Florida Board of Governors

Request to Offer a New Degree Program

University of South Florida - Tampa  Fall 2012  Proposed Implementation Date
University Submitting Proposal

College of Arts & Sciences  Dept. of Cell Biology, Microbiology & Molecular Biology
Name of College or School  Name of Department(s)

Health Science  B.S. in Health Science
Academic Specialty or Field  CIP 51.0000, Track 1/7
Complete Name of Degree  (Include Proposed CIP Code)

The submission of this proposal constitutes a commitment by the university that, if the proposal is approved, the necessary financial resources and the criteria for establishing new programs have been met prior to the initiation of the program.

Date Approved by the University Board of Trustees  President  Date
Signature of Chair, Board of Trustees  Date  Vice President for Academic Affairs  Date

Provide headcount (HC) and full-time equivalent (FTE) student estimates of majors for Years 1 through 5. HC and FTE estimates should be identical to those in Table 1. Indicate the program costs for the first and the fifth years of implementation as shown in the appropriate columns in Table 2. Calculate an Educational and General (E&G) cost per FTE for Years 1 and 5 (Total E&G divided by FTE).

<table>
<thead>
<tr>
<th>Implementation Timeframe</th>
<th>Projected Student Enrollment (From Table 1)</th>
<th>Projected Program Costs (From Table 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HC</td>
<td>FTE</td>
</tr>
<tr>
<td>Year 1</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>380</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>585</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>735</td>
<td></td>
</tr>
<tr>
<td>Year 5</td>
<td>885</td>
<td></td>
</tr>
</tbody>
</table>

Revised 4/4/07
INTRODUCTION

I. Program Description and Relationship to System-Level Goals

A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

The University of South Florida Tampa is creating a Bachelor of Science degree in Health Science to replace the existing B.S. in Interdisciplinary Natural Science major in Health Science currently with 585 majors.

Summary:

(a) B.S. degree in Health Science (undergraduate);
(b) Undergraduates pursuing this degree must complete core courses, upper division courses in two cognate areas, currently as proposed 1) Biological Health Science and 2) Social and Behavioral Health Science and a required senior capstone course;
(c) The proposed new degree for this major can be completed in 120 credit hours that includes all foundation of knowledge requirements, exit/capstone requirements, the core curriculum for this major, requirements for both cognate areas, and elective credit hours.

The curriculum includes:

- Foundation of Knowledge requirements: 36 credits
- Capstone Experience: 6 credits
- State Mandated Prerequisites: 34-40 credits
- Upper level courses (Concentration 1)*: 15 credits
- Upper level courses (Concentration 2)*: 15 credits
- General Electives: 10-14 credits

Total=120 credits

Note students may choose 15 credits from two concentrations or 30 credits from one concentration depending on their career goals.
The purpose of this new degree is to provide a large number of students trained in the health sciences to fill the increasing local demand for entry and mid level health care professionals. Some examples of these areas include:

**Medical Information Technology**; Medical records, information technologists, software and internet development.

**Administration**; Hospitals, physicians offices, health service managers.

**Human Resources**; Marketing, public relations, resource management.

**Health Technology**; Pharmaceutical sales and clinical trials, clinical lab managers and associates, medical assistants, technology specialists.

**Healthcare Education**; Patient education, facilitators, community organization.

**Geriatric Care**; Nursing home administrators, social coordinators, counselors, therapists, geriatric program development.

**Social Programs**; Local and national program administration (including social security and medicare), healthcare specialized social workers and counselors, policy development.

Students graduating from USF with this degree may enter the workforce or continue their education in a variety of fields that might include Master’s degree programs in Health Management, Health Administration, Healthcare Informatics, Communication Disorders and Social Work to name a few. In addition, programs in advanced medical technology and health care in addition to our degree program will make these students more competitive in today’s workplace.

**B. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which goals the program will directly support and which goals the program will indirectly support. (See the SUS Strategic Plan at [http://www.flbog.org/StrategicResources/](http://www.flbog.org/StrategicResources/) )**

The B.S. in Health Sciences specifically supports the current State University System (SUS) Strategic Planning Goal A in “Access to and production of degrees” and Goal B in “Meeting statewide professional and workforce needs”, particularly in the critical areas of Education (Goal B1) Health Professions (Goal B2), Natural Science and Technology (Goal B3b), Medical Science and Health Care (Goal B3c). The B.S. in Health Sciences is a new bachelor’s degree not currently available at USF and graduates in this program will contribute to these goals by becoming healthcare professionals working in areas related to the health sciences and education. Healthcare, specifically the allied health professions, is the most rapidly expanding field of employment in the US today. The healthcare industry is hiring three times more personnel than any other industry. There is a high demand for individuals with bachelors and masters degrees trained in health care related disciplines. Our degree would fulfill this need and prepare our students for further healthcare specialization if desired.
INSTITUTIONAL AND STATE LEVEL ACCOUNTABILITY

II. Need and Demand

A. Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

Due to the recent legislative reform of the healthcare system, the projected need for qualified allied health professionals is greater than any other field. In fact, the Bureau of Labor Statistics has identified the healthcare industry as one of the most rapidly expanding employment sectors in the U.S. Ten of the top twenty fastest growing occupations are healthcare related and the healthcare industry is hiring at a rate that is three times higher than average. Positions in healthcare technology and management are in especially high demand. Florida in particular has an increasing need for geriatric specialties due to the high proportion of retirees in our state. According to the State of Florida Agency for Workforce Innovations allied health professions will see significant increases in demand over the next 6 years, with some occupations increasing in yearly demand more than 5%. Conversations with local medical professionals have verified this information, with some administrators concerned about possible allied health and administrative shortages in their areas.

There is already a shortage of healthcare professionals and support staff on the local, state and national level which our students would be qualified to fill. Our program aims to prepare students with a basic liberal arts foundation, and further their education with regard to their chosen allied health profession. USF has a broad base of courses from which to build an interdisciplinary program capable of training students in health care related technology, communication, management and special skills. The USF network, including USF health, has a wide variety of interactive educational and volunteer opportunities for students in this program. This will better prepare our students to be competitive in today’s workplace.

B. Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

Although this major exists as a concentration under the Interdisciplinary Natural Science degree, students interested in these fields will be best served by an independent health sciences major. We believe that students who have reevaluated their career goals and chosen to pursue a career in allied health care or healthcare administration versus primary medicine require a degree program more suited to their needs. There are currently approximately 600 students enrolled in the health sciences concentration, who would convert to the new B.S. in Health Sciences. In addition, due
to the increase in demand for allied health professionals, as documented by federal and local statistics, we anticipate an overall increase in students interested in this major. Preliminary evidence from incoming students (2011) indicates that over 100 students have chosen the health sciences major. Once the degree stands alone as a B.S., and the goals of the degree are improved, we believe the interest in the program will increase even further. Local healthcare officials have confirmed the demand for graduates of this degree program in our area.

C. If similar programs (either private or public) exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of any communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). Provide data that support the need for an additional program.

A review of similar health science degree programs in our state identified other programs: University of Florida (Gainesville), Florida A & M University (Tallahassee), Florida Atlantic University (Ft. Lauderdale), University of Central Florida (Orlando), Florida Gulf Coast University (Ft. Myers), University of West Florida (Pensacola), Florida International University (Miami), University of North Florida (Jacksonville), USF (St. Petersburg campus with a business focus) and Nova Southeastern University (Ft. Lauderdale). We have not identified another program in the area with a broad based interdisciplinary approach to the health sciences, which is what we propose for this degree. Communication with faculty at the USF St. Petersburg campus indicate a willingness to collaborate. Although they have a health science degree (offered beginning Fall 2011), they have a strong emphasis on health care administration and business. Our program offers more course variety to our students, in our concentrations, and prepares them for many different careers in the health professions. The interdisciplinary nature of our proposed program allows us to draw on the many departments within our university to strengthen our multifaceted degree, which will distinguish it from other programs.

Due to the level of enrollment in our program, even at its inception without this formal degree proposal, the need for such a degree at our University is evident. Local healthcare officials have confided in us that the demand for students from this type of program will be in high demand in the coming years. This data is further supported by statistics from the U.S. Department of Labor which predicts a significant increase job opportunities in Florida for allied health professionals, of all types, by the year 2016. Our program will help fulfill this need at the state and local level.

D. Use Table 1 (A for undergraduate and B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 40 credit hours per year and graduate FTE will be calculated as 32 credit hours per year. Describe the rationale underlying enrollment projections. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

WAITING ON TABLE.
E. Indicate what steps will be taken to achieve a diverse student body in this program, and identify any minority groups that will be favorably or unfavorably impacted. The university’s Equal Opportunity Officer should read this section and then sign and date in the area below.

Table ___ Comparison of Ethnicity among USF Major Colleges and Florida Residents

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>7865</td>
<td>60%</td>
<td>1103</td>
<td>62%</td>
<td>1376</td>
</tr>
<tr>
<td>Black</td>
<td>1793</td>
<td>14%</td>
<td>328</td>
<td>18%</td>
<td>513</td>
</tr>
<tr>
<td>Asian</td>
<td>1027</td>
<td>8%</td>
<td>54</td>
<td>3%</td>
<td>312</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2408</td>
<td>18%</td>
<td>354</td>
<td>20%</td>
<td>829</td>
</tr>
</tbody>
</table>

Step 1: A sample baseline of ethnicity of the major colleges at USF is shown in the above table.
Step 2: The importance of a diverse faculty, staff and student body is valued. Active participation in recruiting consistent with “One Florida” is done and the recruitment guidelines of the College of Arts and Sciences are followed. Representatives administering the B. S. Health Science program will participate in “USF Stampede” a diverse recruitment event targeting high school sophomores.
Step 3: The director of this program will work with the Office of Admissions in identifying high schools in the Tampa Bay area with high numbers of underrepresented minority students where steps can be taken to update high school counselors on the existence of this new degree and to encourage participation in appropriate course preparation.
Step 4: The director will meet with personnel from Community College Health Programs to develop and implement programs meant to increase underrepresented groups and the diversity of our student population.
Step 5: It is anticipated that graduates of this program will become our best recruiters of all underrepresented students.

Equal Opportunity Officer                                                                 Date

III. Budget

A. Use Table 2 to display projected costs and associated funding sources for Year 1 and Year 5 of program operation. Use Table 3 to show how existing Education & General funds will be shifted to support the new program in Year 1. In narrative form, summarize the contents of both tables, identifying the source of both current and new resources to be devoted to the proposed program. (Data for Year 1 and Year 5 reflect snapshots in time rather than cumulative costs.)
B. If other programs will be impacted by a reallocation of resources for the proposed program, identify the program and provide a justification for reallocating resources. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct faculty and teaching assistants). Explain what steps will be taken to mitigate any such impacts. Also, discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting-edge research, improved labs and library resources).

This program has been in effect as a concentration under the Interdisciplinary Natural Sciences B.S. degree. Therefore, we do not anticipate a need for additional allocation of resources at this time.

C. Describe other potential impacts on related programs or departments (e.g., increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the proposed major).

Due to the interdisciplinary nature of this degree program we anticipate a positive impact on participating departments. The curriculum is diversified enough that the majors will take courses in a number of fields and will not overwhelm any one department. The majority of the general education and prerequisite courses required for this major are established large enrollment courses at this time. The participating departments should be capable of compensating for the increased enrollment from our program with existing resources.

D. Describe what steps have been taken to obtain information regarding resources (financial and in-kind) available outside the institution (businesses, industrial organizations, governmental entities, etc.). Describe the external resources that appear to be available to support the proposed program.

We are in the process of putting together an advisory board for the Health Sciences program. There has been a great deal of interest in the program from area healthcare agencies. We have had inquiries from hospital corporations and local healthcare agencies interested in internships opportunities and offers of participation in onsite education (grand rounds, shadowing) for our students. One of our core courses “Introduction to Health Professions” utilizes local professionals for guest lectures from many different allied health fields all of whom are interested in further work with our students. We feel that once the degree is established this interest will be able to be fostered in a way that will strengthen the program and provide a wealth of opportunities for our students.
IV. Projected Benefit of the Program to the University, Local Community, and State

Use information from Table 1, Table 2, and the supporting narrative for “Need and Demand” to prepare a concise statement that describes the projected benefit to the university, local community, and the state if the program is implemented. The projected benefits can be both quantitative and qualitative in nature, but there needs to be a clear distinction made between the two in the narrative.

Students trained in this program will be capable of fulfilling the increasing demand for allied health professionals in our area. The US Department of Labor estimates that demand for such professionals in the state of Florida will increase by more than 25% in the next 5 years. As the retiree population increases, due to the aging baby boomer population, so will the need for educated health professionals. Discussions with local area healthcare administrators have emphasized the need for such individuals in our community. We have already received several inquiries with respect to internships and community opportunities for our students from area healthcare agencies. This indicates a sincere interest in students educated in all aspects of the health sciences. Furthermore, while some health science technical degrees may be available at community colleges, the need for individuals with advanced degrees prepared for mid to upper level management positions is an area yet to be fulfilled a niche that our students will be capable of filling.

V. Access and Articulation – Bachelor’s Degrees Only

A. If the total number of credit hours to earn a degree exceeds 120, provide a justification for an exception to the policy of a 120 maximum and submit a request to the BOG for an exception along with notification of the program’s approval. (See criteria in BOG Regulation 6C-8.014)

Not applicable; the B.S. in Health Sciences degree program will not exceed 120 hours

B. List program prerequisites and provide assurance that they are the same as the approved common prerequisites for other such degree programs within the SUS (see Common Prerequisite Manual http://www.facts.org). The courses in the Common Prerequisite Counseling Manual are intended to be those that are required of both native and transfer students prior to entrance to the major program, not simply lower-level courses that are required prior to graduation. The common prerequisites and substitute courses are mandatory for all institution programs listed, and must be approved by the Articulation Coordinating Committee (ACC). This requirement includes those programs designated as “limited access.”

The B.S. Health Science program will follow the common prerequisite requirements of Track 1 of 7 as specified in the State of Florida (CIP 51.0000) Common Prerequisite Manual 2001-11, https://facts23.facts.org/cpp/pdf/stuPdf.jsp?sessionid=pVPTH6jr1olhzlTCynAUrqO
Take one of the following:

BSCXXXXC
or Take both courses:
& BSCX007/X007L
or Take both courses:
& BSCX005/X005L
or Take Or both courses: & BSCX010/X010L

& MACX105

& PSYX012

& Take one of the following:
or STAXXXX
or STAX023
or STAX014

& - Take one of the following:
or DEPX053
or DEPX004
or DEP X000
or CLPX140

& Take one of the following:
or APKX0105C
or BSCX085/X085L
or BSCX093 & BSCX094

& Take one of the following:
or ENCX210
or ENCX254

C. If the university intends to seek formal Limited Access status for the proposed program, provide a rationale that includes an analysis of diversity issues with respect to such a designation. Explain how the university will ensure that community college transfer students are not disadvantaged by the Limited Access status. NOTE: The policy and criteria for Limited Access are identified in BOG Regulation 6C-8.013. Submit the Limited Access Program Request form along with this document.

USF does not intend to seek formal Limited Access status for this proposed program.
D. If the proposed program is an AS-to-BS capstone, ensure that it adheres to the guidelines approved by the Articulation Coordinating Committee for such programs, as set forth in Rule 6A-10.024 (see Statewide Articulation Manual http://www.facts.org). List the prerequisites, if any, including the specific AS degrees which may transfer into the program.

Not applicable; the Health Sciences degree is not an AS-to-BS capstone program.

INSTITUTIONAL READINESS

VI. Related Institutional Mission and Strength

A. Describe how the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan.

The new B.S. in Health Science directly supports the USF strategic goal II to “Promote globally competitive undergraduate, graduate and professional programs that support interdisciplinary inquiry”. The proposed degree will “address the changing needs of the region state and nation through innovative approaches to curriculum development” and “reflect a student body found at a pre-eminent research university.” The degree also supports the current State University System (SUS) Strategic Planning Goal B in “Meeting statewide professional and workforce needs”, particularly in the critical areas of Health Professions, Natural Science and Technology, Medical Science and Health Care and Information Technology etc. In addition this program will support the university’s mission to strengthen the university community through collaboration and promotion of interdisciplinary cooperation.

B. Describe how the proposed program specifically relates to existing institutional strengths, such as programs of emphasis, other academic programs, and/or institutes and centers.

The Health Sciences degree will utilize an interdisciplinary approach to educating our students in many aspects of the allied health professions. USF is well suited to cover all aspects of healthcare given the diversity and range of programs offered on our campus. USF has programs in business administration, basic sciences, information technology, public health, a range of therapeutics, accounting and management, just to name a few. Our students will be able to take courses in various departments to supplement their educational experience. In addition the USF health system is an invaluable resource for our program with its broad range of departments where our students may gain internship and volunteer experience.

C. Provide a narrative of the planning process leading up to submission of this proposal. Include a chronology (table) of activities, listing both university personnel directly involved and external individuals who participated in planning. Provide a timetable of events necessary for the implementation of the proposed program.
In 2009 USF President Genshaft directed System institutions to explore the development of a health science degree for students dissatisfied with, or could not complete the existing biomedical sciences degree curriculum, but who still were interested in pursuing a degree in health sciences. A system-wide work group chaired by Dr. Donna Peterson, Dean, College of Public Health at USF, met regularly during the spring, summer and fall of 2009 to discuss the feasibility of a system-wide degree in health sciences. The result was a two-pronged approach with USF Tampa launching its Health Sciences program with two clusters: Biological Health Sciences and Social/Behavioral Health Sciences and USFSP completing a new B.S. Degree in Health Sciences with a strong emphasis on health care and management.

**Key Dates in the Planning and Approval Process for the B.S. in Health Sciences USFT**

<table>
<thead>
<tr>
<th>Date</th>
<th>Participants</th>
<th>Planning Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2009</td>
<td>COPH Dean Donna Peterson and various USF faculty</td>
<td>USF Tampa faculty decide against developing a new system-wide degree at this time. Instead they propose to modified an existing degree with a concentration called Health Science.</td>
</tr>
<tr>
<td>October 2009</td>
<td>COPH Dean Donna Peterson</td>
<td>Courses for H.S. Content Clusters are requested</td>
</tr>
<tr>
<td>Late Fall 2009</td>
<td>CAS Associate Dean Potter, Assistant Dean Cole and advisors met with Donna Peterson, Dean COPH</td>
<td>Existing degree is modified by adding a new concentration in Health Science.</td>
</tr>
<tr>
<td>January 2010</td>
<td>CAS Undergraduate</td>
<td>Approves Health Science concentration for major</td>
</tr>
<tr>
<td>February 2010</td>
<td>University Undergraduate Council</td>
<td>Approves Health Science concentration as a major</td>
</tr>
</tbody>
</table>

**Events Leading to Implementation**

<table>
<thead>
<tr>
<th>Date</th>
<th>Implementation Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2010</td>
<td>New Health Science Major is implemented</td>
</tr>
<tr>
<td>Spring 2012 (Anticipated)</td>
<td>New Health Science Degree implemented and listed in the undergraduate catalog.</td>
</tr>
</tbody>
</table>

VII. **Program Quality Indicators - Reviews and Accreditation**

Identify program reviews, accreditation visits, or internal reviews for any university degree programs related to the proposed program, especially any within the same academic unit. List all recommendations and summarize the institution's progress in implementing the recommendations.

Not applicable. USF Tampa has no similar degree programs.
VIII. Curriculum

A. Describe the specific expected student learning outcomes associated with the proposed program. If a bachelor’s degree program, include a web link to the Academic Learning Compact or include the document itself as an appendix.

The specific learning outcomes associated with this proposal program are directly in line within the existing Academic Learning Compact structure and requirements of the State of Florida.

***See syllabi for individual courses listed below for more specific learning outcomes

ALC specifies learning outcomes in four areas:

1. Content/Discipline Knowledge
   a. Demonstrate knowledge of health professions (IDS 2931)
   b. Demonstrate knowledge of scientific and medical terminology (CLT3040)

2. Communication Skills
   a. Demonstrate professional writing skills (IDS2931 & ENC 2210)
   b. Demonstrate ability to communicate scientific and medical ideas to general public

3. Critical Thinking Skills
   a. Demonstrate knowledge of health ethics (PHI 3633)
   b. Demonstrate knowledge of global, aging, or mental health issues (various electives)

4. Civic Engagement
   a. Demonstrate knowledge about the role of factors such as race, religion, age, gender, ethnicity, economic status, environment etc in health care issues (internships/shadowing experiences)

B. Describe the admission standards and graduation requirements for the program.

Admission standards are the same as those for admission to USF Tampa. Graduation standards must meet those of B.S. degrees in the College of Arts and Sciences as follows: 2.0 GPA overall (including all Ds and Fs). Graduation requirements are 120 credit hours of course work with 42-44 hours in the health science major in addition to the university exit requirements, Gordon Communications and Gordon Computation requirements, 48 minimum upper level hours, with 30 minimum hours in residency.

C. Describe the curricular framework for the proposed program, including number of credit hours and composition of required core courses, restricted electives, unrestricted electives, thesis requirements, and dissertation requirements.
Identify the total numbers of semester credit hours for the degree.

Students must complete 120 course hours including required general study prerequisites, the required health sciences perquisites (biology, chemistry, math, and statistics) and the major courses in health sciences. Students will also choose 2 possible capstone/exit courses. Note that courses with XXX in prefix or number have been approved at the institutional level, and are awaiting approval by SCNS and/or entry into the next edition of the USF Tampa undergraduate catalog.

Required Program Core Courses (34-40 credits)

BSC 1005 Principles of Biology (3)
OR
BSC 1020 The Biology of Humans (3)

BSC 2085/2085L Anat. & Phys. I for Health Prof. (4)
OR
BSC 2093 Human Anat. & Phys. I (4)
 & BSC 2094 Human Anat. & Phys. II (4)

MAC 1105 College Algebra (3)
OR
MAC 1147 Pre-calculus Algebra and Trigonometry (4)
OR
MAC 2241 Life Sciences Calculus (4)

STA 2023 Introductory Statistics (4)
OR
PSY 3204 Psychological Statistics (3)

IDS 2931 Introduction to Health Professions (3)

PHI 3633 Biomedical Ethics (3)
OR
PHI 3636 Professional Ethics (3)

ENC 2210 Technical Writing (3)

DEP 2004 The Life Cycle (3)

PSY 22012 Introduction to Psychological Science (3)

CLT 3040 Scientific and Medical Terminology (3)
COM 2000 Introduction to Communication (3)
OR
ACG 2021 Principles of Financial Accounting (3)
OR
ANT 2511 Biological Anthropology (3)
OR
SYG 2000 Introduction to Sociology (3)
OR
GEY 2000 Introduction to Gerontology (3)

**Biological Health Science Concentration (15 - 30 hours)**

PHY 2020 Conceptual Physics (3)
CHM 2032 Intro. to General, Organic, and Biochem. (3) OR CHM 2023 Chem. for Today (3)
PHY 3XXX Application of Physics to Medical Diagnostics (3)
HSC4554 Survey of Human Disease (3)
ANT4520C Forensic Anthropology (3)
ANT 4462 Health Illness and Culture (3)
BSC 3022 Biology of Aging (3)
ZOO 4512 Sociobiology (3)
BMS 4402 Principles of Human Pharmacology (3)
BSC 4930 Microbiology for Health Sciences (with lab) (3)
LIS 4930 LIS Health Informatics (3)
SPA 3101 Anatomy and Physiology of the Speech & Hearing Mechanism (3)
SPA 3002 Introduction to Disorders of Speech and Language (3)
SPA 3004 Introduction to Language Development and Disorders (3)
SPA XXXX Multiculturalism in Communication Disorders (3)
SPA 3030 Introduction to Hearing Science (3)
SPA 3101 Anatomy & Physiology of the Speech & Hearing Mechanisms (3)
SPA 3112 Applied Phonetics in Communication Disorders (3)
SPA 4104 Neuroanatomy of Speech, Language & Hearing Disorders (3)
GEY 3601 Physical Change and Aging (3)
PHC 3302 Introduction to Environmental & Occupational Health (3)
PHC 4030 Introduction to Epidemiology (3)
HSC 4504 Foundation of Public Health Immunology (3)
HSC 4624 Foundation of Global Health (3)
HSC 3541 Human Structure & Function (3)
PHC 4542 Stress, Health & College Life (3)
PHC 4406 Informed Decision Making (3)

**Social and Behavioral Health Science Concentration (15 - 30 hours)**

MHS 4002 Behavioral Health Systems Delivery (3)
MHS 4931 Ethical Issues in Behavioral Healthcare (3)
PSB 3444 Drugs and Behavior (3)
CLP 4143 Abnormal Psychology (3)
LIS 4930 Health Information Studies (3)
PHI 4930 Social Issues in Biomedical Ethics (3)
SOW 3102 Introduction to Social Work (3)
SOW 3210 The American Social Welfare System (3)
HSC 4933 US Healthcare Systems (3)
HSC 4211 Health Behavior and Society (3)
HSC 3411 Multidisciplinary Behavioral Healthcare (3)
WST 4320 The Politics of Women’s Health (3)
SYO 4400 Medical Sociology (3)
SOP 4330 Social Psychology of HIV/AIDS (3)
MHS 4931 Case Management and Community Resources (3)
MHS 4408 Exemplary Practices in Behavioral HC (3)
MHS 4931 Case Management and Community Resources (3)
COM 4022 Health Communication (3)
COM 4020 Communicating Illness, Grief and Loss (3)
COM 4021 Family Communication and End of Life (3)
SPC 4305 Communicating Emotions (3)
SPC 4930 Global and Cultural Health Comm. (3)
SPC 4930 Communications and Aging (3)
COM 4702 Communications, Language and Mental Illness (3)
HSC 4172 Women’s Health: A Public Health Perspective (3)
PHC 4406 Informed Decision Making (3)
HSC 4579 Foundation of Maternal and Child Health (3)
PHC 4406 Informed Decision Making (3)
HSC 4631 Critical Issues in Public Health (3)
MHS 4931 Substance Abuse Delivery Systems (3)

**Aging Studies Concentration (15 - 30 hours)**

GEY 4322 Gerontological Case Management (3)
OR
MHS 4931 Case Management in Community Mental Health (3)

GEY 4327 Understanding Policy and Practice in Long Term Care (3)
GEY 3601 Physical Change and Aging (3)
GEY 4360 Gerontological Counseling (3)
GEY 4608 Alzheimer’s Disease Management (3)
GEY 4628 Race, Ethnicity, and Aging (3)
GEY 4641 Death and Dying (3)
GEY 4935 Program and Service Evaluation (3)
SOW 3210 The American Social Welfare System (3)
SPA 3002 Introduction to Disorders of Speech and Language (3)
SPA 4254 Survey of Neurogenic Disorders (3)
BSC3022 Biology of Aging (3)
& GEY 4935 Senior Seminar in Gerontology OR
GEY 4945 Field Placement (3)
HSC 4931 Health Care Ethics (3)
HSC 4211 Health, Behavior and Society (3)
HSC 4630 Understanding US Health Care (3)

Health Management Concentration (15 - 30 hours)

ACG 2071 Principles of Managerial Accounting (3)
MAN 3025 Principles of Management (3)
HSC 4011 Introduction to Public Health (3)
HSC 4630 Understanding US Health Care (3)
PAD 3003 Introduction to Public Administration (3)
PAD 4204 Public Financial Administration (3)
PHI 3636 Professional Ethics (3)
PUP 4002 Public Policy (3)
PUP 5607 Public Policy and Health Care (3)
RMI 3011 Principles of Insurance (3)
SYO 4400 Medical Sociology (3)
GEY 4635 Business Management in an Aging Society (3)
HSC 4933 US Healthcare Systems (3)
PHC 4931 Health Care Ethics (3)
HSC 4211 Health, Behavior and Society (3)
HSC 4624 Foundation of Global Health (3)
HSC 4631 Critical Issues in Public Health (3)

Health Information Technology Concentration (15 - 30 hours)

LIS 4930 Introduction to Health Informatics (3)
LIS 3353 IT Concepts for Information (3)
LIS 4482 Networks and Communication (3)
LIS 4930 Health Information Management Systems (3)
LIS 4930 Health Information Technologies (3)
LIS 4930 LIS Health Informatics (3)
LIS 4930 Health Information Sources and Services (3)
LIS 4410 Information Policy and Ethics (3)
PAD 4712 Managing Information Resources in the Public Sector (3)

•Please note: courses listed as 4930 are currently offered as special topics or are now in development by the department to be offered in upcoming semesters.

D. Provide a sequenced course of study for all majors, concentrations, or areas of emphasis within the proposed program.

Due to the flexible, interdisciplinary nature of this proposed degree program, there are many possible sequences of courses. We have listed below one possible scenario:
**Health Sciences major with Psychology minor**

Semester 1 (14 hours):
ENC 1101
SLS 1101 University Experience
BSC 1005 (FKL Life Science)
MAC 1105 (FKL computation)
PSY 2012 (counts toward degree, minor and FKL social science)

Semester 2 (16 hours):
ENC 1102
FKL physical science
STA 2023 (FKL computation)
FKL Humanities
Elective

Semester 3 (16 hours):
IDS 2931 Intro to Health Professions
SYG 2000 (FKL Social Science and major)
BSC 2085 and Lab
FKL Human and Cultural Diversity
Psychology minor elective

Semester 4 (16 hours):
HSC 4551
FKL humanities
Psychology minor elective
ANT 2511 and L
Elective

Semester 5 (15 hours):
BSC 4933 Microbiology for Health Sciences
NSP 4545 (also counts as Gordon Rule communication)
ENC 2210
CLT 3040
Psychology minor elective

Semester 6 (15 hours):
SYO 4400 Medical Sociology
Psychology minor elective
FKL Fine Arts
PHI 3633 OR PHI 3636
BSC 3022

Semester 7 (15 hours):
Psychology minor elective
Writing intensive exit
PSB 3444 Drugs and Behavior
PHC 3302
DEP 2004

Semester 8 (13 hours):
Capstone
CLP 4143
Elective (3 are necessary, 11 credits)

Total hours: 120 (36 hours of upper-level included in degree requirements – additional upper-level credits will come from minor)

E. Provide a one- or two-sentence description of each required or elective course.

**Note that all selected topics courses listed below (as well as those with XXX in the course number) are currently in the process of being created as permanent courses.

ACG 2021 Principles of Financial Accounting (3) BU ACC
Study of basic accounting principles including the recording and reporting of financial activity. The preparation and interpretation of financial statements.

ACG 2071 Principles of Managerial Accounting (3) BU ACC
A study of the accountant's role in assisting management in the planning and controlling of business activities.

ANT 2511 Biological Anthropology NS CANL (3) AS ANT
This is an overview of biological anthropology. It covers areas such as evolutionary theory and genetics (critical thinking and scientific process), human variation (diversity), and epidemiology (environment). It also has a historical component.

ANT 4462 Health, Illness, and Culture (3) AS ANT
The study of health and human behavior in cross-cultural perspective. Main themes include: the impact of disease on the development of human culture; comparative studies of curing practices; medical systems in their relationship to ideology. Emphasis on understanding the role of medicine, and the behavior of both practitioners and patients in modern societies.

ANT 4520C Forensic Anthropology (4) AS ANT
This course is designed to familiarize students with forensic anthropology through lectures and lab work. Students will learn human skeletal biology for personal identification and cause of death.

BSC 1005 Biology for Life NS CANL (3) AS BIN
A comprehensive introduction to living systems, including the scientific basis of biology, cell structure and function, genetic mechanisms, human anatomy and physiology, and ecological and evolutionary processes.
BSC 1020 The Biology of Humans NS CANL (3) AS BCM
This course deals with the principles and applications of human biology. Topics include: scientific literacy, cell structure and function, anatomy and physiology, genetics, infectious diseases, and biotechnology.

BSC 2085 Anatomy and Physiology I for Health Professionals
NS CANL (3) NU NUR
Introduction to the normal structure, function and selected pathological conditions for physiologic systems. Focus on understanding how the body functions in preparing for careers in nursing or health-related professions.

BSC 2086 Anatomy and Physiology II for Nursing and other Healthcare Professionals NS CANL (3) NU NUR
Introduction of normal structure, function and selected pathological conditions for physiologic systems. Focus on understanding how the body functions in preparing for careers in nursing or health-related professions.

BSC 2093C Human Anatomy and Physiology I (4) AS BIN
PR: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L and CHM 2045. Basic biochemistry, cell structure and function, tissues, anatomical terminology, anatomy and physiology of the integumentary, skeletal, muscular, and nervous systems. Lecture and Laboratory.

BSC 2094C Human Anatomy and Physiology II (4) AS BIN

BSC 3022 Biology of Aging (3)
This is introduction to basic biology of aging. Emphasis will be placed on understanding basic principles of biology relevant to time and the aging process which begins at birth.

BSC 4930 Microbiology for Health Sciences (with lab) (3)
Provides students with a global perspective of the relationship of microbes to Health Sciences.

BMS 4402 Principles of Human Pharmacology NS (3) ME MSG
Pharmacodynamics (effects), pharmacokinetics (absorption, distribution, metabolism, excretion) and side effects/toxicity of drugs. Designed to provide basic understanding of mechanism of drug action resulting from modifying biologic processes.

DEP 2004 The Life Cycle (3) BC
An examination of individuals and the physical, cognitive, personality, and social changes which occur throughout the entire life span

CHM 2023 Chemistry for Today NS (4) AS CHM
An introduction to the principles and applications of modern chemistry including the properties of matter, structural view of matter and reactions, quantitative relations in chemical reactions, technological aspects and societal impact.
CHM 2032 Introduction to General, Organic, and Biochemistry
Fundamental concepts of general, organic, and biological chemistry.

CLT 3040 Scientific and Medical Terminology (3) AS WLE
A course in the Greek and Latin word elements used in science and technology.

CLP 4143 Abnormal Psychology (3) AS PSY
Descriptions, theoretical explanations, research evidence, and treatment of maladaptive behavior.

COM 2000 Introduction to Communication SS (3) AS SPE
Introduction to the roles, contexts, and issues in contemporary human communication.

COM 4020 Communicating Illness, Grief, and Loss 6A (3) AS SPE
Focus on stories of illness, grief, and loss to make sense of these experiences; to understand the cultural and rhetorical influences on how stories are told; and to explore the context of everyday life, romantic relationship, families, institutions, and culture in which they occur.

COM 4021 Family Communication and the End of Life (3) AS SPE
Explores theories and practices of family communication at end-of-life through language, relationships, bioethics, and case analysis techniques.

COM 4022 Health Communication (3) AS SPE
Application of communication theory and research to the health context including provider-patient communication, health information campaigns, and health beliefs and behavior. Special attention to the value issues in health communication.

COM 4702 Communication, Language, and Mental Illness (3) AS SPE
Explores intersection of mental illness and communication as language, talk-in-interaction, and discourse as social practice. For majors; non-majors by permit. May not be repeated for credit.

ENC 2210 Technical Writing 6A (3) AS ENG
PR: ENC 1101 and ENC 1102 or ENC 1121 and ENC 1122. Effective presentation of technical and semi-technical information. Will not count toward the English major.

GEY 2000 Introduction to Gerontology SS CASB (3) BC GEY
This course is designed to be an introduction to the study of aging. The aging process is viewed from a multi-disciplinary perspective including the biological, psychological, and sociological aspects of aging.

GEY 3601 Physical Changes and Aging (3) BC GEY
A survey of normal and pathological physical changes occurring from middle age through older age. Course emphasis will be on basic age-related changes and their implications for behavior in older age.
GEY 4322 Gerontological Case Management (3) BC GEY
This course examines the role and function of case management in meeting the care needs of the older adult. All aspects of case management practice are covered, including the elements of the case management process as well as ethical and legal issues.

GEY 4327 Understanding Policies and Practices of Long Term Care HP SS MW CPST (3) BC GEY
This course provides principles for managing disability in a variety of settings. Topics include historical context, experience of disability, and challenges of providing care for disabled persons. Course is repeatable and not restricted to GEY majors.

GEY 4360 Gerontological Counseling (3) BC GEY
An introduction to the study of the major mental health problems of the elderly. Current approaches to counseling the elderly in community and institutional settings are discussed.

GEY 4608 Alzheimer's Disease Management (3) BC GEY
This course will provide instruction on effective approaches for providing care to persons with Alzheimer's Disease and related disorders in residential and home care settings. The major dementing disorders and typical behaviors presented by patients are presented along with strategies for successful behavior management. Building a dementia program and building dementia care teams are also covered.

GEY 4628 Race, Ethnicity and Aging SS (3) BC GEY
This course addresses how people of different ethnic and racial groups age, in the physical, psychological, and social context. Topics include cultural competence and sensitivity. Not restricted; not repeatable.

GEY 4635 Business Management in an Aging Society MW CPST (3) BC GEY
This course provides students with an interdisciplinary perspective that addresses both business management and the impact of our aging society on business.

GEY 4641 Death and Dying SS CASB (3) BC GEY
A broad overview of the basic concepts and psychosocial issues relating to the meaning of loss and death, the process of death, and the experience of grieving. Health care practices are considered along with community resources.

GEY 4935 Program and Service Education (3)

HSC 4211 Health, Behavior and Society (3) PH PHC
This course focuses on an ecological perspective of the determinants of health including biology, individual behavior, social relationships, social stratification, institutions, neighborhoods and communities, environment, policies and globalization.

HSC 4933 US Healthcare Systems (3)
An overview and critique of the systems of healthcare in the US.
HSC 3411 Multidiciplinary Behavioral Healthcare (3)

HSC 3541 Human Structure and Function NS (3) PH CFH
This course is designed to introduce the structural levels of the body beginning with chemicals and progressing through cells, tissues, organs and systems with emphasis on homeostasis, stress and feedback systems. Not restricted to majors.

HSC 4011 Introduction to Public Health (3)

HSC 4172 Women's Health: A Public Health Perspective (3) PH PHC
From a public health perspective, this course will explore the multidimensional and multidisciplinary dimensions of women’s health. The course will emphasize health promotion, disease prevention, and overall well-being.

HSC 4211 Health, Behavior and Society (3) PH PHC
This course focuses on an ecological perspective of the determinants of health including biology, individual behavior, social relationships, social stratification, institutions, neighborhoods and communities, environment, policies and globalization.

HSC 4504 Foundations of Public Health Immunology NS (3) PH PHC
This course provides an overview of the principles of Immunology and an introduction to the applications of immunology and immunologic techniques used in the surveillance, prevention and control of diseases of public health importance.

HSC 4554 Survey of Human Diseases (3) PH PHC
An overview of the nature, types, and mechanisms of diseases of the major body systems.

HSC 4579 Foundations of Maternal and Child Health (3) PH PHC
This course provides an overview of maternal and child health issues and trends. With this primary aim, the objectives are organized around the knowledge of health assessment and interventions for families and children.

HSC 4580 (also listed as 4573) Foundations of Food Safety (3) PH PHC
This course provides an overview of food safety practices and principles emphasizing the role of food safety in public health. Topics include proper food handling procedures, food safety hazards, food-borne illness prevention, and food safety regulations.

HSC 4624 Foundations of Global Health (3) PH PHC
This course introduces students to the principles of public health from a global perspective. Emphasis will be placed on the impact of social, economic, political and environmental factors that influence health and access to health care across the globe.

HSC 4630 Understanding U.S. Health Care (3) PH PHC
An introduction to health services; providing an overview of important components of the U.S. health care system, health policy, funding sources, and comparisons with other developed nations.
HSC 4631 Critical Issues in Public Health 6A CPST (3) PH PHC
This course provides students the opportunity to learn about the multiple ways to view controversial topics in public health. The course covers topics including biomedical issues, social & behavioral factors related to health, and environmental issues.

IDS 2931 Introduction to Health Professions (3)
Introduction to the many professions in the field of Health Sciences and a general overview of the US healthcare system.

LIS 4930 LIS Health Informatics (3)
Provides students with an opportunity to use software in Health Sciences.

LIS 4930 Health Information Studies (3)
The course content will depend on student demand and instructor's interest.

LIS 3353 IT Concepts for Information Professional (3) AS LIS
Covers the history, development, and current state of computer hardware and software. Also examines programming basics, networks, the internet and web, emerging technologies, information industries, and careers. Majors only or permission of instructor.

LIS 4482 Networks and Communication (3) AS LIS
PR: LIS 3353. This course is designed to provide a solid foundation in data communication and networking. Topics include local area networks (LANs), wide area networks (WANs), protocols used to implement networks & management issues of IT professionals. Majors or PI.

LIS 4930 Health Information Management Systems (3)
Provides students with an opportunity to use software in Health Sciences.

LIS 4930 LIS Health Informatics (3)
Provides students with an opportunity to use software in Health Sciences.

LIS 4930 Health Information Technologies (3)
The course content will depend on student demand and instructor's interest.

LIS 4930 Health Information Sources and Services (3)
The course content will depend on student demand and instructor's interest.

LIS 4410 Information Policy and Ethics (3)
The course content will depend on student demand and instructor's interest.

MAC 1105 College Algebra 6A QM CAMA (3) AS MTH
Concepts of the real number system, functions, graphs, and complex numbers. Analytic skills for solving linear, quadratic, polynomial, exponential, and logarithmic equations. Mathematical modeling of real life applications.
MAC 1147 Pre-calculus Algebra and Trigonometry 6A QM CAMA (4) AS MTH
Review of functions and graphs. Analytic geometry including conic sections and rotation of axes, systems of equations including matrix algebra and determinants, sequences and series including Binomial Theorem. Angles, trigonometric functions, properties and graphs of trigonometric functions, right triangles, laws of sines and cosines, polar coordinates.

MAC 2241 Life Sciences Calculus I 6A QM CAMA (4) AS MTH
Differentiation and integration of algebraic, trigonometric, exponential, and logarithmic functions with applications to life sciences.

MAN 3025 Principles of Management (3) BU MAN
Examines intrapersonal, interpersonal, group/team, organizational, and environmental (both stakeholder and societal) factors influencing the management task.

MHS 3411 Multidisciplinary Behavioral Healthcare Services (3) BC FMH
Working in behavioral healthcare requires the application of specific knowledge and skills. This open enrollment course offers a practical multidisciplinary look at service delivery. Students will examine their career and educational goals in context.

MHS 4002 Behavioral Health Systems Delivery (3) BC FMH
This course is designed to provide students with an understanding of the significant issues and trends in behavioral health delivery systems in America. Four major areas will be emphasized: 1) history and legislation; 2) systems delivery; 3) programs and policies; 4) selected at-risk populations. This course is not repeatable for credit and is open to non-minors in behavioral healthcare.

MHS 4931 Ethical Issues in Behavioral Healthcare (3)
This course will focus on the ethical issues arising in behavioral healthcare situations.

MHS 4931 Substance Abuse Delivery Systems BC FMH
The course content will depend on student demand and instructor's interest. The course may be repeated for different topics up to 9 hours.

MHS 4931 Case Management and Community Resources (3)
The course content will depend on student demand and instructor's interest. The course may be repeated for different topics up to 9 hours.

MHS 4408 Exemplary Practices in Behavioral Healthcare Treatment (3) BC FMH
This course explores exemplary clinical practices in public behavioral health service delivery. Best or exemplary practices are defined as those that have both a track record and their efficacy has been empirically validated. Modules may begin with a historical perspective of the treatment of a specific population or a treatment strategy but will primarily focus on emerging methodologies.

PAD 3003 Introduction to Public Administration SS (3) AS PAD
Examination of organizational behavior and change, policy process, management, financial administration, and personnel management from the perspective of public and social delivery.
PAD 4204 Public Financial Administration (3) AS PAD
Analysis of problems in the growth and development of public budgetary theory and Federal budgetary innovations.

PAD 4712 Managing Information Resources in the Public Sector (3) AS PAD
Introduces students to the fundamental concepts, theories, principles and practices in public information management. Internet access is required.

PHC 3302 Introduction to Environmental & Occupational Health (3) PH EOH
Introduces the principles of environmental health from a public health perspective. This course is designed for students with an interest in the environment, assessment of risk, human health issues, and control strategies to reduce health risks.

PHC 4030 Introduction to Epidemiology (3) PH EPB
Course provides an overview of epidemiological methods and the application to understanding health- and non-health issues. Students will develop critical thinking skills and apply the concepts applied problems, both in and outside the field of health.

PHC 4406 Informed Decision Making in Public Health (3) PH EPB
This course provides the skills, data and information for students to become informed consumers when making decisions regarding their health and safety. There are no prerequisites required.

PHC 4542 Stress, Health and College Life (3) PH CFH
The purpose of this course is to examine the relationship between stress, as a multi-casual concept, health and disease. Focus areas include: the historical evolution and current theories of stress as they relate to types of stressors, physiological reactions and predisposition to disease, and techniques related to the recognition and prevention of an unhealthy level of stress.

PHC 4931 Health Care Ethics (3) PH EOH
This course provides the student with a broad overview of health care ethics. Will cover ethical issues that concern a wide variety of health professionals who are interested in clinical situations, as well as public health professionals and researchers.

PHI 3633 Biomedical Ethics (3) AS PHI
This course will focus on the ethical issues arising from advances in medical practice, delivery of health care, and scientific research.

PHI 3636 Professional Ethics (3) AS PHI
An examination of the ethical problems that professionals will face in the complex, global society of the next few decades: confidentiality, divided loyalty, racism/sexism, etc.

PHI 4930 Social Issues in Biomedical Ethics (3)
This course will focus on the ethical issues arising from advances in medical practice and delivery of health care from a social perspective.
PHY 2020 Conceptual Physics NS CANP (3) AS PHY
A qualitative investigation of physics concepts. Emphasis is placed on using physics to describe how common things work.

PHY 3XXX Application of Physics to Medical Diagnostics (3)
This course will provide a lay understanding of some aspects of the technology used in diagnoses

PSB 3444 Drugs and Behavior (3) AS PSY
This is a basic introduction to drugs and their effects on society and behavior. Specifically, drug regulations and laws will be covered as well as how drugs interact with the brain to alter consciousness.

PSY 2012 Introduction to Psychological Science SS CASB (3) AS PSY
This course is an introduction to psychology for majors and nonmajors. It presents psychological theory and methods in a survey of various areas of psychology including clinical, cognitive, developmental, health, industrial, social and biopsychology.

PSY 3204 Psychological Statistics 6A QM CAQR (3) AS PSY
Introduction to analyzing psychological data, in the context of behavioral research. Covers basic research design, descriptive statistics, analysis procedures, use of computer analysis packages, interpretation of outputs, and implications for research.

PUP 4002 Public Policy (3) AS POL
Examines the formation and implementation of public policy in areas such as the economy, health, etc.

PUP 5607 Public Policy and Health Care (3) AS POL
The study of health care policy as it relates to the policy process in the American setting.

RMI 3011 Principles of Insurance (3) BU FIN
Analysis of insurable risks of both businesses and individuals. An examination of the characteristics of those areas of risk and uncertainty where the mechanisms of insurance are effective alternatives. The concept, contracts, and institutions involved in insurance are examined in relation to the socio-economic environment

SOP 4330 Social Psychology of HIV/AIDS (3) AS PSY
Students study social psychology theory and research while working at an AIDS service organization. They use the research as a framework for understanding, and developing solutions to, problems confronting the organization’s staff and clients.

SOW 3102 Human Behavior And The Social Environment II (3) BC SOK
An integrating course emphasizing dynamics of behavior and environmental factors as they relate to social work practice with families, groups, organizations and communities.

SOW 3210 The American Social Welfare System SS (3) BC SOK
A general education introductory course which provides students with a framework for
understanding the historical development of American social welfare, its value base, and its response to minorities, women, children, the elderly, and the disabled.

**SPA 3002 Introduction to Disorders of Speech and Language SS (3) BC CSD** The scope of speech-language pathology as a profession and a field of study. An introduction to speech and language disorders, etiologies, major treatment approaches, and research findings.

**SPA 3004 Introduction to Language Development and Disorders (3) BC CSD**
This course introduces theoretical concepts and research findings concerning the normal developmental process of language learning as a basis for differentiating developmental delay or disorder of language.

**SPA 3030 Introduction to Hearing Science (3) BC CSD**
Introduction to the field of hearing including: physics of sound, auditory anatomy and physiology, and psychophysics of hearing.

**SPA 3101 Anatomy and Physiology of the Speech and Hearing Mechanism (3) BC CSD**
The neurological and anatomical basis of communication disorders. Comparisons of normal and pathological organic structures and their functional dynamics.

**SPA 4104 Neuroanatomy for Speech, Language and Hearing (3) BC CSD**
Students will learn neuroanatomical & neurophysiological principles, structures, and functions that subserve speech, hearing, language and cognition. A case-based approach will enable understanding of behavioral manifestations of neuropathologies.

**SPA 4254 Survey of Neurogenic Disorders (3)**
An overview of neurogenic communication disorders.

**SPA XXXX Multiculturalism in Communication Disorders (3)**
This course considers how cultural backgrounds impact communication disorders.

**SPC 4305 Communicating Emotions 6A (3) AS SPE**
Study of emotional experience, what emotions mean to us, how we talk about them, and the ways group and cultural membership influence them. Focus on attachment and loss in romantic, family and group relationships.

**SPC 4930 Global and Cultural Health Communication (3)**
This course will orient students to the knowledge bases and cases in global health care.

**SPC 4321 Communication and Aging (3)**
Explores the contributions that the communication discipline makes to our understanding of aging on a personal level as well as the impact of population aging on society.

**STA 2023 Introductory Statistics I 6A QM CAQR (4) AS MTH**
SYG 2000 Introduction to Sociology SS CASB (3) AS SOC
This course introduces undergraduate students to the discipline of sociology. During the semester, we will analyze sociological theories, core concepts, and issues through readings, lectures, discussions, films, and hands-on research assignments.

SYO 4400 Medical Sociology (3) AS SOC
The study of disease and the sick person including the analysis of health practices, beliefs, and practitioners, the hospital as an organization, the cost, financing, and politics of health care.

WST 4320 Politics and Issues in Women's Health CASB (3) AS WST
This course will focus on celebrating women's health and wholeness: mental, physical, emotional, spiritual, social, economic, and understanding the potential negative effects of institutional and interpersonal oppression on health and wellness.

ZOO 4512 Sociobiology MW (3) AS BIN
An analysis of Animal and human behavior such as sex, territoriality, and aggression in the context of evolution.

F. For degree programs in the science and technology disciplines, discuss how industry-driven competencies were identified and incorporated into the curriculum and identify if any industry advisory council exists to provide input for curriculum development and student assessment.

We are in the process of putting together an advisory board for the health sciences program. There has been a great deal of interest in the program from area healthcare agencies. It is our intention to assemble a group of advisors from various backgrounds and specialties in the healthcare industry in order to cover the various fields in which our students will train. This may include hospital administrators, specialized medical personnel, administrators of social programs, clinical specialists etc.

G. For all programs, list the specialized accreditation agencies and learned societies that would be concerned with the proposed program. Will the university seek accreditation for the program if it is available? If not, why? Provide a brief timeline for seeking accreditation, if appropriate.

Accreditation is currently not available for Health Science degrees.

H. For doctoral programs, list the accreditation agencies and learned societies that would be concerned with corresponding bachelor’s or master’s programs associated with the proposed program. Are the programs accredited? If not, why?

This is not a doctoral program, at this time.
I. Briefly describe the anticipated delivery system for the proposed program (e.g., traditional delivery on main campus; traditional delivery at branch campuses or centers; or nontraditional delivery such as distance or distributed learning, self-paced instruction, or external degree programs). If the proposed delivery system will require specialized services or greater than normal financial support, include projected costs in Table 2. Provide a narrative describing the feasibility of delivering the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to shared courses, distance/distributed learning technologies, and joint-use facilities for research or internships.

The proposed B.S. in Health Sciences will be traditionally delivered on campus. Some students in this program will be applying to professional schools, many of which do not accept non-traditionally delivered courses. In addition, as previously mentioned many of the courses are already established and offered in a traditional format. With regard to development of new courses, some distance learning may be utilized where appropriate.

IX. Faculty Participation

A. Use Table 4 to identify existing and anticipated ranked (not visiting or adjunct) faculty who will participate in the proposed program through Year 5. Include (a) faculty code associated with the source of funding for the position; (b) name; (c) highest degree held; (d) academic discipline or specialization; (e) contract status (tenure, tenure-earning, or multi-year annual [MYA]); (f) contract length in months; and (g) percent of annual effort that will be directed toward the proposed program (instruction, advising, supervising internships and practicals, and supervising thesis or dissertation hours).

See attachment. **WAITING ON TABLE**

B. Use Table 2 to display the costs and associated funding resources for existing and anticipated ranked faculty (as identified in Table 2). Costs for visiting and adjunct faculty should be included in the category of Other Personnel Services (OPS). Provide a narrative summarizing projected costs and funding sources.

See attachment. **WAITING ON TABLE**

C. Provide the number of master's theses and/or doctoral dissertations directed, and the number and type of professional publications for each existing faculty member (do not include information for visiting or adjunct faculty).

Not Applicable.
D. Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student HC in major or service courses, degrees granted, external funding attracted, as well as qualitative indicators of excellence.

The new B.S. in Health Sciences will be placed in the Department of Cell Biology, Microbiology and Molecular Biology (CMMB). This degree is interdisciplinary using courses taught in numerous departments and several colleges. For example, the degree will be supported faculty with appointments in Anthropology, Integrative Biology, Religion, Psychology, Communications, Business, Sociology, Philosophy, Women’s and Gender Studies, and World Languages. Both the College of Arts and Sciences and Behavioral and Community Sciences have faculty that carry 2/2, 2/3, 3, 3 or 4/4 teaching loads depending on their positions and grants. CMMB has approximately 17 full time faculty including five instructors.

Non-Faculty Resources

E. Describe library resources currently available to implement and/or sustain the proposed program through Year 5. Provide the total number of volumes and serials available in this discipline and related fields. List major journals that are available to the university’s students. Include a signed statement from the Library Director that this subsection and subsection B have been reviewed and approved for all doctoral level proposals.

The USF Library at Tampa as well as USF Health Science Library has access to numerous databases and e-journals of top science, medical, clinical and other health related journals and periodicals such as Nature, Science, JAMA, Annual Reviews of numerous topics and Health Science and other Health topics; additional data bases include Web of Knowledge, Web of Science PsycINFO, PubMed, BIOSIS, etc. Currently students and faculty have access to over 56751 books, journals (including online) in the biological and microbiological areas supporting health science. * Please see appendix for a complete analysis of library resources.

F. Describe additional library resources that are needed to implement and/or sustain the program through Year 5. Include projected costs of additional library resources in Table 3.

- Please see appendix for full analysis of library resources.

Recognizing the value and importance of research, the USF Libraries will continue a sustained level of support that will meet the needs of undergraduate students who are pursuing a non-medical degree in Health Sciences.

In any given year, the USF Libraries materials budget is pushed to its limit. The rising cost of continuing journal subscriptions, the need for new research materials, and requests for access to online databases and data sets are part of the daily landscape. A large portion of the USF Libraries’ 6.2 million dollar budget supports the continuation of the electronic resources. Within
the next five years, the expectation would be for a continued level of support for this discipline. An increase in the cost of the library’s journal subscriptions would be anticipated, with typical annual increases of 3-6%. The acquisition of additional resources would have to be balanced against the research needs of other academic disciplines on campus within the confines of any budgetary restraints that the university could face during the next five years.

Prepared by:

Cheryl McCoy, Coordinator of Collections, USF Libraries

Date: 8/12/11 Email: cmccoy@usf.edu

Approved by:

Todd Chavez, Director of Academic Resources, USF Libraries

Date: 8/12/11 Email: tchavez@usf.edu

As of August 2011, the collections of the USF Tampa Library and affiliates are sufficient to support the support a non-medical Bachelor’s Degree in Health Sciences. Sustained annual investments to maintain the recurring elements of this collection and to purchase newly published materials are required to preserve sufficiency. With escalating costs, typical annual increases of 3-6% are likely. Strategic investments will be required as new faculty are hired and areas of emphasis evolve.

Certified by:

William Garrison, Dean of USF Libraries

Date: Email: wgarrison@usf.edu
G. Describe classroom, teaching laboratory, research laboratory, office, and other types of space that are necessary and currently available to implement the proposed program through Year 5.

This program has been in effect as a concentration under the Interdisciplinary Natural Sciences B.S. degree. Therefore, we do not anticipate a need for additional allocation of resources at this time. Due to the interdisciplinary nature of this degree program we anticipate that the needs of the degree can be met at this time with existing resources.

H. Describe additional classroom, teaching laboratory, research laboratory, office, and other space needed to implement and/or maintain the proposed program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space in Table 2. Do not include costs for new construction because that information should be provided in response to X (J) below.

We do not anticipate a need for additional research or teaching space to accommodate the program at this time.

I. Describe specialized equipment that is currently available to implement the proposed program through Year 5. Focus primarily on instructional and research requirements.

We do not anticipate a need for additional equipment to accommodate the program at this time.

J. Describe additional specialized equipment that will be needed to implement and/or sustain the proposed program through Year 5. Include projected costs of additional equipment in Table 2.

We do not anticipate a need for additional equipment to sustain the program at this time.

K. Describe any additional special categories of resources needed to implement the program through Year 5 (access to proprietary research facilities, specialized services, extended travel, etc.). Include projected costs of special resources in Table 2.

Not applicable.

L. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5. Include the projected costs in Table 2.

Not applicable.
M. Describe currently available sites for internship and practicum experiences, if appropriate to the program. Describe plans to seek additional sites in Years 1 through 5.

At this time the program does not require an internship or practicum for completion of the degree.

N. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. Table 2 includes only Instruction and Research (I&R) costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form below. It is expected that high enrollment programs in particular would necessitate increased costs in non-I&R activities.

Not applicable.

**Additional Appended Information:**

A. Outline of Health Science Degree Requirements and Concentration Offerings

B. Pie Chart showing the results of a survey of 216 Health Science Majors, showing interest in all proposed concentrations. First and second choice concentrations are shown.

C. Library Resource Statement for Health Science degree proposal.

D. Statements of Concurrence from colleges/departments participating in the health science degree program.
September 2, 2011

Dear Claudia,

Thank you for the work you have done on the Health Science degree proposal. Your idea to organize the concentrations and link them to career/graduate school opportunities is a great enhancement to the proposal. I have talked to the BCS department chairs/school directors who have concentrations/courses in the proposal and they have accepted the changes you made: deletion of courses with pre-requisites and deletion of field placement/internships. In addition, CSD would like to substitute Multiculturism in Communication Disorders for the course in Applied Phonetics and remove SPA 3112 (Applied Phonetics) from the list of electives in the Biological Health Science Concentration. The School of Aging Studies confirmed the addition of GEY 4935 (Senior Seminar) and the School of Social Work confirmed their desire to continue SOW 3102 and SOW 3210 as electives within the Social and Behavioral Health Science concentration.

The College of Behavioral & Community Sciences is please to provide concurrence with the Health Science degree program and wish you the best as it proceeds through the curricular process.

Thank you,

Catherine

Catherine Batsche, Ph.D.  
Interim Dean  
College of Behavioral & Community Sciences
September 13, 2011

Dear Claudia,

I am writing to reconfirm that the School of Information is happy to provide concurrence for the Health Science degree program that is currently going through the College and University committee process. As we discussed, our B.S. in Information Studies (BSIS) seems well suited for supporting an area of emphasis in Health Informatics.

While the BSIS program, in its current form, is itself rather new, we have both information technology courses and health IT-focused ones that will contribute to this emphasis area. In particular, students in your program could register for the following:

LIS 3353 IT Concepts for the Information Professional
LIS 2937 Database Concepts
LIS 3783 Information Architecture
LIS 4410 Information Policy and Ethics
LIS 4482 Networks and Communication
LIS 4930 Health Information Management Systems
LIS 4930 Health Information Technology
LIS 4930 Introduction to Health Informatics
LIS 4930 Heath Information Sources and Services

Some of these are still listed as special topics, but will be submitted for official course numbers in the coming months. Moreover, we will be sure that our faculty and advisors continue to work with you if refinements to these need to be made to ensure an effective set of courses is being offered and students are appropriately advised.

We wish you all the best as the program goes through the approval process, and look forward to working with you in the semesters to come.

Sincerely,

James Andrews, Ph.D.
Director

SCHOOL OF INFORMATION
University of South Florida • 4202 East Fowler Avenue, CIS1040 • Tampa, FL 33620-7800
(813) 974-3520 • Fax (813) 974-6840
MEMORANDUM

DATE: September 9, 2011

TO: Claudia Cooperman, PhD
    Director, Health Science Program

FROM: Donna J. Petersen, ScD, MHS
    Dean

SUBJECT: Proposed Bachelor of Science in Health Science, Tampa Campus

Thank you for sharing with us your proposal for a Bachelor of Science in Health Science degree. I understand this degree is on the approved BOG workplan and that you are working diligently to conform to the new process for new degree proposals, on a fairly tight timeframe, in order to have this approved within this academic year.

As you correctly note, part of the impetus for this degree came from the “Emerging Health Professions” workgroup which had envisioned a “system-wide” degree through which students could take courses across the system that reflected the strengths of the various USF campuses. The movement toward separate accreditation precluded a single degree, but the workgroup persevered and devised a model whereby any campus could offer the BSHS degree, following the structure outlined by the group. Unique to the recommended structure was the inclusion of two “clusters”, each around a critical theme within the health sciences, any number of which could be offered by and completed on any of our member campuses. So, for example, a student earning the degree at the USF St Petersburg campus, could, in theory, take one or even both clusters at another USF campus. Similar arrangements were envisioned across the system.

However, in this case, the stronger impetus for this degree was a combination of the new D/F rule and the pressure to develop an alternative for students in the Biomedical Sciences major. With the full concurrence of the Emerging Health Professions workgroup at the time, the College of Arts and Sciences devised a health sciences major within an existing interdisciplinary science degree which successfully relieved the pressure on the BMS program as evidenced by the large number of enrollees and the number of students who have already graduated from this program. It is this structure that is now being proposed as the new Bachelor of Science in Health Science, not the structure developed by the Emerging Health Professions workgroup.

At this time, given the success of the existing major and the continuing evolution of the USF System, I understand the rationale for creating a degree based on your positive experience with the major. I understand that the College of Arts and Sciences remains committed to the ideal of the original plan and is willing to continue to work toward that ideal. I further understand that as this degree structure does not conform to the original “clusters” idea, there is no need for a public health cluster (though we would happily contribute one should you find it would be beneficial to your students); I do note that there are public health courses recommended in the degree you are
proposing and that Dr. Kay Perrin has shared other offerings within public health we believe would enhance the learning opportunities for your students.

The College of Public Health is willing to offers its concurrence with this proposal at this time and looks forward to continuing to work with you and others toward a more consistent and flexible health sciences degree across the USF System as the System moves to make these options more easily and readily available to our students.

DJP: dj

cc: Eric Eisenberg, PhD, Dean, CAS
    Robert Potter, PhD, Associate Dean CAS
    Kay Perrin, PhD, Director, Undergraduate Programs, COPH
University of South Florida Libraries
New Bachelor’s Degree in Health Sciences

Overview of USF Libraries, Mission, and Program/Discipline Strengths
The University of South Florida is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award degrees at the baccalaureate, masters, specialist, and doctoral levels, including the Doctor of Medicine. The institution was initially accredited in 1965 and was last reviewed and reaffirmed in 2005. The institution is scheduled to receive its next reaffirmation of accreditation review in 2015.

The University of South Florida Libraries consist of USF’s main research library, located on the Tampa Campus; two special libraries, the Hinks and Elaine Shimberg Health Sciences Library and the Louis de la Parte Mental Health Institute Library, which are also located on the Tampa Campus; the Nelson Poynter Memorial Library, USF St. Petersburg; the Jane Bancroft Cook Library, USF Sarasota-Manatee; and the USF Polytechnic Library in Lakeland.

Our vision is to become a globally recognized academic library system advancing knowledge through integrated resources, responsive services, research, and instruction. Together, the USF Libraries provide access to more than 2 million volumes and an extensive collection of electronic resources including approximately 6,500 e-journal subscriptions and 800 aggregator databases containing another 53,000 unique e-journal titles, 443,000 e-books, and 826,000 digital images. In addition, students have access to over 45,000 audio/visual materials including videos, CDs, and DVDs.

In addition to extensive electronic and print resources, the USF Libraries offer unique access to primary research materials through the Special and Digitized Collections Department. Specializations include: Holocaust & Genocide Studies, Science Fiction, Oral Histories, Florida Studies, Sacred Leaves medieval manuscripts, literature and book arts, children and young adult literature, sheet music, and rare books.

The library endeavors to develop and maintain a research collection that satisfies the resource needs of the undergraduate curriculums in all of the subject disciplines and also meets the specialized needs of the graduate students and faculty for advanced research materials. The interdisciplinary nature of this non-medical Health Sciences degree will rely upon the integrated support structure found within the well-established research collections in the natural sciences, social and behavioral sciences, and humanities disciplines.

USF Libraries Collections
The USF Tampa Library collects current research materials in all subject areas within the Library of Congress subject classifications relating to biological, social, behavioral, economic, and ethical studies related to health care today. All of these areas of study will provide support for a non-medical degree program in health sciences. These subject areas include materials in the LC call number areas of BF, BJ, GN, HA, HM-HT, QA, QC, QD, QH, QP, R-RC; and RF.

<table>
<thead>
<tr>
<th>Psychology/Ethics</th>
<th>BF1-724; BJ1-1800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthropology/Communication</td>
<td>GN1-699; P87-96</td>
</tr>
<tr>
<td>Social/Behavioral Sciences</td>
<td>HM; HN; HQ503-2030; HT</td>
</tr>
<tr>
<td>Mathematics &amp; Statistics</td>
<td>HA1-9999, QA150-329</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>QC1-80; QD1-70; QD415, QH301-671, QP360</td>
</tr>
<tr>
<td>Health/Allied Sciences</td>
<td>R723-727; RA1-790; RA960-1000; RC952-954</td>
</tr>
</tbody>
</table>
Emphasis is on acquiring and maintaining a robust collection of electronic journals and in developing a strong research monographic eBook collection representing the important trade, university and professional presses. Conference proceedings, technical reports, dissertations, reference works, datasets, audio-visual materials, and graduate and advanced undergraduate texts are acquired selectively.

- **Number of Books in Health Sciences Subject Areas**
  - Print: 60,589
  - Electronic: 7,992

  **eBook Collections include:** Annual Reviews, Springer eBook Collection in Biomedical and Life Sciences, eBook Collection (formerly NetLibrary) Springer eBook Collection in Humanities, Social Sciences, and Law, Springer eBook Collection in Chemistry & Materials Science, PsycBOOKS, and Springer eBook Collection in Behavioral Science.

- **Number of Journals in Health Sciences Subject Areas**
  - Print: 1,297
  - Electronic: 1,880

- **Number of electronic databases - 175**
  **Select List of Databases within the Health Science Subject Areas:**
  - Academic Search Premier
  - Ageline
  - Anthropology Plus
  - Anthrosource
  - Applied Science & Technology Full-text
  - Biological & Agricultural Index Plus
  - BIOSIS Previews
  - CINAHL
  - Communication Abstracts
  - General Science Full-text
  - Health & Wellness Resource Center
  - Health Reference Center Academic
  - JSTOR
  - LexisNexis Academic
  - MEDLINE
  - PsycINFO
  - PubMed
  - Science Direct
  - SciFinder Scholar
  - Sociological Abstracts
  - Sociology – A SAGE Full-text Collection
  - Springerlink
  - Web of Science
  - Wiley Online Library

- **Media Resources – 918**
  - Videos, DVDs, and Streaming Videos
Government Publications
The USF Tampa Library is a designated Federal Depository Library. The materials that are received from the Government Printing Office are selected based on the research needs of the university. The library routinely receives publications from the U.S. Department of Health and Human Services, which includes publications from the Administration for Aging, the Health Resources and Services Administration, and the National Institute of Health. In addition to recent publications, the library also maintains an historical collection of research materials from these departments and agencies.

Summary Statement
Recognizing the value and importance of research, the USF Libraries will continue a sustained level of support that will meet the needs of undergraduate students who are pursuing a non-medical degree in Health Sciences.

In any given year, the USF Libraries materials budget is pushed to its limit. The rising cost of continuing journal subscriptions, the need for new research materials, and requests for access to online databases and data sets are part of the daily landscape. A large portion of the USF Libraries’ 6.2 million dollar budget supports the continuation of the electronic resources. Within the next five years, the expectation would be for a continued level of support for this discipline. An increase in the cost of the library’s journal subscriptions would be anticipated, with typical annual increases of 3-6%. The acquisition of additional resources would have to be balanced against the research needs of other academic disciplines on campus within the confines of any budgetary restraints that the university could face during the next five years.

Prepared by:

Cheryl McCoy, Coordinator of Collections, USF Libraries
Date: 8/12/11 Email: cmccoy@usf.edu

Approved by:

Todd Chavez, Director of Academic Resources, USF Libraries
Date: 8/12/11 Email: tchavez@usf.edu
As of August 2011, the collections of the USF Tampa Library and affiliates are sufficient to support the support a non-medical Bachelor’s Degree in Health Sciences. Sustained annual investments to maintain the recurring elements of this collection and to purchase newly published materials are required to preserve sufficiency. With escalating costs, typical annual increases of 3-6% are likely. Strategic investments will be required as new faculty are hired and areas of emphasis evolve.

Certified by:

William Garrison, Dean of USF Libraries

Date:  Email:  wgarrison@usf.edu
## Results of an Informal Survey of Current Health Science Majors Indicating Concentration Preference
(First and Second Choice are shown)

<table>
<thead>
<tr>
<th>Biological</th>
<th>Social and Behavior</th>
<th>Geriatrics</th>
<th>Management</th>
<th>Health Information</th>
<th>Health Education</th>
<th>Biological</th>
<th>Social and Behavioral</th>
<th>Geriatrics</th>
<th>Management</th>
<th>Health Information</th>
<th>Health Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>129</td>
<td>26</td>
<td>18</td>
<td>20</td>
<td>3</td>
<td>20</td>
<td>21</td>
<td>64</td>
<td>24</td>
<td>45</td>
<td>24</td>
<td>36</td>
</tr>
</tbody>
</table>

### First Choice
- Biological: 60%
- Geriatrics: 12%
- Management: 9%
- Health Information: 9%
- Social and Behavior: 8%

### Second Choice
- Biological: 30%
- Geriatrics: 21%
- Management: 11%
- Health Information: 11%
- Social and Behavioral: 17%
- Health Education: 10%
Health Science Degree Core Courses (34-40 credits)

Core Prerequisites (21 credits)
IDS 2931 Introduction to Health Professions (3)
ENC 2210 Technical Writing (3)
DEP 2004 The Life Cycle (3)
CLT 3040 Scientific and Medical Terminology (3)
PSY 2012 Introduction to Psych. Science (3)
PHI 3633 Biomedical Ethics (3)
OR PHI 3636 Professional Ethics (3)

Health Science Concentration

ANT 2511 Biological Anthropology (3)
SYG 2000 Intro. to Sociology (3)
GEY 2000 Intro. to Gerontology (3)

Careers in pharmaceutical sales, clinical lab management, technology specialists, audiology, pre-PA and PT.

Social & Behavioral Health Science Concentration

Careers in social service agencies such as mental health, substance abuse, and other human service agencies. Prepares students for entry to graduate programs in clinical or healthcare administration.

Aging Health Studies Concentration

Careers in nursing home administration, social coordinators, counselors, therapists and geriatric program development.

Health Management Concentration

Careers in hospital administration, physician and small office management, local & national program administration, the insurance industry and health service management.

Health Information Technology Concentration

Careers in medical records management, information technologies, software and internet development.

Biological Sciences (7-11 credits)

BSC 1005 Principles of Biology (3)
OR BSC 1020 The Biology of Humans (3)
BSC 2085/2085L Anat. & Phys. I for Health Prof. (4)
OR BSC 2093 Human Anat. & Phys. I (4)
AND BSC 2094 Human Anat. & Phys. II (4)

Mathematics (6-8 credits)
STA 2023 Introductory Statistics (4)
OR PSY 3204 Psychological Statistics (3)
MAC 1105 College Algebra (3)
OR MAC 1147 Pre-calc. Algebra and Trig. (4)
OR MAC 2241 Life Sciences Calculus (4)

Core Prerequisites (21 credits)
IDS 2931 Introduction to Health Professions (3)
ENC 2210 Technical Writing (3)
DEP 2004 The Life Cycle (3)
CLT 3040 Scientific and Medical Terminology (3)
PSY 2012 Introduction to Psych. Science (3)
PHI 3633 Biomedical Ethics (3)
OR PHI 3636 Professional Ethics (3)
Biological Health Science Concentration

PHY 2020 Conceptual Physics (3)
CHM 2032 Intro. to General, Organic, and Biochem. (3) OR CHM 2023 Chem. for Today (3)
PHY 3XXX Application of Physics to Medical Diagnostics (3)
BSC 4930 Microbiology for Health Sciences (with lab) (3)
BMS 4402 Principles of Human Pharmacology (3)
PHC 3302 Introduction to Environmental & Occupational Health (3)
HSC 4504 Foundation of Public Health Immunology (3)
HSC 4624 Foundation of Global Health (3)
BSC 3022 Biology of Aging (3)              PHC 4030 Introduction to Epidemiology (3)
HSC4554 Survey of Human Disease (3)           ANT 4520C Forensic Anthropology (3)
ANT 4462 Health Illness and Culture (3)       ZOO 4512 Sociobiology (3)
LIS 4930 LIS Health Informatics (3)            GEY 3601 Physical Change and Aging (3)
PHC 4406 Informed Decision Making (3)          PHC 4542 Stress, Health & College Life (3)
HSC 4573 Foundation of Food Safety (3)           HSC 3541 Human Structure & Function (3)

Communication Sciences & Disorders Cluster

SPA 3030 Introduction to Hearing Science (3)
SPA 3101 Anatomy and Physiology of the Speech & Hearing Mechanism (3)
SPA 3002 Introduction to Disorders of Speech and Language (3)
SPA 3004 Introduction to Language Development and Disorders (3)
SPA XXXX Multiculturalism in Communication Disorders (3)
SPA 4104 Neuroanatomy of Speech, Language & Hearing Disorders (3)
# Social and Behavioral Health Science Concentration

**Mental Health Cluster**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHS 3411</td>
<td>Multidisciplinary Behavioral HC</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 4931</td>
<td>Ethical Issues in Behavioral HC</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 4931</td>
<td>Case Management and Community Resources</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 4408</td>
<td>Exemplary Practices in Behavioral HC</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 4002</td>
<td>Behavioral Health Systems Delivery</td>
<td>(3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYO 4400</td>
<td>Medical Sociology</td>
<td>(3)</td>
</tr>
<tr>
<td>SOP 4330</td>
<td>Social Psychology of HIV/AIDS</td>
<td>(3)</td>
</tr>
<tr>
<td>COM 4022</td>
<td>Health Communication</td>
<td>(3)</td>
</tr>
<tr>
<td>COM 4020</td>
<td>Communicating Illness, Grief and Loss</td>
<td>(3)</td>
</tr>
<tr>
<td>COM 4021</td>
<td>Family Communication and End of Life</td>
<td>(3)</td>
</tr>
<tr>
<td>SPC 4305</td>
<td>Communicating Emotions</td>
<td>(3)</td>
</tr>
<tr>
<td>SPC 4930</td>
<td>Global and Cultural Health Comm.</td>
<td>(3)</td>
</tr>
<tr>
<td>SPC 4321</td>
<td>Communication and Aging</td>
<td>(3)</td>
</tr>
<tr>
<td>COM 4702</td>
<td>Communications, Language and Mental Illness</td>
<td>(3)</td>
</tr>
<tr>
<td>CLP 4143</td>
<td>Abnormal Psychology</td>
<td>(3)</td>
</tr>
<tr>
<td>LIS 4930</td>
<td>Health Information Studies</td>
<td>(3)</td>
</tr>
<tr>
<td>HSC 4933</td>
<td>US Healthcare Systems</td>
<td>(3)</td>
</tr>
<tr>
<td>HSC 4211</td>
<td>Health Behavior and Society</td>
<td>(3)</td>
</tr>
<tr>
<td>WST 4320</td>
<td>The Politics of Women’s Health</td>
<td>(3)</td>
</tr>
<tr>
<td>HSC 4579</td>
<td>Foundation of Maternal &amp; Child Health</td>
<td>(3)</td>
</tr>
<tr>
<td>HSC 4631</td>
<td>Critical Issues in Public Health</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Substance Abuse Cluster**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHS 3411</td>
<td>Multidisciplinary Behavioral HC</td>
<td>(3)</td>
</tr>
<tr>
<td>PSB 3444</td>
<td>Drugs and Behavior</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 4931</td>
<td>Substance Abuse Delivery Systems</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 4408</td>
<td>Exemplary Practices in Behavioral HC</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 4931</td>
<td>Ethical Issues in Behavioral HC</td>
<td>(3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOW 3102</td>
<td>Introduction to Social Work</td>
<td>(3)</td>
</tr>
<tr>
<td>SOW 3210</td>
<td>The American Social Welfare System</td>
<td>(3)</td>
</tr>
<tr>
<td>PHI 4930</td>
<td>Social Issues in Biomedical Ethics</td>
<td>(3)</td>
</tr>
<tr>
<td>HSC 4172</td>
<td>Women’s Health: A Public Health Perspective</td>
<td>(3)</td>
</tr>
<tr>
<td>PHC 4406</td>
<td>Informed Decision Making</td>
<td>(3)</td>
</tr>
<tr>
<td>MHS 4931</td>
<td>Ethical Issues in Behavioral HC</td>
<td>(3)</td>
</tr>
</tbody>
</table>
Aging Health Studies Concentration

GEY 4322 Gerontological Case Management (3)
OR
MHS 4931 Case Management in Community Mental Health (3)
GEY 4327 Understanding Policy and Practice in Long Term Care (3)
GEY 3601 Physical Change and Aging (3)
GEY 4360 Gerontological Counseling (3)
GEY 4608 Alzheimer's Disease Management (3)
GEY 4628 Race, Ethnicity, and Aging (3)
GEY 4641 Death and Dying (3)
GEY 4935 Program and Service Evaluation (3)
SOW 3210 The American Social Welfare System (3)
SPA 3002 Introduction to Disorders of Speech and Language (3)
SPA 4254 Survey of Neurogenic Disorders (3)
BSC 3022 Biology of Aging (3)
GEY 4935 Senior Seminar in Gerontology (3)
PHC 4931 Health Care Ethics (3)
HSC 4211 Health, Behavior & Society (3)
HSC 4630 Understanding US Healthcare (3)
Health Management Concentration

ACG 2071 Principles of Managerial Accounting (3)
MAN 3025 Principles of Management (3)
HSC4011 Introduction to Public Health (3)
HSC4630 Understanding US Health Care (3)
PAD 3003 Introduction to Public Administration (3)
PAD 4204 Public Financial Administration (3)
PHI 3636 Professional Ethics (3)
PUP 4002 Public Policy (3)
PUP 5607 Public Policy and Health Care (3)
RMI 3011 Principles of Insurance (3)
SYO 4400 Medical Sociology (3)
GEY 4635 Business Management in an Aging Society (3)
HSC 4933 US Healthcare Systems (3)
PHC 4931 Health Care Ethics (3)
HSC 4211 Health, Behavior & Society (3)
HSC 4624 Foundation of Global Health (3)
HSC 4631 Critical Issues in Public Health (3)
Health Information Technology Concentration

LIS 4930 Introduction to Health Informatics (3)
LIS 3783 Information Architecture
LIS 3353 IT Concepts for Information (3)
LIS 4482 Networks and Communication (3)
LIS 4930 Health Information Management Systems (3)
LIS 4930 Health Information Technologies (3)
LIS 4930 Health Information Sources and Services (3)
LIS 4410 Information Policy and Ethics (3)
PAD 4712 Managing Information Resources in the Public Sector (3)

• Please note: courses listed as LIS 4930 are currently offered as special topics or are now in development by the department to be offered in upcoming semesters.