CSU Channel Islands

PROGRAM PROPOSAL FOR

NEW UNDERGRADUATE DEGREE/CREDENTIAL (Long Form)

SIGNATURE PAGE – updated 11.18.11

Name of Proposed Degree/Credential:	Bachelor of Science in Health Science
Date of Submission:	October 2011
Faculty Proposing New Program:	Ching-Hua Wang, Harley Baker, A.J. Bieszczad, Karen Jensen, William Wagner III, Daniel Wakelee,

Review and Approval Signatures:

1. Proposer:		Date:	
2. Curriculum Chair:		Date:	
3. Academic Senate Chair:		Date:	
4. AVP Academic Programs and Planning		Date:	
5. Provost:		Date:	
6. President or Designee:		Date:	

Internal Note: Please return this document to Academic Programs and planning after all signatures are completed.

CSU Channel Islands
PROGRAM PROPOSAL FOR
NEW UNDERGRADUATE DEGREE/CREDENTIAL (Long Form)

Approval process: A Proposal for a New Undergraduate Degree/Credential should be submitted to the Academic Programs and Planning office. A proposal is reviewed and approved by the Curriculum Committee, the Academic Senate, the Provost, and the President. After final campus-level approval, new degrees (but not credentials) at submitted to the CSU Office of the Chancellor. New degrees are implemented after written approval has been received by the CSU Chancellor.

This form should not be used for proposals for graduate degrees. Instead, since graduate programs require the additional step of review by Western Association of College and Schools (WASC), graduate proposals use the WASC Substantive Change Proposal form. See the Academic Programs and Planning Office for more information.

1. Program Type (Please specify any from the list below that apply—delete the others)

√ State-Support

2. Program Identification

a. Campus:

California State University Channel Islands

b. Full and exact degree designation and title (e.g. Bachelor of Arts with a Major in History).

Bachelor of Science in Health Science

c. Date the Board of Trustees approved adding this program projection to the campus Academic Plan.

March 2008

d. Term and academic year of intended implementation.

Fall 2013

e. Name of the department(s), division, or other unit of the campus that would offer the proposed degree major program. Please identify the unit that will have primary responsibility.

Arts and Sciences of Academic Affairs

f. Name, title, and rank of the individual(s) primarily responsible for drafting the proposed degree major program.

Ching-Hua Wang, MD., PhD, Professor of Immunology and Microbiology
Harley Baker, PhD, Professor of Psychology
A.J. Bieszczad, PhD, Associate Professor of Computer Science

Karen Jensen, PhD, Associate Professor of Nursing, Director of the Nursing Program
William Wagner III, PhD, Professor of Sociology
Daniel Wakelee, PhD, Professor of Political Science

g. Statement from the appropriate campus administrative authority that the addition of this program supports the campus mission and will not impede the successful operation and growth of existing academic programs.

Attached.

h. Proposed Classification of Instructional Programs (CIP) Code and CSU Degree Program Code . Campuses are invited to suggest one CSU degree program code and one corresponding CIP code. If an appropriate CSU code does not appear on the systemwide list at: http://www.calstate.edu/app/documents/HEGIS-CIP2000_102406.xls , you can search CIP 2000 at http://nces.ed.gov/pubs2002/cip2000/ to identify the code that best matches the proposed degree program. The Classification of Instructional Programs (CIP) is a National Center for Education Statistics (NCES) publication that provides a numerical classification and standard terminology for secondary and postsecondary instructional programs. The CSU degree program code (based on old HEGIS codes) and CIP code will be assigned when the program is approved by the Chancellor.

CSU Code: 12011 Health Science; CIP Code: 51.0000

2. Program Description and Rationale

a. A brief description of the program, its purpose and strengths, fit with institutional mission, and a justification for offering the program at this time. The description should include a rationale explaining the relationship among the program philosophy, design, target population, and any distinctive pedagogical methods.

Health Science is a multidisciplinary field, directed toward understanding factors affecting health and improving the health status of populations and individuals. Bachelor of Science in Health Science is an interdisciplinary degree program that is designed to prepare students for professional careers in private and public health services that aim to enhance the health status of individuals and populations. The program combines the knowledge and skills from multiple disciplines to provide rigorous training in health science with course work and experiential learning in general health science, gerontology and health informatics. The program includes a set of core courses and several elective courses. Our approaches include in-class discussions, group work, case studies, service, experiential, and online learning.

Along with an option to complete a general BS in Health Science degree program, students can also choose to complete a BS in Health Science with an Emphasis in Gerontology, or a BS in Health Science with an Emphasis in Health Informatics. Students can also choose to complete one of the emphases without completing the entire Bachelor of Science in Health Science degree program. They will then receive a certificate instead of a diploma upon successful completion of the requirements for the certificate program.

Gerontology is the study of human lifespan which explores the biological, psychological, sociological, political, philosophical, medical and financial aspects of

adult life. Health Informatics is an emerging specialization in the healthcare industry that joins the disciplines of information technology, communications, and health care. Together with the general health science option, they provide students with the increased knowledge and scientific advancements that contribute to a more effective health care industry and public health systems, leading to a more productive and extended human lifespan.

The healthcare industry is 1/6th of the entire US economy. The workforce demand for healthcare workers is growing rapidly. In information distributed at the 2010 Academic Planning Summit sponsored by the CSU Office of the Chancellor, 'health care and social assistance' was ranked the highest among all employment sectors in the projected number of new jobs anticipated between 2008 and 2018. Currently, we have four academic programs at CI aiming at producing graduates for the healthcare industry: BS in Nursing, RN to BSN, BS in Biology with an Emphasis in Clinical Laboratory Science and BS in Biology with an Emphasis in Medical Imaging. Each year, we have hundreds of students unable to gain entry into the above programs, especially the BS in Nursing program, due to program capacity and have to leave for healthcare related programs elsewhere. Consequently, the workforce development needs in the region are not met.

The current health care system in the US is focused on acute or in-patient care and treatment. It is costly and it depends on professional and insurance industry prerogative. It relies on individual professionals who provide traditional practice. Information is used as record and patient passivity is the rule. Over the next decades, the US health care system will change itself. These aforementioned dimensions of the US health care system will not disappear entirely, but they will increasingly be modulated to chronic prevention and management, ambulatory care at homes and in local communities, rendered by teams of health care workers. The future health care workers will be cost competitive and consumer responsive. They will provide evidence-based practice and use information as tools for health management. These health care workers will be engaged with their health customers and patients and will be accountable to their services.

By 2050, nearly 2 billion people worldwide will be age 60 or older. In the coming decade, Seventy-six million Americans who were born between 1945 and 1964 (Baby Boomers) will join the aging population in the US, representing a cohort that is significant on account of its size alone. Baby Boomers control over 80% of personal financial assets and more than 50% of discretionary spending power. They are responsible for more than half of all consumer spending, buy 77% of all prescription drugs, 61% of OTC medication, and spend $500 million on vacations per year and 80% of all leisure travel. Hence, the impact of this population on the US economy is enormous. In the coming years, the vast and complex medical information will be modernized into digital format and will be used by the health care industry and public health systems to provide effective care and management of individuals and populations. Both fields of gerontology and health informatics will be in dire need of well-educated and trained individuals to join the workforce to meet the staggering demand in the nation.

In light of the changing health care landscape, CI plans to offer a BS in Health Science program aiming at the current and future needs in the industry. The design of the curriculum is based on extensive study of the health care industry and input from our advisory board members and the experts in community health organizations. The

target populations of the degree program are students who are interested in joining the service workforce provided by the health care industry and community health and public health organizations.

The degree program features a general health science program as well as two emphases on Health Informatics and Gerontology, representing the two high growth areas in the region, the state and the nation. All students in the degree program will be required to engage in community health practices as their service learning component and will be required to complete a senior capstone project before graduation. The curriculum is highly interdisciplinary, utilizing courses from multiple disciplines and meshing them into the degree program.

b. Proposed catalog description, including program description, degree requirements, and admission requirements.

Program Description

Bachelor of Science in Health Science is an interdisciplinary degree program that is designed to prepare students for professional careers in private and public health services that aim to enhance the health status of individuals and populations. The program combines the knowledge and skills from multiple disciplines to provide rigorous training in health science with course work and experiential learning in general health science, gerontology and health informatics. The program includes a set of core courses and several elective courses. Our approaches include class work, service, experiential, and online learning. Along with an option to complete a general BS in Health Science degree program, students can also choose to complete a BS in Health Science with an Emphasis in Gerontology, or a BS in Health Science with an Emphasis in Health Informatics. Students can also choose to complete one of the emphases without completing the entire Bachelor of Science in Health Science degree program. They will then receive a certificate instead of a diploma upon successful completion of the requirements for the certificate program.

Gerontology is the study of human lifespan which explores the biological, psychological, sociological, political, philosophical, medical and financial aspects of adult life. Health Informatics is an emerging specialization in the healthcare industry that joins the disciplines of information technology, communications, and health care. Together with the general health science option, they provide students with the increased knowledge and scientific advancements that contribute to a more effective health care industry, leading to a more productive and extended human lifespan.

Degree Requirements

Bachelor of Science in Health Science (total 120 units)

Common Core (39)
HLTH 100 Medical Terminology (1)
HLTH 101 Overview of Health Care Industry and Its Delivery (3)
HLTH 102 Community Health Organizations and Their Functions (2)
SOC 303 Statistical Applications in the Social Sciences (4)
BIOL 203 Quantitative Methods for Biology (3, B3, B4) or MATH/PSY 202 *Biostatistics (3, B3) taken as pre-nursing student at CI may be accepted for Health Science major in lieu of SOC 303.*
CHEM 110 Chemistry of Life (4, B1)

BIOL 210 Human Anatomy and Physiology I (4)
BIOL 211 Human Anatomy and Physiology II (4)
HLTH 300 Nutrition, Exercise and Wellness (3, Prerequisite: CHEM 110)
HLTH 301 Introduction to Public Health Admin (3, Prerequisite: HLTH 101 and 102)
NRS/PSY/SOC 348 Healthy Aging (3, D, UIDGE)
HLTH 302 Introduction to Health Care Informatics (3, Prerequisites: HLTH 100 and 101)

Complete 2 units of the following (2)
HLTH 492 Service learning in Health Science (1-2, Prerequisite: HLTH 301)
HLTH 494 Independent Research (1-2, Prerequisites: HLTH 100, 301 and SOC 303)
HLTH 497 Directed Study (1-2, Prerequisites: HLTH 100, 301, and SOC 303)
and
HLTH 499 Senior Capstone Project (3, Prerequisites: HLTH 100, 301, and SOC 303)

Additional Required Supporting GE (21)

SOC 100 Introduction to Sociology or SOC 201 Social Problems (3, D)
PSY 213 Developmental Psychology (3, D, E)
COMM 210 Interpersonal Communication or COMM 101 Public Speaking (3, A1)
ANTH 443 Medical Anthropology: Cross-cultural Perspectives on Health/Healing (3, D, UIDGE)
MGT/BIOL 326 Scientific and Professional Ethics (3, D)
BIOL 333 Emerging Public Health Issues (3, B2, E, UIDGE)
BIOL 432 Principles of Epidemiology and Environmental Health (3, D, UIDGE)

Additional GE and American Institutions Courses (2&)

General Education not included in the major (21 units, categories A2, A3, B3 or B4, C1, C2, C3a, C3b)
Six of the nine units of upper-division interdisciplinary General Education are included in the requirements for the major.
American Institutions (6)

Electives (15)

Select 5 courses from the following list:
BUS/ECON/SOC 336 Social Entrepreneurship (3, D, UUIDGE)
CHS 343 Health Issues in the Latina/o Community (3, C3b, UUIDGE)
COMM 333 Nonprofit Organizations (3, D, UUIDGE)
COMM/NRS 441 Health Communication (3, D, UUIDGE)
COMP 447 Societal Issues in Computing (3, B4, D. UUIDGE)
COMP/PSY 449 Human-Computer Interaction (3, B4, UUIDGE)
COMP 469 Artificial Intelligence/Neural Networks (3)
ENGL 330 Interdisciplinary Writing (3, A2 UUIDGE)
HLTH 322 Health Issues in Education (2, E)
MGT 307 Management of Organizations (3)
MGT 325 Entrepreneurial Management (3)
MGT 426 Management of Healthcare Organization (3)
MGT 471 Project Management (3)

NRS/PSY 342 Complementary and Alternative Health (3, C3b, E UUIDGE)
POLS 325 American Public Policy (3)
SOC 310 Research Methods in Sociology (4)
SOC 352 Social Movements (3)
SOC 360 Race and Ethnicity (3)
SOC 374 Sociology of Organizations (3)

Free Electives (18)
Choose from special courses from the emphases and or from any listed upper-division courses at the university.

Bachelor of Science in Health Science with an Emphasis in Gerontology (total 120 units)
Common Core (39)
Additional Required Supporting GE (21)
Additional GE and American Institutions Courses (27)
Same as in BS in Health Science

Gerontology Emphasis (24)*
BIOL 305 Biology of Human Aging (3, Prerequisites: BIOL 211)
HLTH 303 Pharmacology and Aging Adults (3, Prerequisites: HLTH 100, CHEM 110, BIOL 305)
HLTH/POLS 304 Aging Policy and Politics (3, Prerequisites: HLTH 102, 301)
HLTH 305 Therapeutic Recreation for Older Adults (3, Prerequisites: HLTH 100, 102 and BIOL 305)
HLTH 306 Mental Health and Aging (3, Prerequisites: BIOL 305)
PSY 375 Psychology of Health Counseling (3, Prerequisites: PSY 213)
HLTH 400 Health Assessment and Case Management of Older Adults (3, Prerequisites: BIOL 305, HLTH 100, SOC 303 and HLTH /POLS 304)
HLTH 401 Management of Long Term Care Facilities and Programs (3, Prerequisites: HLTH 101, 102 and HLTH /POLS 304)

Electives (9)
Complete at least 9 units of courses. At least two courses should be selected from the elective courses under the general option of the Health Science degree program.

Bachelor of Science in Health Science with an Emphasis in Health Informatics (total 120 units)
Common Core (39)
Additional Required Supporting GE (21)
Additional GE and American Institutions Courses (27)
Same as in BS in Health Science

Health Informatics Emphasis (24)*
IT 152 Programming for Health Informatics (4)
HLTH 200 Diagnostic and Procedural Coding (2, Prerequisite: HLTH 100)
MATH 301 Discrete Mathematics for IT (3)
MIS 310 Management Information Systems (3)
IT 403 Advanced Programming for Health Informatics (3, Prerequisite: IT 152)

IT 420 Database Theory and Design for IT (3, Prerequisite: MATH 300 or 301)
IT 424 Computer System Security for IT (3, Prerequisites: IT 151 or IT 152)
IT 428 Computer Networks for Health Informatics (3, Prerequisite: IT 152)

Electives (9)
Complete at least 9 units of courses. At least two courses should be selected from the elective courses under the general option of the Health Science degree program.

*: The Emphases could be completed as independent Certificate programs.

Admission Requirements

Requirements for admission to CSU Channel Islands (CI) are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Code of Regulations. Complete information is available at www.csumentor.edu/planning/.

Electronic versions of the CSU undergraduate and graduate applications are accessible online at http://www.csumentor.edu. The CSU Mentor system allows students to browse through general information about the CSU's 23 campuses, view multimedia campus presentations, send and receive electronic responses to specific questions, and apply for admission and financial aid.

Applying online via www.csumentor.edu is expected unless electronic submission is impossible. Applications in "hard copy" form may be obtained online via www.csumentor.edu as a portable data format (PDF).

3. Curriculum

a. Goals for the (1) program and (2) student learning outcomes. Program goals are broad statements about what the program is intended to achieve, including what kinds of graduates will be produced. Student learning outcomes are more specific and assessable statements that are related to the program goals but that more narrowly identify what students will know and be able to do upon successful completion of the program.

(1). Program Goals
Prepare students for graduate programs or professional careers in private and public health services that aim to enhance the health status of individuals and populations.

(2). Student Learning Outcomes
Upon completing the program, BS Health Science students will be able to:

- Identify issues and trends in health care delivery systems and public health areas and implement solutions to better health care services to individuals and ethnically and culturally diverse populations.
- Analyze the nature, transmission, pathologic processes, prevention, and control of human diseases from a public health perspective.
- Demonstrate an understanding of health care information systems that affect service delivery with agencies and in the public.
- Demonstrate an understanding of the aging population and the ability to apply knowledge and skills in gerontology in fields from disease prevention and life extension to policy planning and social reform.

- Apply research skills in organizational and personal health settings, and in health education practice.
- Integrate and apply current management concepts and skills in areas of health care personnel, organizations and agencies, emphasizing problem-solving techniques and group communication skills.

b. Plans for assessing program goals and student learning outcomes. Some planners find it helpful to develop matrices in which student learning outcomes and required courses are mapped, indicating where content related to the learning outcomes is introduced, reinforced, and practiced at an advanced level in required courses.

See Attachment.

c. Total number of units required for the major; total number of units required to graduate including any concentrations, options, general education, American Institutions ("Statutory Requirement"), and electives.

120 units for the BS in Health Science degree program; 120 units for the BS in Health Science with an Emphasis in Gerontology degree program; 120 units for the BS in Health Science with an Emphasis in Health Informatics degree program; and 24 units for the Gerontology and the Health Informatics Certificate programs.

d. Include a justification for any baccalaureate program that requires more than 120-semester units.

Not Applicable.

e. If any formal options, concentrations, or special emphases are planned under the proposed major, identify and explain fully. Optional: You may propose a CSU degree program code and CIP code for each concentration that you would like to report separately from the major program, if the option is approximately equivalent to a degree currently listed on the CSU application-booklet degree program table. If you do not find an appropriate CSU degree program code at: http://www.calstate.edu/app/documents/HEGIS-CIP2000_102406.xls , you can search CIP 2000 at http://nces.ed.gov/pubs2002/cip2000/ to help identify the code that best matches the proposed curriculum.

There are two emphases planned under the proposed major: Gerontology and Health Informatics. See above for detailed information.

f. A list of all courses *required* for the major, specifying catalog number, *title*, units of credit, and prerequisites or co-requisites (thereby ensuring that there are no "hidden" prerequisites that would drive the total units required to graduate beyond the total reported in 4c above).

Required Common Core Courses for BS in Health Science:
HLTH 100 Medical Terminology (1)
HLTH 101 Overview of Health Care Industry and Its Delivery (3)
HLTH 102 Community Health Organizations and Their Functions (2)
SOC 303 Statistical Applications in the Social Sciences (4)
BIOL 203 Quantitative Methods for Biology (3, B3, B4) or MATH/PSY 202 Biostatistics (3, B3) taken as pre-nursing student at CI may be accepted For Health Science major in lieu of SOC 303.
CHEM 110 Chemistry of Life (4, B1)

BIOL 210 Human Anatomy and Physiology I (4)
BIOL 211 Human Anatomy and Physiology II (4, Prerequisite: 210)
HLTH 300 Nutrition, Exercise and Wellness (3, Prerequisite: CHEM 110)
HLTH 301 Introduction to Public Health Administration (3, Prerequisites: HLTH 102 and 102)
HLTH 302 Introduction to Health Care Informatics (3, Prerequisites: HLTH 100 and 101)
NRS/PSY/SOC 348 Healthy Aging (3, D, UUIDGE)

Complete 2 units of the following (2)
HLTH 492 Service Learning in Health Science (1-2, Prerequisite: HLTH 301)
HLTH 494 Independent Research (1-2, Prerequisites: HLTH 100, 301, and SOC 303
HLTH 497 Directed Study (1-2, Prerequisites: HLTH 100, 301, and SOC 303
and
HLTH 499 Senior Capstone Project (3, Prerequisites: HLTH 100, 301 and SOC 303

Additional Required Supporting GE
SOC 100 Introduction to Sociology or SOC 201 Social Problems (3, D)
PSY 213 Developmental Psychology (3, D, E)
COMM 210 Interpersonal Communication or COMM 101 Public Speaking (3, A1)
ANTH 443 Medical Anthropology: Cross-cultural Perspectives on Health/Healing (3, D, UIDGE)
MGT/BIOL 326 Scientific and Professional Ethics (3, D)
BIOL 333 Emerging Public Health Issues (3, B2, E, UIDGE)
BIOL 432 Principles of Epidemiology and Environmental Health (3, D, UIDGE)

Additional Required Courses for the Gerontology Emphasis
BIOL 305 Biology of Human Aging (3, Prerequisites: BIOL 211)
HLTH 303 Pharmacology and Aging Adults (3, Prerequisites: HLTH 100, CHEM 110, BIOL 305)
HLTH/POLS 304 Aging Policy and Politics (3, Prerequisites: HLTH 102, 301)
HLTH 305 Therapeutic Recreation for Older Adults (3, Prerequisites: HLTH 100, 102 and BIOL 305)
HLTH 306 Mental Health and Aging (3, Prerequisites: BIOL 305)
PSY 375 Psychology of Health Counseling (3, Prerequisites: PSY 213)
HLTH 400 Health Assessment and Case Management of Older Adults (3, Prerequisites: BIOL 305, HLTH 100)
HLTH 401 Management of Long Term Care Facilities and Programs (3, Prerequisites: HLTH 101, 102 and HLTH /POLS 304)

Additional Required Courses for the Health Informatics Emphasis
IT 152 Programming for Health Informatics (4, Prerequisites: HLTH 100)
HLTH 200 Diagnostic and Procedural Coding (2, Prerequisite: HLTH 100)
MATH 301 Discrete Mathematics for IT (3)
MIS 310 Management Information Systems (3)
IT 403 Advanced Programming for Health Informatics (3, Prerequisite: IT 152)
IT 420 Database Theory and Design for IT (3, Prerequisite: MATH 300 or 301)
IT 424 Computer System Security for IT (3, Prerequisites: IT 151 or IT 152)
IT 428 Computer Networks for Health Informatics (3, Prerequisite: IT 152)

g. List of *elective* courses that can be used to satisfy requirements for the major, specifying catalog number, title, units of credit, and prerequisites or co-requisites. Include proposed catalog descriptions of all new courses. For graduate program proposals, identify whether each course is a graduate or undergraduate offering.

Note: With regard to Sections 4f and 4g, a proposed program should take advantage of courses already offered in other departments when subject matter would have considerable overlapping content.

Elective Courses for BS in Health Science Program

Select 5 courses from the following list:

BUS/ECON/SOC 336 Social Entrepreneurship (3, D, UIDGE)

CHS 343 Health Issues in the Latina/o Community (3, C3b, UIDGE)

COMM 333 Nonprofit Organizations (3, D, UIDGE)

COMM/NRS 441 Health Communication (3, D, UIDGE)
COMP 447 Societal Issues in Computing (3, B4, D. UIDGE)
COMP/PSY 449 Human-Computer Interaction (3, B4, UIDGE)
COMP 469 Artificial Intelligence/Neural Networks (3)

ENGL 330 Interdisciplinary Writing (3, A2 UIDGE)

HLTH 322 Health Issues in Education (2, E)
MGT Management of Organizations (3)
MGT 325 Entrepreneurial Management (3)

MGT 426 Management of Healthcare Organization (3) prerq: MGT307

MGT 471 Project Management (3)

NRS/PSY 342 Complementary and Alternative Health (3, C3b, E UIDGE)
POLS 325 American Public Policy (3)
SOC 310 Research Methods in Sociology (4)

SOC 352 Social Movements (3)

SOC 360 Race and Ethnicity (3)

SOC 374 Sociology of Organizations (3)

Free Electives for BS in Health Science Program (18)

Choose from special courses from the emphases and or from any listed upper-division courses at the university.

h. List of any new courses that are: (1) needed to initiate the program and (2) needed during the first two years after implementation. Only include proposed catalog descriptions for new courses. For graduate program proposals, identify whether each course is a graduate-level or undergraduate-level offering.

(1) New Courses Needed to Initiate the Program:

During the first year, the following new courses need to be developed for incoming freshman students to initiate the program: HLTH 100, 102, 102 and 200;
The following new courses need to be developed for the transfer students during the first year, including HLTH 300, 301, 302, 303, BIOL 305 and IT 152.

(2) New Courses Needed During the First Two Years after Implementation:

HLTH 304, 305, 306, 400, 401, 492, 494, 497, 499 and PSY 375.

i. Attach a proposed course-offering plan for the first three years of program implementation, indicating, where possible, likely faculty teaching assignments.
See attached.

j. Admission criteria, including prerequisite coursework.

Freshman admission criteria for the Health Science major are the same as those for general University admission, including having graduated from high school, having a qualifiable minimum eligibility index score, and having completed with grades of C or better each of the courses in the college preparatory subject requirements.

Transfer admission criteria are also the same as those for general University admission, including having a GPA of at least 2.0 in all transferable units attempted and good standing at the last college or university attended.

k. Criteria for student continuation in the program.

Criteria for continuation in the Health Science major are the same as those for undergraduate students in the University generally. The degree does not have additional minimum GPA requirements in major courses that students must achieve in order to remain in the program

l. Planned provisions for articulation of the proposed major with community college programs.

Regional community colleges offer a number of lower division courses in health science, health education, and health information technology. Through the University's articulation office, CI plans to articulate appropriate courses from these fields to satisfy lower division requirements in Health Science. For instance, Moorpark, Oxnard and Ventura Colleges offer HS 19 Medical Terminology, which likely will articulate with our proposed HLTH 100. These colleges also offer courses in health and wellness, health care ethics, health and society, and health information management, which will support lower division preparation for transfer students.

m. If there is a Lower-Division Transfer Pattern (LDTP) for this major, indicate the relationship between the LDTP and the requirements presented in this proposal. Information on LDTP is available at: http://www.calstate.edu/AcadAff/ldtp.shtml

N/A

n. Advising "roadmaps" that have been developed for the major.

See attached Roadmaps.

o. Provision for meeting accreditation requirements, if applicable, and anticipated date of accreditation request.

The University does not plan to seek specialized accreditation in Health Science.

Accreditation Note:

Fast-track proposals

Fast-track proposals cannot be subject to specialized accreditation by an agency that is a member of the Association of Specialized and Professional Accreditors unless the proposed program is already offered as an authorized option or concentration that is accredited by an appropriate specialized accrediting agency.

4. Need for the Proposed Degree Major Program

a. List of other California State University campuses currently offering or projecting the proposed degree major program; list of neighboring institutions, public and private, currently offering the proposed degree major program.

Currently, 13 CSU campuses offer BS in Health Science, Health Education degree programs, including Chico, Dominguez Hills, East Bay, Fresno, Fullerton, Long Beach, Los Angeles, Northridge, Sacramento, San Bernardino, San Diego, San Francisco, and San Jose. Among these, Chico, Los Angeles, San Bernardino, San Jose, San Marcos offer an Option in Gerontology whereas Sacramento offers a BS in Gerontology and San Diego offers a BA in Gerontology. No campus offers a Health Informatics program. Since CSU Channel Islands is the only 4-year comprehensive public university in Ventura County, CI will be the only campus plan to offer the proposed degree program.

b. Differences between the proposed program and programs listed in Section 5a above.

CI will be the only one that will offer a BS in Health Science degree program that will provide both Gerontology and Health Informatics emphases to students at the undergraduate level.

c. List of other curricula currently offered by the campus that are closely related to the proposed program.

Not applicable.

d. Community participation, if any, in the planning process. This may include prospective employers of graduates.

In 2009, representative members from the health care industry, community health organizations and educational institutions have been added to our existing advisory board and the members have provided valuable input in the development of this proposed degree program. The following is the list of the advisory board that is related to health care programs:

John Bibby, MBA, SPHR
Vice President
Human Resources
St. John's Regional Medical Center
St. John's Pleasant Valley Hospital

Edward H. O'Neil, PhD, MPA, FAAN
Professor and Director
Center for the Health Professions
UCSF

Sue Tatangelo, MA
Chief Resource Officer
Camarillo Health Care District

Ming K. Heng, MD., FRACP, FAHA
Clinical Professor of Medicine, UCLA/Consulting Cardiologist
Board Certified Internal Medicine and Cardiovascular Disease
Centers for Family Health
Community Memorial Health System

Robert Gonzalez, MD
Medical Director
Ventura County Healthcare Agency

Patricia Fausset, PhD
Director of the Central Coast Biotechnology Center
Department of Sciences
Ventura College

Cheryl Moore
Executive Director
Workforce Investment Board of Ventura County

e. Applicable workforce demand projections and other relevant data.

Note: Data Sources for Demonstrating Evidence of Need

APP Resources Web http://www.calstate.edu/app/resources.shtml

US Department of Labor, Bureau of Labor Statistics

California Labor Market Information

Labor Forecast

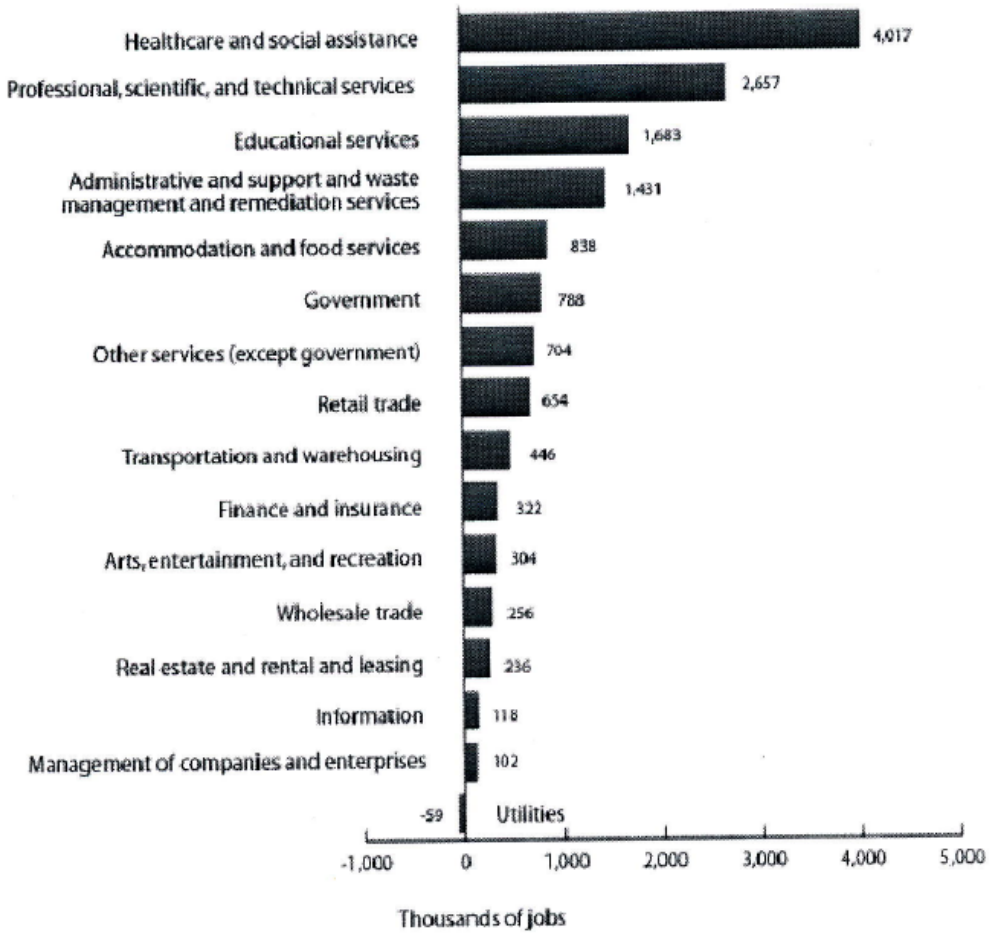
Perhaps most significantly, the proposed Health Science degree will serve to attract students from the region who are intent on pursuing a baccalaureate degree and who have a particular interest in the health field. It complements the University's existing BS in Nursing and expands the curriculum into an important area of undergraduate education. From the workforce perspective, this is important because of the state and region's documented need for increased numbers of baccalaureate-educated citizens. The State of California Employment Development Department's (EDD) "Projections of Employment by Industry and Occupation: 2008-2018" states that:

"The top 50 fastest growing occupations are all expected to grow at a rate of 20.5% or more, compared to the overall 9.7% growth rated projected for the State. . . . Nearly half of these occupations require a bachelor's degree or higher." The report goes on to state that "occupations on this list (of the top 50 fastest growing) are concentrated in the health care field, mirroring the continued demand in health care industry employment, largely due to a growing and aging population." (www.labormarketinfo.edd.ca.gov)

Matching specific state and federal employment categories to the BS Health Science is difficult, but indicative of expected demand for graduates in the health field are projections by the California's EDD showing employment growth of 25.7% for "health care support occupations," 23.0% for "health care practitioners and technical occupations," and 21.9% for "medical records."

Finally, the US Bureau of Labor Statistics similarly identifies the health science field as enjoying large growth nationally. In a graph distributed at the CSU Academic Planning Summit in Spring, 2010, "healthcare and social assistance" is ranked first in wage and salary employment grow. (See below).

Chart 5. **Numeric change in wage and salary employment in service-providing industries, 2008–18 (projected)**



Source: BLS National Employment Matrix

In the related categories of health educators, social and human service assistants, and medical records and health information technicians, BLS project 'faster' or 'much faster than average' employment grow through 2018. (www.bls.gov)

f. If the program was proposed to meet society's need for the advancement of knowledge, please specify the need and explain how the program meets that need.

The Bachelor of Science in Health Science is designed to foster the ability to apply knowledge and skills learned from the program in the service industry in health care and community health organizations. The Program is meeting that need by producing graduates educated with knowledge and skills in an interdisciplinary field of health science and providing opportunities for experiential learning and application of the knowledge and skills in real-world projects through the program.

5. Student Demand

a. Compelling evidence of student interest in enrolling in the proposed program. Types of evidence vary and may include national, statewide, and professional employment forecasts and surveys; petitions; lists of related associate degree programs at feeder community colleges; reports from community college transfer centers; and enrollments from feeder baccalaureate programs, for example.

The degree of interests in health-related programs is best revealed in the number of applications and the actual enrollment of the Bachelor of Science in Nursing program. In the last three years, the number of applications for the BS Nursing degree program has increased from 653 for F07, 974 for F08, to over 1000 for F09, whereas the actual numbers of students admitted into the BSN degree program have been 55, 22 and 15 during F07, F08 and F09, respectively due to the low FTE target allocated to CI by the Chancellor's Office. With the impaction of the BSN program and the lack of other health-related programs at CI, most of these students who have applied to the BSN program have been turned away and their demand is not met. There are many other students from the local community colleges who are interested in health science related programs simply apply to universities out of the region to seek health-related programs.

b. Issues of access considered when planning this program.

The proposed degree program is to fill a void in the Ventura County region where no other university is currently offering such a program. The entire proposed program requires a total of 120 units. Full-time students should be able to complete the degree program within 4 years.

c. Professional uses of the proposed degree program.

The program prepares graduates with comprehensive knowledge and skills along with sophisticated expertise in health science for a diverse set of vocations, including the health care industry, public and community health organizations. The program also prepares graduates who wish to enter professional or graduate programs in public health fields.

d. The expected number of majors in the year of initiation and three years and five years thereafter. The expected number of graduates in the year of initiation, and three years and five years thereafter.

Expected number of majors:
Year 1 - 30
Year 3 - 60
Year 5 - 100

Expected number of graduates:
Year 1 - 0
Year 3 - 15
Year 5 - 50

6. Existing Support Resources for the Proposed Degree Major Program

Note: Sections 6 and 7 should be prepared in consultation with the campus administrators responsible for faculty staffing and instructional facilities allocation and planning. A statement from the responsible administrator(s) should be attached to the proposal assuring that such consultation has taken place.

a. Faculty who would teach in the program, indicating rank, appointment status, highest degree earned, date and field of highest degree, professional experience, and affiliations with other campus programs. For master's degrees, include faculty publications or curriculum vitae.

Ching-Hua Wang, MD., PhD, Professor of Immunology and Microbiology
Harley Baker, PhD, Professor of Psychology
A.J. Bieszczad, PhD, Associate Professor of Computer Science
Karen Jensen, PhD, Associate Professor of Nursing, Director of the Nursing Program
William Wagner III, PhD, Professor of Sociology
Daniel Wakelee, PhD, Professor of Political Science
Minder Chen, PhD., Associate Professor of Information Systems

One of the unique features of the proposed BS In Health Science program is its interdisciplinary curriculum, which fits the university Mission that emphasizes interdisciplinarity and meets the current demand in the field of health science. To offer such an interdisciplinary degree program, faculty members from multiple disciplines on campus will contribute to the implementation and instruction for the program. The above faculty members from biology, psychology, computer science, nursing, sociology, political science and business and economics are representative faculty members who will not only oversee the operation of the program as members of a faculty advisory committee for the degree program but will also teach for the program. Their CVs are attached.

b. Space and facilities that would be used in support of the proposed program.

The facilities and space impact of the Health Science program will be seen primarily in added classroom use, for both new HLTH courses and some added sections of existing courses. Potentially, after the program expands, there also will be need for additional lab sections of biology and chemistry. Classroom space is adequate for the new degree, especially since University enrollment planning will incorporate this new degree in future enrollment targets. Construction of North Hall, a large classroom building and faculty office building incorporating both renovations of old state hospital space and new construction began in November 2010, with occupancy slated for Fall 2012.

c. A report provided by the campus Library, detailing resources available to support the program (discussion of subject areas, volume counts, periodical holdings, etc. are appropriate).

The John Spoor Broome library, completed in 2007, has extensive book, periodicals, and database collections in support of the health science degree. Among the databases Broome Library currently has are ScienceDirect, Wiley InterScience journals, LexisNexis Academic, Science Magazine (1997-present), Science Archive, Biology Abstracts, and JSTOR Arts and Sciences Collection. Among its search engines are OAlser database for open access collections, Google Schoalr, and Standford Unviersity's Highwire.

The Library makes extensive use of its interlibrary loan office, to provide students access to books and journal articles at other CSUs and California universities. In addition, the Broome library has numerous media, film, and video materials, available to both faculty and students.

d. Existing academic technology, equipment, and other specialized materials currently available.

Existing academic technology, equipment, and other specialized materials are currently available.

The University enjoys use of a variety of instructional technologies, software programs, wired classrooms, and course management technologies, supported by the Academic Affairs and the Office of Academic and Information Technology.

7. Additional Support Resources Required

Note: If additional support resources will be needed to implement and maintain the program, a statement by the responsible administrator(s) should be attached to the proposal assuring that such resources will be provided.

a. Any special characteristics of the additional faculty or staff support positions needed to implement the proposed program.

A senior level tenure-track faculty member in the health science field needs to be hired in 2012 to carry out preparation to launch the program in 2013. The person needs to have a broad spectrum of educational and practical experiences in the field of health science, who can teach the key required courses in the field, e.g., HLTH 100, 101, 102, 300, and 301 and has prior administrative experience in leading health science degree programs.

In 2013, a full-time faculty member at junior level needs to be hired. The specialty area of this position should be in gerontology/health informatics to provide the expertise in the areas.

b. The amount of additional lecture and/or laboratory space required to initiate and to sustain the program over the next five years. Indicate any additional special facilities that will be required. If the space is under construction, what is the projected occupancy date? If the space is planned, indicate campus-wide priority of the facility, capital outlay program priority, and projected date of occupancy.

As described above, no new specific instructional space is required for implementation of the Health Science, but instead the degree will be housed within

exist classrooms and the new North Hall classroom building, to be completed in fall 2012.

c. A report written in consultation with the campus librarian, indicating any additional library resources needed. Indicate the commitment of the campus either to purchase or borrow through interlibrary loan these additional resources.

The library suggests the following:

$5000.00 annually Upgrade from Pubmed (index only) to MEDLINE® with Full Text, since it has key full-text for gerontology and health informatics

$1800.00 annually Ageline database for discovery, since students could then make use of full-text in journal repositories.

$4700.00 annually Taylor & Francis public health and social care.

Proquest Nursing and Allied Health Source which provides abstracting and indexing for more than 850 titles, with over 715 titles in full-text, plus more than 12,000 full text dissertations representing the most rigorous scholarship in nursing and related fields.

The above costs will be covered by the general fund and the funds from Extended University due to the nature of this degree completion program.

d. Additional academic technology, equipment, or specialized materials that will be (1) needed to implement the program and (2) needed during the first two years after initiation. Indicate the source of funds and priority to secure these resource needs.

Current academic technology and equipment is adequate for initiation of the degree.

EXHIBIT A- Assessment Plan for the Bachelor of Science Degree in Health Science

Mission Statement

To provide an undergraduate Bachelor of Science degree program in Health Science which provides students with an interdisciplinary and multidisciplinary foundation in health science.

Program Goals

1. Offer a BS in Health Science degree program to help students understand the multidisciplinary factors affecting health and improving wellness of populations and individuals;

2. Prepare students for professional careers in private and public health services that aim to enhance the health status of individuals and populations.

Student Learning Outcomes

Upon completing the program, BS Health Science students will be able to:

1. Identify issues and trends in health care delivery systems and public health areas and implement solutions to better health care services to individuals and ethnically and culturally diverse populations.

2. Analyze the nature, transmission, pathologic processes, prevention, and control of human diseases from a public health perspective.

3. Demonstrate an understanding of health care information systems that affect service delivery with agencies and in the public.

4. Demonstrate an understanding of the aging population and the ability to apply knowledge and skills in gerontology in fields from disease prevention and life extension to policy planning and social reform.

5. Apply research skills in organizational and personal health settings, and in health education practice.

6. Integrate and apply current management concepts and skills in areas of health care personnel, organizations and agencies, emphasizing problem-solving techniques and group communication skills.

The following three tables contain alignment of program objectives with required curriculum:

TABLE 1. ALIGNMENT OF PROGRAM OBJECTIVES WITH REQUIRED CURRICULUM

Program objectives	**Required Courses for both emphases***											
	HLTH 100	HLTH 101	HLTH 102	SOC 303	CHEM 110	BIOL 210/ 211	HLTH 300	HLTH 301	NRS/ PSY/ SOC 348	HLTH 302	HLTH 492/ 494/ 497	HLTH 499
1		exam	exam					exam				
2				Exam, project report	exam	exam						Project report
3	exam									exam		
4							exam		Exam papers			
5				Exam, Project report							Project report	Project report
6											Project report	Project report

* The courses listed are required for both the Health Informatics emphasis and the Gerontology emphasis.

TABLE 2. ALIGNMENT OF PROGRAM OBJECTIVES WITH REQUIRED CURRICULUM FOR THE HEALTH INFORMATICS EMPHASIS

Program objectives	**Required Courses for the emphasis**							
	IT 152	HLTH 200	MATH 301	MIS 310	IT 402	IT 420	IT 424	IT 429
1								
2								
3	exam	exam			exam	Exam Project report	Exam Project report	Exam Project report
4								
5			exam					
6				Exam Project report	Exam Project report			

TABLE 3. ALIGNMENT OF PROGRAM OBJECTIVES WITH REQUIRED CURRICULUM FOR THE

GERONTOLOGY EMPHASIS								
Program objectives	**Required Courses for the emphasis**							
	BIOL 305	HLTH 303	HLTH/ POLS 304	HLTH 305	HLTH 306	PSY 375	HLTH 400	HLTH 401
1			Exam Paper	Exam Project report	exam	Exam paper	Exam Project report	Exam Project report
2	exam	exam			paper	Exam paper	Exam Project report	Exam Project report
3								
4	exam	exam	Exam Paper	Exam Project report	Exam paper	Exam paper	Exam Project report	Exam Project report
5						Exam paper	Exam Project report	Exam Project report
6							Exam Project report	Exam Project report

EXHIBIT B – BS Health Science Projected Course Offerings

Projected Course Offerings in B. S in Health Science Program
(may be adjusted pending enrollment and budgetary concerns)

Year.Term	Courses Offered by the Program		
Year 1.Fall	HLTH 100	Medical Terminology	1
	HLTH 101	Overview of Health Care Industry and Its Delivery	3
	CHEM 110	Chemistry of Life	4
	SOC 100 or 201	Introduction to Sociology or Social Problems	3
Year 1.Spring	HLTH 102	Community Health Organizations and Their Functions	2
	PSY 213	Developmental Psychology	3
	COMM 210 or 101	Interpersonal Communication or Public Speaking	3
	MGT/BIOL 326	Scientific and Professional Ethics	3
Year 2.Fall	BIOL 210	Human Anatomy and Physiology I	4
	HLTH 300	Nutrition, Exercise and Wellness	3
	HLTH 301	Introduction to Public Health Administration	3
	IT 152	Programming for Health Informatics	4
	MATH 301	Discrete Mathematics for IT	3
Year 2.Spring	BIOL 211	Human Anatomy and Physiology II	4
	NRS/PSY/SOC 348	Healthy Aging	3
	HLTH 302	Introduction to Health Care Informatics	3
	HLTH 200	Diagnostic and Procedural Coding	2
	HLTH/POLS 304	Aging Policy and Politics	3
Year 3.Fall	SOC 303	Statistical Applications in the Social Sciences	4
	BIOL 333	Emerging Public Health Issues	3
	ANTH 443	Medical Anthropology: Cross-cultural Persp on Health/Healing	3
	BIOL 305	Biology of Human Aging	3
Year 3.Spring	BIOL 432	Principles of Epidemiology and Env Health	3
	MIS 310	Management Information Systems	3
	HLTH 303	Pharmacology and Aging Adults	3
	HLTH 305	Therapeutic Recreation for Older Adults	3
	Elective in the Major		3
	Elective in the Major		3
	Elective in the Major		3
Year 4.Fall	HLTH 492/494/497	Service Learning in Health Science/Independent Research/ Directed Study	2
	IT 402	Advanced IT Programming	3
	IT 420	Database Theory and Design for IT	3
	HLTH 306	Mental Health and Aging	3
	PSY 375	Psychology of Health Counseling	3
	Elective in the Major		3
	Elective in the Major		3
Year 4.Spring	HLTH 499	Senior Capstone Project	3
	IT 424	Computer System Security for IT	3
	IT 429	Computer Networks for IT	3
	HLTH 400	Health Assessment and Case Management of Older Adults	3
	HLTH 401	Management of Long Term Care Facilities and Programs	3
	Elective in the Major		3

Additional GE and Title V courses are offered by other programs every term.

EXHIBIT C- Road Maps for BS in Health Science

Road Map for BS in Health Science - General Option

Year.Term	Course No.	Course Title	Units	
Year 1. Fall	HLTH 100	Medical Terminology	1	
	HLTH 101	Overview of Health Care Industry and Its Delivery	3	
	GE course		3	7
Year 1. Winter	CHEM 110	Chemistry of Life	4	
	GE course		3	7
Year1. Spring	HLTH 102	Community Health Organizations and Their Functions	2	
	Title V		3	
	GE course		3	8
Year 1. Summer	PSY 213	Developmental Psychology	3	
	GE course		3	6
Year 2.Fall	BIOL 210	Human Anatomy and Physiology I	4	
	GE course		3	7
Year 2.Winter	SOC 100 or 201	Introduction to Sociology or Social Problems	3	
	GE course		3	
	Title V		3	9
Year 2.Spring	BIOL 211	Human Anatomy and Physiology II	4	
	Free Elective		3	7
Year 2.Summer	Free Elective		3	
	COMM 210 or 101	Interpersonal Communication or Public Speaking	3	
	GE course		3	9
Year 3.Fall	SOC 303	Statistical Applications in the Social Sciences	4	
	HLTH 301	Introduction to Public Health Administration	3	7
Year 3.Winter	NRS/PSY/SOC 348	Healthy Aging	3	
	HLTH 302	Introduction to Health Care Informatics	3	
	HLTH 300	Nutrition, Exercise and Wellness	3	9
Year 3.Spring	BIOL 432	Principles of Epidemiology and Env Health	3	
	Elective in the Major		3	6
Year 3. Summer	Elective in the Major		3	
	Elective in the Major		3	
	ANTH 443	Medical Anthropology: Cross-cultural Persp on Health/Healing	3	9
Year 4.Fall	HLTH 492/494/497	Service Learning in Health Science/Independent Research/		
		Directed Study	2	
	BIOL 333	Emerging Public Health Issues	3	
	Elective in the Major		3	8
Year 4.Winter	Elective in the Major		3	
	MGT/BIOL 326	Scientific and Professional Ethics	3	6
Year 4.Spring	HLTH 499	Senior Capstone Project	3	
	Free Elective		3	
	Free Elective		3	9
Year 4. Summer	Free Elective		3	
	Free Elective		3	6
Total Units			120	120

Road Map for BS in Health Science with an Emphasis in Health Informatics

Year.Term	Course No.	Course Title	Units	
Year 1. Fall	HLTH 100	Medical Terminology	1	
	HLTH 101	Overview of Health Care Industry and Its Delivery	3	
	CHEM 110	Chemistry of Life	4	
	SOC 100 or 201	Introduction to Sociology or Social Problems	3	
	GE course		3	14
Year1. Spring	HLTH 102	Community Health Organizations and Their Functions	2	
	PSY 213	Developmental Psychology	3	
	COMM 210 or 101	Interpersonal Communication or Public Speaking	3	
	MGT/BIOL 326	Scientific and Professional Ethics	3	
	GE course		3	14
Year 2.Fall	BIOL 210	Human Anatomy and Physiology I	4	
	HLTH 300	Nutrition, Exercise and Wellness	3	
	HLTH 301	Introduction to Public Health Administration	3	
	IT 152	Programming for Health Informatics	4	
	MATH 301	Discrete Mathematics for IT	3	17
Year 2.Spring	BIOL 211	Human Anatomy and Physiology II	4	
	NRS/PSY/SOC 348	Healthy Aging	3	
	HLTH 302	Introduction to Health Care Informatics	3	
	HLTH 200	Diagnostic and Procedural Coding	2	
	GE course		3	15
Year 3.Fall	SOC 303	Statistical Applications in the Social Sciences	4	
	BIOL 333	Emerging Public Health Issues	3	
	ANTH 443	Medical Anthropology: Cross-cultural Persp on Health/Healing	3	
	GE course		3	
	Title V		3	16
Year 3.Spring	BIOL 432	Principles of Epidemiology and Env Health	3	
	MIS 310	Management Information Systems	3	
	GE course		3	
	Elective in the Major		3	
	Title V		3	15
Year 4.Fall	HLTH 492/494/497	Service Learning in Health Science/Independent Research/		
		Directed Study	2	
	IT 403	Advanced Programming for Health Informatics	3	
	IT 420	Database Theory and Design for IT	3	
	Elective in the Major		3	
	GE course		3	14
Year 4.Spring	HLTH 499	Senior Capstone Project	3	
	IT 424	Computer System Security for IT	3	
	IT 428	Computer Networks for Health Informatics	3	
	Elective in the Major		3	
	GE course		3	15
Total Units				120

Road Map for BS in Health Science with an Emphasis in Gerontology

Year.Term	Course No.	Course Title	Units	Units/Ter
Year 1. Fall	HLTH 100	Medical Terminology	1	
	HLTH 101	Overview of Health Care Industry and Its Delivery	3	
	CHEM 110	Chemistry of Life	4	
	SOC 100 or 201	Introduction to Sociology or Social Problems	3	
	GE course		3	14
Year1. Spring	HLTH 102	Community Health Organizations and Their Functions	2	
	PSY 213	Developmental Psychology	3	
	COMM 210 or 101	Interpersonal Communication or Public Speaking	3	
	MGT/BIOL 326	Scientific and Professional Ethics	3	
	GE course		3	14
Year 2.Fall	BIOL 210	Human Anatomy and Physiology I	4	
	HLTH 300	Nutrition, Exercise and Wellness	3	
	HLTH 301	Introduction to Public Health Administration	3	
	GE course		3	
	Title V		3	16
Year 2.Spring	BIOL 211	Human Anatomy and Physiology II	4	
	HLTH/POLS 304	Aging Policy and Politics	3	
	HLTH 302	Introduction to Health Care Informatics	3	
	NRS/PSY/SOC 348	Healthy Aging	3	
	GE course		3	16
Year 3.Fall	SOC 303	Statistical Applications in the Social Sciences	4	
	BIOL 333	Emerging Public Health Issues	3	
	ANTH 443	Medical Anthropology: Cross-cultural Persp on Health/Healing	3	
	BIOL 305	Biology of Human Aging	3	
	GE course		3	16
Year 3.Spring	BIOL 432	Principles of Epidemiology and Env Health	3	
	HLTH 303	Pharmacology and Aging Adults	3	
	HLTH 305	Therapeutic Recreation for Older Adults	3	
	Elective in the Major		3	
	Title V		3	15
Year 4.Fall	HLTH 492/494/497	Service Learning in Health Science/Independent Research/		
		Directed Study	2	
	HLTH 306	Mental Health and Aging	3	
	PSY 375	Psychology of Health Counseling	3	
	Elective in the Major		3	
	GE course		3	14
Year 4.Spring	HLTH 499	Senior Capstone Project	3	
	HLTH 400	Health Assessment and Case Management of Older Adults	3	
	HLTH 401	Management of Long Term Care Facilities and Programs	3	
	Elective in the Major		3	
	GE course		3	15
Total Units				120