, pharmaceuticals, and environmental protection and sanitation. There are many career opportunities in fields such as public health and health policy as well.

Program Learning Outcomes

Students graduating with a BS in Health Sciences will be able to:

1. Use knowledge and skills to provide effective, necessary, and appropriate health services and public health interventions in diverse and multicultural communities.
2. Work effectively on a team in health and health care.
3. Act ethically and responsibly.
4. Use critical thinking, knowledge, and expertise to address complex challenges in health and health care.
5. Apply population perspectives in the health professions
6. Apply knowledge of the role of the environment and of climate change in human health in ways that improve population health and sustainability

See instructions here before completing the following Major Requirements field.

Lower Division Core Requirements (25)

- BIOL 230 Introduction to Clinical Microbiology (4)
- ENSC 280 Humans and the Environment in California (3)
STAT 100 Elements of Statistics and Probability (3)
POS 101 American Political Institutions (3)
HSC 100 First Year Seminar in Health Sciences (3)
HSC 110 Introduction to Health Systems and Social Determinants of Health (3)
HSC 130 Health Humanities (3)
HSC 250 Health Disparities and Health Equity (3)

Upper Division Core (18)

HSC 300 Environmental Health (3)
HSC 315 Public Health (3)
HSC 330 Epidemiology (3)
HSC 355 Bioethics (3)
HSC 360 Health Law (3)
HSC 400 Health Policy Research and Analysis (3)

Concentrations (33)

Public Health Concentration (33)

Public health promotes and protects the health of people and the communities where they live, learn, work and play. (APHA). Public health works to track disease outbreaks, prevent injuries, and shed light on why some populations and communities are more likely to suffer from poor health than others. Public health professions work collaboratively and across disciplines to assure the conditions in which people can be healthy.

The Concentration in Public Health in the Bachelor of Science Degree Program aims to prepare qualified, diverse, and committed graduates qualified to understand and address complex public health challenges, locally, nationally, and globally. Upon successful completion of Concentration requirements, graduates will be able to:

Define public health and related roles and responsibilities of government, non-government agencies, and private organizations.
Evaluate the source and quality of health information, research, data, or public health interventions, which
assess and/or address the well-being of a population, as they relate to individual and community health.

Analyze the magnitude of health concerns faced by vulnerable and at-risk communities accounting for the role of gender, race, ethnicity, social determinants, and other dynamic influences affecting population health.

Assess the role of community engagement in promoting population health and social justice by discussing public health interventions and the values and perspectives of diverse individuals, communities, and cultures and their influence on health behaviors and practices.

Public Health Required Courses (21)

ECON 200 Principles of Microeconomics (3)
ECON – 370 / HSC – 370 Health Economics and Public Policy (3)
HSC 310 Community Engaged Health Promotion (3)
HSC 350 Health Behavior and Health Education Theory (3)
HSC 375 Program Planning and Evaluation (3)
HSC 410 Qualitative Methods in the Health Sciences (3)
HSC 450 Health Communication (3)

Human Health and Disease Elective (3)

Students should choose one course from the following list of electives.

HSC 115 Human Health and Wellness (3)
or
HSC 327 Genes and Human Health (3)
or
HSC 385 Vector Control (3)
or
HSC 405 Toxicology (3)

Experiential Electives (3)
Students must select one course from the following.

HSC 423 Homelessness, Urban Poverty, and Health (3)
or
HSC 440 Global Health and Disability (3)
or
HSC 460 Emergency Preparedness and Response (3)

**Elective (6)**

Students must take another 6 units from the following courses.

HSC 115 Human Health and Wellness (3)
HSC 323 Plagues, Peoples and Populations (3)
HSC 325 Health Care Payment Systems (3)
HSC 327 Genes and Human Health (3)
HSC 335 Pharmaceutical, Biotechnology and Medical Device Policy (3)
HSC 340 Climate Change and Public Health (3)
HSC 345 Aging and Long Term Care (3)
HSC 365 Mental Health Policy (3)
HSC 375 Program Planning and Evaluation (3)
HSC 380 Health Regulation (3)
HSC 385 Vector Control (3)
HSC 390 LGBT Communities and Health (3)
HSC 405 Toxicology (3)
HSC 410 Qualitative Methods in the Health Sciences (3)
HSC 420 Occupational Health (3)
HSC 423 Homelessness, Urban Poverty, and Health (3)
HSC 435 Public Health and Life Course Perspective (3)
HSC 440 Global Health and Disability (3)
HSC 445 HIV/AIDS in a Global Context (3)
HSC 455 Management and Employment Issues in the Health Professions (3)
HSC 460 Emergency Preparedness and Response (3)
HSC 465 Health Data and Information Management (3)
HSC 470 Health and the Built Environment (3)
HSC 480 State and Local Health Systems (3)
HSC 485 Applications of Research Methods in Health Sciences (3)
HSC 497 Issues in Health Sciences (3)
Health Policy Concentration (33)

Public policy is increasingly central to society’s efforts to promote and protect human health, both at the individual level and at the population level. As the regulations, statutes, and court rulings that affect public health, the environment, and health care systems become more and more complex, the need for health policy professionals has never been higher.

The Concentration in Health Policy in the Bachelor of Science Degree Program is designed to provide students with a solid grounding in policy theory, policy development, the policymaking process, policy enforcement and policy evaluation. Students are trained in policy processes that occur at all jurisdictional levels, ranging from local communities, to the state, national, and international levels, and will become familiar with the range of stakeholders and institutions influencing health policy.

The program emphasizes teamwork, critical thinking, and problem solving skills. Upon successful completion of the Concentration requirements, graduates will be competent as professionals to recommend evidence-based solutions to problems related to public programs, policies and procedures related to health.

Health Policy Concentration Required Courses (27)

ECON 200 Principles of Microeconomics (3)
ECON – 370 / HSC – 370 Health Economics and Public Policy (3)
HSC 325 Health Care Payment Systems (3)
HSC 380 Health Regulation (3)
HSC 450 Health Communication (3)
HSC 455 Management and Employment Issues in the Health Professions (3)
HSC 465 Health Data and Information Management (3)
HSC 480 State and Local Health Systems (3)
HSC 497 Issues in Health Sciences (3)

Health Policy Electives (6)

Students must take 6 units from the following courses
HSC 115 Human Health and Wellness (3)
HSC 270 Investigating Disease Outbreaks (3)
HSC 310 Community Engaged Health Promotion (3)
HSC 323 Plagues, Peoples and Populations (3)
HSC 327 Genes and Human Health (3)
HSC 335 Pharmaceutical, Biotechnology and Medical Device Policy (3)
HSC 340 Climate Change and Public Health (3)
HSC 345 Aging and Long Term Care (3)
HSC 350 Health Behavior and Health Education Theory (3)
HSC 365 Mental Health Policy (3)
HSC 375 Program Planning and Evaluation (3)
HSC 385 Vector Control (3)
HSC 390 LGBT Communities and Health (3)
HSC 405 Toxicology (3)
HSC 410 Qualitative Methods in the Health Sciences (3)
HSC 420 Occupational Health (3)
HSC 423 Homelessness, Urban Poverty, and Health (3)
HSC 435 Public Health and Life Course Perspective (3)
HSC 440 Global Health and Disability (3)
HSC 445 HIV/AIDS in a Global Context (3)
HSC 460 Emergency Preparedness and Response (3)
HSC 470 Health and the Built Environment (3)
HSC 485 Applications of Research Methods in Health Sciences (3)

**Electives (30)**

Students who do not select a concentration must select an additional 30 units in consultation with an advisor. These electives must be chosen as part of a course plan designed in consultation with an advisor to achieve a student's learning goals. The course plan must be approved and filed before taking elective courses. Students may review courses to construct a plan by using the Course Description link in the catalog. All Health Sciences courses have an HSC prefix.

The following courses have been pre-approved as a course plan for students interested in careers in clinical settings. These courses will prepare students for most post-graduation professional fields and programs:

BIOL 270 Human Anatomy and Physiology I (4)

BIOL 271 Human Anatomy and Physiology II (4)
PHYS 125 Principles of Physics I (4)
CHEM 111 General Chemistry I (5)
CHEM 112 General Chemistry II (5)
CHEM 230 Survey of Organic Chemistry (5)
CHEM 340 Survey of Biochemistry (3)

Students may notify an advisor if they wish to elect the above pre-approved plan.

Once a plan is approved, students should not deviate from the plan without meeting with an advisor. Credit taken off plan may not be approved.

Students must meet with a career advisor before completing 60 units. Transfer students must meet with an advisor before they may enroll in HSC courses.

Capstone (3)

Students in the Public Health Concentration must take HSC 499b. Students in the Health Policy and Administration Concentration must take HSC 499c. All other students take HSC 499a.

HSC 499a Capstone in the Health Sciences (3)
or
HSC 499b Capstone in the Health Sciences (3)
or
HSC 499c Capstone in the Health Sciences (3)

To revise an existing concentration (formerly option) or create a new concentration, select form 3a. Semester Conversion Request for Approval of New or Revised Undergraduate Concentration.

Total Units Required

<table>
<thead>
<tr>
<th>Quarter Based Program:*</th>
<th>180</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester Based Program:*</td>
<td>118</td>
</tr>
</tbody>
</table>

Total Units should not exceed 120 Semester Units unless previously approved by Chancellor’s Office for exemption.

B.A. Programs: Major requirements are a minimum of 24 units with at least 12 upper division units.
B.S. Programs: Major requirements are a minimum of 36 units with at least 18 upper division units.
See Unit Calculator for assistance.

Additional Notes/Information

If the program has a similar transfer model curriculum (TMC), please e-mail Kyle Burch, Articulation Officer, Academic Programs and Graduate Studies, to verify that the revised program meets the TMC requirements prior to submitting the program revision request form.

Is the major approved as a "similar" degree under the STAR Act (SB 1440)?*  
- Yes  - No  - I’m not sure (Articulation Office will contact you)

If yes, explain how this modification will affect the "similar" degree agreement

Were any concentrations (options) discontinued?*  
- Yes  - No

If yes, please explain below. If no, please enter "N/A" or "not applicable."*  
Option D, Environmental Health was discontinued and will be offered by Earth and Environmental Sciences.

The Pre-Clinical Preparation option is discontinued.
Is this major approved as an online degree program?*

Yes □  No □

If no, is there any pathway in the revised degree that is more than 50% online?

Yes □  No □

Resource implications of the proposed revision, if any:

Relationship of Revised Program to requirements for teaching credentials, accreditation, and/or licensing, if any:

Consultation with other affected departments and programs:

The following department(s) has (have) been Department of Biological Sciences

The following department(s) has (have) been None Selected
consulted and raised no objections:

- Department of Chemistry and Biochemistry
- Department of Computer Science
- Department of Earth and Environmental Sciences
- Department of Economics
- Department of Management
- Department of Nursing
- Department of Physics
- Department of Political Science
- Department of Psychology
- Department of Statistics and Biostatistics

No objections raised from consulted departments.

**Attachments**

Please scroll to the top of this form and select the *Files* icon to attach the following documents to your proposal:

- Bachelor's Degree Roadmap
- Curriculum Map 1 - PLOs to Courses
- Curriculum Map 2 - PLOs to ILOs
- Five Year Assessment Plan

**Did you attach your Curriculum Maps, Five Year Assessment Plan or other supporting documents to this proposal?**

- Yes
- No

**Catalog Item Types**

- Degree Type*
Bachelor of Science

Program Type: Bachelor
Attachments for B.S. in Health Sciences

- Curriculum Map 2 Final.docx (uploaded by Jason Smith, 4/13/2016 9:00 pm)
- HSC Summary of Transformation.docx (uploaded by Jason Smith, 4/13/2016 9:00 pm)
- BSC Health Sciences with Clinical Plan.xls (uploaded by Jason Smith, 4/18/2016 1:06 pm)
- BS Health Sciences Policy Concentration.xls (uploaded by Jason Smith, 4/18/2016 1:07 pm)
- BS in Health Sciences Public Health Concentration.xlsx (uploaded by Jason Smith, 4/18/2016 1:41 pm)
- BS in Health Sciences Assessment Plan.docx (uploaded by Jason Smith, 4/18/2016 1:42 pm)
- Curriculum Map 1 Final.xlsx (uploaded by Jason Smith, 4/19/2016 1:35 pm)