Health Sciences

College of Health and Human Development

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Emeritus Faculty
Miriam Cotler, Mary Ellen Etherington, Bonnie Faherty, Shelia Harbet, Bernard Hanes, Donald Hufhines, Michael Kline, Roberta Madison, Mary Parker, and Robert Huff.

Programs

Undergraduate:
- B.S., Health Sciences
  - Health Administration Option
  - Health Education Option
  - Radiologic Technology Sciences Option
- B.S., Nursing*
- Interdisciplinary Minor in Gerontology

Graduate:
- M.S. Health Administration
- M.P.H. Health Education
- M.S., Interdisciplinary Studies with Gerontology Concentration

Certificate:
- Public Health Nurse Certificate*
- School Nurse Credential*
- Post-Baccalaureate Certificate in Gerontology

*See Nursing listed alphabetically in this Catalog

Mission Statement

It is the mission of the Department of Health Sciences to enable students to develop the critical knowledge and skills required to assume professional responsibility and leadership in health promotion, disease prevention, administration, and clinical practice in a variety of health care settings. Health Sciences faculty are committed to student-centered learning, scholarship, and service.

The Major

The primary objective of the Department of Health Sciences is to the education of students preparing for professional careers in private and public health services. The programs in Health Sciences are multidisciplinary, and directed toward understanding factors affecting the wellbeing and health of populations and individuals and toward improving their health status.

The professional programs are based upon a foundation in the liberal arts and the physical and behavioral sciences. The professional programs are directed toward preparing student for the specific program discipline.

Scholarships

In honor of our emeritus faculty, the Department has established several scholarships: the Ellen McFadden Scholarship, Seymour Eisman Scholarship, and the Lennin Glass Scholarship. For more information about applications and deadlines, please contact the Department of Health Sciences at (818) 677-3101.

Academic Advisement

Faculty advisors are available prior to registration and throughout the semester during regular scheduled office hours. Program advisement should be obtained at that time. The department requires advisement prior to registration. Students are responsible for completing all of the requirements for the degree as listed in the catalog the year in which they were admitted. Substitutions for a required course may be permitted only by petition submitted prior to enrollment in the course. Please contact the following coordinators for more information about individual department programs:
Health Administration Program: Louis Rubino (818) 677-7257
Health Education: (818) 677-3101
Radiologic Technology Sciences: Anita Slechta (818) 677-2475
Nursing: (818) 677-3101*
M.S. in Health Administration: Janet Reagan (818) 677-2298
M.P.H. in Health Education: (818) 677-3101
School Nurse Credential: (818) 677-3101*
Gerontology Minor: 818-677-3101*
*See Nursing and Gerontology listed alphabetically in this Catalog

Student Learning Outcomes of the Undergraduate Program

Graduates of the undergraduate programs in Health Sciences should be able to:
1. Demonstrate critical thinking, problem solving, and leadership skills.
2. Demonstrate competency in new technologies that are continuously evolving.
3. Promote respect for and the promotion of ethical practices in diverse populations.
4. Demonstrate skills required to assume professional responsibility in their area of specialization.

Requirements for the B.S. in Health Science

Lower Division: Please refer to the specific Program for a summary of lower division requirements.

Upper Division (required for all programs): The core contains 4 areas of competence, which encompass knowledge, attitudes and skills relevant to all Health Sciences majors:

Required Competency Areas

1. Public Health and Promotion
2. Health Administration, Organization and Delivery
3. Bio-Statistics and Program Evaluation
4. Epidemiology

The following listing by program identifies the courses that meet each of the above competency areas for each of the four Department of Health Sciences Programs (Students majoring in a Program are restricted to taking only those core courses designated for their Program):

Competencies/Departmental Programs

Health Administration (Three of the four Department competencies, 9 to 10 units.)
Public Health and Health Promotion: HSCI 345
Health Administration, Organization and Delivery: HSCI 314
Bio-Statistics and Program Evaluation: HSCI 390/L
Epidemiology: HSCI 488

Health Education (Three of the four Department competencies, 9 to 10 units.)
Public Health and Health Promotion: HSCI 345 or 132
Health Administration, Organization and Delivery: HSCI 314
Bio-Statistics and Program Evaluation: HSCI 390/L
Epidemiology: HSCI 488

Radiologic Technology Sciences (Three of the four Department competencies, 9 to 10 units.)

Public Health and Health Promotion: Upper Division Elective with Advisement

Health Administration, Organization and Delivery: HSCI 487 Bio-Statistics and Program Evaluation: HSCI 390/L

Epidemiology: HSCI 488

To meet core requirements, all majors in the Department of Health Sciences must complete at least one course in three of the four competency areas. Students must consult with their academic advisor to determine which of the three courses best meets program requirements.

A. Option I: Health Administration Program

The Health Administration option in the B.S. in Health Science degree program provides initial preparation for careers in health services administration and for those already employed, an opportunity to continue their professional advancement. The undergraduate curriculum also prepares the individual to enter the Master of Science in Health Administration (MSHA) degree program. Further education at the graduate level is often necessary to assume advanced management and policymaking roles in health care and related organizations. Graduates of the undergraduate program are in demand and are employed by managed care organizations, hospitals, skilled nursing and other long-term care facilities, medical groups, HMOs, health insurance companies, public health and mental healthcare organizations, governments and consulting firms. The Association of University Programs in Health Administration certifies the undergraduate Health Administration program.

Mission Statement

The mission of the Health Administration Program is to prepare a diverse student body for careers in health care management and related disciplines. With a focus on learning centered courses, community partnerships, research, advocacy, and scholarship, the Health Administration Program aims to educate students for professional positions, and thus enhance the operational efficiency and effectiveness of health care and related organizations and improve the delivery of health care services.

Student Learning Outcomes of the Health Administration Option

The program provides a curriculum contemporary and relevant to evidence-based health administration practice and which meets national standards for excellence. Graduates of the undergraduate program in Health Sciences with the option in Health Administration should

1. Demonstrate mastery of the conceptual and technical knowledge and skills relevant to successful health administration practice and which meet national standards for certification by the Association of University Programs in Health Administration.
2. Demonstrate mastery of the analytical, written and oral communication, and interpersonal skills required for successful practice.
3. Demonstrate an ability to integrate classroom knowledge and skills and be able to bridge the gap to the professional practice of health administration.
4. Demonstrate an appreciation of the importance of professional ethics and continual professional growth.
5. Demonstrate an ability to assume entry level staff and management positions in health services organizations.

1. Lower Division Required Courses (19 Units)

ACCT	220	Introduction to Financial Accounting (3)
BIOL	101/L	General Biology and Lab (3/1)
HSCI	132	History of Preventative Medicine and Public Health (3)
		or HSCI 345 Public Health Issues (3)*
PSY	150	Principles of Human Behavior (3)*
SOC	150	Introductory Sociology (3)*
MATH	102	College Algebra (3)*

**Overlap with General Education*

2. Upper Division Required Courses (43 Units)

Note: A minimum grade of "C-" is required in all upper division required courses.

HSCI	312	Introduction to Health Administration (3)
HSCI	313	Health Administration (3)
HSCI	314	Organization and Delivery of Health Services (3)
HSCI	390/L	Biostatistics and Biostatistics Lab (3/1)
HSCI	391	Computer Applications for Health Science (3)
HSCI	412	Medical Care Organization in the United States (3)
HSCI	413	Leadership and Direction in the Administration of Health Services (3)
HSCI	414	Health Law (3)
HSCI	415	Health Information Systems (3)
HSCI	416	Utilization of Professional and Allied Health Personnel (3)
HSCI	424	Health Planning (3)
HSCI	425	Financial Planning and Reimbursement in Health Care (3)
HSCI	488	Epidemiology: Introduction to Study of Disease (3)
HSCI	494C	Academic Internship (3)

3. Electives (9 Units Minimum)

Select a minimum of 9 units–with prior advisor approval.

Total Units Required in Major	71
General Education	48
Additional Units	8
Total Units Required for the Degree	120

B. Option II: Health Education

The Health Education Option is intended to prepare students with the skills needed to plan, implement, and evaluate the educational components of health and human service programs. The Program contains one track, Public Health Education. Public, voluntary and proprietary health and human service agencies, hospitals, organizations, industry, as well as professional consulting firms that provide services to various governmental and private organizations employ graduates of the Public Health Education track. Appropriate advisement provides students flexibility in the selection of various health education career opportunities. These opportunities include health promotion and wellness, consumer health, health and human services gerontology, school health education, community health education, and health education generalist.

Student Learning Outcomes of the Health Education Option

Students in the Health Education option should be able to:

1. Demonstrate knowledge of public health and health education program planning; theories of health behavior; change assessment and intervention and multicultural influences impacting the delivery of public health interventions.
2. Apply knowledge and skills necessary of program planning, implementation and evaluation of health education programs in a variety of practice settings.
3. Demonstrate a mastery of biostatistical and epidemiological methods appropriate to the health education practice.

Public Health Education Track

1. Lower-division Required Courses (23-26 Units)

BIOL	101/L	General Biology (Meets GE/B.1) and Lab (3/1)

BIOL 211/212 Human Anatomy and Lab (2/1)*
or EOH 353 Global Perspective of Environmental Health (3)
BIOL 281 Human Physiology (3)
CHEM 100 Principles of Chemistry (3)**
HSCI 237 Introduction to Health Education (3)
MATH 140 Introductory Statistics (4)**
PSY 150 Principles of Human Behavior (3)**
SOC 150 Introduction to Sociology (3)**

**BIOL 211 and BIOL 212 may be taken in lieu of EOH 353*
***Meets GE requirement.*

2. Upper Division Health Sciences Department Core (10 Units)

HSCI 390/L Biostatistics and Biostatistics Lab (3/1)
HSCI 488 Epidemiology Study of Disease (3)

Students are to select one of the following two courses:

HSCI 345 Topics in Public Health (3)
HSCI 314 Organizations and Function of Community Health Services (3)

3. Upper Division Required Courses (24-27)

ENGL 306 Report Writing (3)
EOH 353 Global Perspectives of Environmental Health (3)*
HSCI 391 Computer Applications in Health Science (3)
HSCI 431 Health Behavior (3)
HSCI 437 Strategies for Making Health Decisions (3)
HSCI 439 Community Health Action (3)
HSCI 441 Community Health Education (3)
HSCI 445 Senior Seminar in Health Education (3)
HSCI 494C Academic Internship (3)

**EOH 353 may be taken in lieu of BIOL 211 and BIOL 212. Meets GE reqiorement.*

4. Health Science Electives (15 Units)*

Select up to 15 units from the following*, with advisor approval:

HSCI 231 Women and Health (3)
HSCI 335 Holistic Health (3)
HSCI 336 Health Aspects of Drug Abuse (3)
HSCI 337 Nutrition and Health (3)
HSCI 433 Counseling of Health Problems (3)
HSCI 436 Health Concerns of Adolescents (3)
HSCI 438 International Health (3)
HSCI 440 Family Health (3)
HSCI 442 Health Problems of the Disadvantaged (3)
HSCI 499A-C Independent Study (1-3)

**Examples of electives from within the Health Sciences Department course offerings, must be approved by a Health Education academic advisor.*

5. Non-Health Sciences Electives (Select up to six units)*

FCS 207 Nutrition for Life (3)
FCS 340 Marriage and Family Relations (3)
EOH 352 Environmental Health Policy, Law and Administration (3)
PSY 310 Behavior Disorders (3)
PSY 460 Counseling and Interviewing (3)
SOC 328 The Child and Society (3)
URBS 310 Growth and Development of Cities (3)

**Examples of electives outside of the Health Sciences Department course offerings, must be approved by a Health Education academic advisor.*

Total Units in the Major	69
General Education Units	30
Additional Units	21
Total Units Required for the Degree	120-122

Health Science Subject Matter Program for the Single Subject Credential track

Suspended to new enrollment Fall 2010.

An overall GPA of 2.75 is required for admission into the program.

1. Lower Division Required Courses (30 Units)

BIOL 101/L General Biology and Lab (3/1)*
BIOL 211/212 Human Anatomy and Lab (2/1)
BIOL 281 Human Physiology (3)
CHEM 100 Principles of Chemistry (3)*
MATH 140 Introductory Statistics (4)*
HSCI 131 Health and Society (2)
HSCI 170 Emergency Health Procedures (2)
HSCI 237 Introduction to Health Education (3)
PSY 150 Principles of Human Behavior (3)*
SOC 150 Introduction to Sociology (3)*

**Meets GE requirement.*

2. Upper Division Health Sciences Department Core (10 Units)

HSCI 390/L Biostatistics and Lab (3/1)
HSCI 488 Epidemiology: Study of Disease (3)
HSCI 345 Issues of Public Health (3)

3. Upper Division Required Courses (36 Units)

ENGL 306 Report Writing (3)
HSCI 336 Health Aspects of Drug Use (3)
HSCI 337 Nutrition and Health (3)
EOH 365 Principles of Accident Prevention (3)
HSCI 391 Computer Applications in Health Science (3)
HSCI 431 Health Behavior (3)
HSCI 433 Counseling of Health Problems (3)
HSCI 436 Health Concerns of the Adolescent (3)
HSCI 440 Family Health (3)
HSCI 441 Community Health Education (3)
HSCI 445 Senior Seminar in Health Education (3)
HSCI 494C Academic Internship (3)

Total Units in the Major	78
General Education Units	33
Additional units	9
Total Units Required for the Degree	123

C. Option III: Radiologic Technology Sciences

The Radiologic Technology Sciences Option (RT) B.S. degree program prepares practitioners (radiologic technologists) to work with the patient and physician, performing a wide variety of diagnostic imaging procedures within the radiology (x-ray) department. The radiologic technologists must know the principles of anatomy, physiology, pathology, radiographic imaging, radiation safety, the operation of many types of x-ray and computerized equipment, the professional care and handling of patients and the management of a radiology department or division. The baccalaureate program provides a multi-competent practitioner for the diagnostic team. Program competencies include experiences with standard x-ray equipment, angiographic suites, computerized tomography (CT or CAT scan), magnetic resonance (MR), cardiac catheterization, digital vascular imaging devices and mammography.

The Radiologic Technology Sciences Option consists of 2 phases, the pre-professional and the professional phase. During the pre-professional portion, students complete the university General Education requirements and the Radiologic Technology Sciences Option prerequisites. Upon completion of the pre-professional phase, students become eligible to apply to the professional Radiologic Technology Sciences Option program which includes 2,600 hours of clinical-

internship at affiliate Medical Centers. A limited number of clinical positions at these medical centers are available each year for students accepted into the professional phase. A separate application to the R. T. S. Program Selection Committee for clinical internship placement is due each January in the CSUN Health Sciences Department. Tours of clinical facilities must be arranged through the Health Sciences Department prior to interviews. Additionally, 40 hours of experience in a hospital-patient-care setting must be documented prior to interviews. See the Department for applications and information regarding selection criteria for the professional phase of the program. Please note that meeting prerequisite criteria DOES NOT guarantee placement into the professional program.

If selected to the professional program, prior to clinical placements all CSUN radiologic technology sciences students are required to obtain their own criminal background checks at their sole cost and to supply that information to designated approving agencies or persons. In order to meet accreditation standards many clinical agencies are requiring background checks and drug testing on all students placed at their facilities and have the right to refuse a student clinical placement based upon information from background checks and drug screening. Students will be unable to complete degree requirements if clinical placements are refused. Further information on background checks and where to obtain them is available from radiologic technology sciences advisors.

Professional RTS students are responsible for obtaining, at their sole cost, any necessary health exams, immunizations, evidence of a TB test, titers, or other requirements necessary to meet OSHA requirements, and maintain compliance with requirements by the University and affiliating clinical agencies. Documentation of the requirements is to be submitted to the designated person, upon request. Before the first clinical course, each student is required to complete a pre-clinical checklist and provide proof that requirements are currently met. Access to reliable transportation is required for clinical courses off campus.

Student Learning Outcomes of the Radiologic Technology Sciences Option

Graduates of the Radiologic Technology Sciences Option shall:

1. Demonstrate a mastery of basic Radiographic Medical Imaging skills and advanced medical imaging skills in MRI, CT and Angiography.
2. Demonstrate effective communication, problem solving/critical thinking skills that provide compassionate patient care.
3. Value the importance of professional development through life-long learning for improved patient care and medical imaging.

1. Lower Division Required Courses (31 Units)

BIOL	101/L	General Biology and Lab (3/1)
BIOL	211	Human Anatomy (2)
BIOL	212	Lab Studies in Human Anatomy (1)
BIOL	281	Human Physiology (3)
CHEM	100	Principles of Chemistry (3)
PSY	150	Principles of Human Behavior (3)*
SOC	150	Introductory Sociology (3)*
PHY	100A	General Physics I (3)*
PHY	100B/L	General Physics II and Lab (3/1)*
MATH	105	Pre-Calculus (5)*†

**Overlap with lower division General Education requirements.*

†MATH 102 plus MATH 104 will also meet this requirement.

2. Clinical Courses (13 Units)

HSCI	280	Radiologic Sciences: Clinical Education I (2)
HSCI	281	Radiologic Sciences: Clinical Education II (2)
HSCI	282	Radiologic Sciences: Clinical Education III (3)
HSCI	283	Radiologic Sciences: Clinical Education IV (3)
HSCI	284	Radiologic Sciences: Clinical Education V (3)

3. Professional Courses (37 Units)

PHYS	376	Radiologic Physics (3)
HSCI	181	Medical Imaging Sciences I (3)
HSCI	182	Medical Imaging Sciences II (3)
HSCI	285	Radiographic Anatomy and Positioning I (4)
HSCI	286	Radiographic Anatomy and Positioning II (4)
HSCI	302	Pathophysiology (3)
HSCI	380	Cross-sectional Anatomy for Radiographers (2)
HSCI	385	Quality Assurances and Evaluation of Radiologic Imaging Equipment (2)
HSCI	480	Computerized Tomography (2)
HSCI	482	Angiography and Interventional Procedures (3)
HSCI	485	Principles of MRI (3)
HSCI	487	Professional Development for Radiographers (3)
HSCI	499	Independent Study (2)

4. Required Upper Division Health Sciences Core (9-10 Units)

HSCI	488	Epidemiology Study of Disease (3)
HSCI	390/L	Biostatistics and Lab (3/1)

Upper Division Elective with Advisement (3)

General Education: Eighteen units required in the major (lower division) overlap with General Education requirements.

Total Units in the Major	91
General Education Units	42
Total Units Required for the Degree	123

Post-Baccalaureate Internship

HSCI 494A,B,C Internship (6)

Upon successful completion (minimum of "C" in each course), the student shall earn a B.S. in Health Science, Radiologic Technology Option as well as a certificate of clinical completion from the clinical institutions. Completion of both academic and clinical work enables the student to sit for the national registry administered by the American Registry of Radiologic Technologists (ARRT) and the licensing exam given by the California Department of Public Health (CRT).

Minor in Gerontology

The Interdisciplinary Minor in Gerontology is offered by the College of Health and Human Development. The minor complements many other academic majors and many of the courses satisfy the requirements or electives for other programs. The program provides students with the knowledge and skills to pursue a career in the field of aging. Graduates with a Minor in Gerontology are in demand for entry level jobs in human services, allied health care, corporations, administration, and direct services in a wide variety of settings. Courses are listed at the end of the Health Sciences section.

Requirements for the Minor

1. Core Requirements (15 Units)

PSY	365	Introduction to Gerontology (3)
SOC	440	Sociology of Aging (3)
PSY	465	Psychology of Aging (3)
HSCI	418	Health and Aging (3)

Integrating courses (select one of the following):

HSCI	422	Health Services for the Elderly and Mentally Ill (3)
FCS	424	Resource Management for the Elderly (3)
RTM	415	Leisure and Aging (3)

2. Elective (3 Units)

FCS	409	Geriatric Nutrition (3)
FCS	424	Resource Management for the Elderly (3)
FCS	543	Intergenerational Care Giving (3)
HSCI	422	Health Services for the Elderly and Mentally Ill (3)

HSCI	521	Health Care Ethics (3)
KIN	325	Motor Development (3)
KIN	566	Seminar in Aging and Environmental Aspects of Exercise (3)
RTM	415	Leisure and Aging (3)

3. Internship (3 Units)

Internship in major with aging focus.

Total Units Required for the Minor	21

Gerontology Certificate

The Gerontology Certificate provides an opportunity for those who have completed a bachelor's degree in another discipline to acquire an understanding of the issues and problems of aging. The certificate program complements many other graduate degree programs and can be taken concurrently since many of the courses satisfy requirements or electives for graduate programs. The certificate program is a rigorous and demanding educational experience, designed to provide students with the knowledge and skills to pursue a career in the field of aging. Please contact the Department of Health Sciences for details of the requirements.

General Requirements for all Master of Science or Master of Public Health Degree Programs

A. For Admission to Conditionally Classified Graduate Status

1. A bachelor's degree from an accredited university or college with a major in Health Science or its equivalent.
2. A cumulative grade point average of 3.0 or above for all undergraduate work.
3. Students not meeting requirements #1 above may be assigned a program of prerequisites in the Health Sciences. Under certain circumstances, students not meeting requirement #2 above may be assigned a qualifying program. Specific information concerning prerequisites or qualifying programs may be obtained through consultation with a program graduate advisor.
4. Students must provide evidence of satisfactory completion of the verbal and/or quantitative and/or analytical sections of the Graduate Record Examination (GRE).

The GRE may be waived with approval for those students who have a minimum of 3.00 grade point average overall and in the major, or have a 3.2 GPA in the last 60 units of undergraduate work, or who already have an advanced graduate degree from an accredited school.

B. Advancement from Conditional to Classified Status

Students admitted as conditionally classified must complete all qualifying coursework, GRE and/orUDWPE prior to moving from conditional to fully classified status. In addition,

1. A GPA of 3.0 or better must be achieved in qualifying coursework.
2. No more than 12 units of work taken prior to attaining fully classified status will be applied to the Master's program, and
3. Students completing qualifying coursework must meet with their faculty advisor to complete the paperwork to advance from conditional to classified status.

Master of Science in Health Administration

The graduate degree in Health Administration prepares students for management and leadership roles in health services and related organizations and systems. The curriculum provides for advanced study of issues, problems and strategies for managing the effective and efficient delivery of health care through public, voluntary, and private sector health care organizations including, but not limited to, hospitals, long term care organizations, medical and dental group practices, health maintenance organizations, health insurance and health benefits administrators administration, and public health agencies.

The following criteria are used for evaluating applicants to the Master of Science in Health Administration (MSHA) degree program:

1. Overall grade point average
2. Graduate Record Examination.
3. Undergraduate degree. Students not having a degree in health administration, if accepted, will be required to take a qualifying program prior to being admitted to classified graduate status.
4. Work experience.
5. Letters of recommendation.
6. Interviews.

The Master of Science in Health Administration program requires a minimum of 45 semester hours of course work beyond the Bachelor's degree. A minimum grade of B is required for each course; an overall program GPA of 3.0 is required for graduation.

Learning Outcomes for the M.S. in Health Administration

Graduates of the graduate program in Health Administration should:

1. Demonstrate mastery of the conceptual and technical knowledge and skills relevant to successful health administration practice and which meet national standards for certification by the Association of University Programs in Health Administration.
2. Demonstrate mastery of the analytical, written and oral communication, and interpersonal skills required for successful practice.
3. Demonstrate an ability to integrate classroom knowledge and skills and be able to bridge the gap to the professional practice of health administration.
4. Demonstrate an appreciation of the importance of professional ethics and continual professional growth.
5. Demonstrate the knowledge, skills, and professionalism to assume mid-level and leadership positions in healthcare organizations.

Qualifying Courses: To be determined at advisement.

1. Required Courses (36 Units)

HSCI	513	Applied Theory in Health Administration Practice (3)
HSCI	517	Health Economics and National Health (3)
HSCI	521	Health Care Ethics (3)
HSCI	523	Seminar in Medical Care Organization (3)
HSCI	613	Managing Change in Health Care Organizations (3)
HSCI	614	Financial Management (3)
HSCI	615	Information Management for Decision Making and Control (3)
HSCI	616	Quality Assurance for Health Administration (3)
HSCI	618	Strategic Planning in Health Administration (3)
HSCI	619	Third Party Payer Impact on Health Delivery (3)
HSCI	625	Integrative Seminar in Health Administration (3)
HSCI	693A *or* 693B	Supervised Field Training (2)
and HSCI	693C	Supervised Field Training (1)

2. Electives (9 Units Minimum)

Select from the following, with advisor approval:

HSCI	414	Health Law (3)
HSCI	422	Health Services for the Elderly and the Mentally Ill (3)
HSCI	515	Seminar in Healthcare Information Management (3)
HSCI	518	Managed Care (3)
HSCI	587	Seminar: Epidemiology (3)
HSCI	620	Seminar in Hospital Administration (3)
HSCI	694	Research Design (3)
HSCI	621	Facilities Planning and Materials Management (3)

3. Capstone

Select one of the following: (units do not count toward program total)

a. Comprehensive Examination. Student registers for HSCI 697 Directed Comprehensive Studies (3 units, Credit/No Credit Only)
b. Thesis/Graduate Project (with faculty permission only) Student registers for HSCI 698 (2 units, Credit/No Credit Only)

Total Units Required for the Degree	45

Master of Public Health in Community Health Education (MPH)

The graduate program in Community Health Education provides advanced study for health educators working in a variety of settings such as community health agencies, patient education, consumer health advocacy, training and continuing education, organizational development and team building, schools and other positions within public, private and professional settings. This program is nationally accredited by the Council on Education for Public Health. The program is designed to enable health educators to meet responsibilities for leadership, supervisory, administrative and consultative roles in these health education settings.

Applications to the graduate program in Health Education are accepted for the fall and spring semesters. Students should send applications and transcripts (two sets) directly to the University Graduate Admissions Office. Additionally, three letters of recommendation should be sent directly to Director, Master of Public Health Program, Department of Health Sciences, CSUN (recommendation forms are provided).

The following criteria are used for evaluating applicants to the Health Education graduate program:

1. Overall grade point average.
2. Graduate Record Examination scores.
3. Any student who has not had HSCI 390/L or an equivalent statistics course will be required to take it before advancing to classified status.
4. Work experience in either health education or a related health field.
5. Three letters of recommendation.
6. Statement of Purpose.

The Master of Public Health program requires a minimum of 42 semester hours of course work beyond the Bachelor's degree. A minimum grade of B- is required for each course; an overall program GPA of 3.0 is required for graduation.

Student Learning Outcomes of the Graduate Program

Graduates of the Master of Public Health program in Health Education should be able to:

1. Demonstrate a mastery of public health and health education knowledge and skills including community health program planning, implementation, and evaluation; theories and application of health behavior change assessment and intervention; community organization; curriculum design; administration of health education programs and services; epidemiology; environmental health; research design; and biostatistics.
2. Apply knowledge and skills necessary for program planning, implementation and evaluation of health education programs in a variety of practice settings.
3. Demonstrate understanding of public health research methodology including study design, hypotheses testing, data collection and analysis of appropriate for health education practice and the competent use of computer tools for analysis and presentation.
4. Demonstrate the professional knowledge necessary to assume staff and leadership positions in the practice of public health education.

1. Required Courses (30 Units)

HSCI	531	Seminar: Health Education Program Planning and Evaluation (3)
HSCI	533	Advanced Concepts of Health Behavior (3)
HSCI	535	Curriculum Development in Health Education (3)
HSCI	538	Seminar: Community Health Action (3)
HSCI	541	Administration, Supervision and Consultation (3)
EOH	554	Seminar: Environmental Health Problems (3)
HSCI	587	Seminar: Epidemiology (3)
HSCI	592	Advanced Biostatistics for the Health Sciences (3)
HSCI	693A	Supervised Field Training (2)
HSCI	694	Research Design in the Health Science (4)

2. Electives (9 Units Minimum)

With approval of graduate advisor, students may take 400, 500, and 600-level courses in such areas of study as Communications, Health Administration, Environmental and Occupational Health, or related areas of interest.

3. Capstone (2-3 Units)

Choose one of the following:

a. Comprehensive Examination. Student registers for HSCI 697 Directed Comprehensive Studies (3 units; counts in total program)
b. Thesis or Graduate Project. Student registers for 698C (3units)

Total Units Required for the Degree	42

Course List

HSCI 131. Health and Society (3)

Analysis of major health problems affecting the life of an individual, the family and community-at-large. Evaluation, planning and implementation of approaches to meeting personal and societal health needs. (Available for General Education, Lifelong Learning)

HSCI 132. History of Preventive Medicine and Public Health (3)

Historical development of the disease processes, concepts, and the institutions concerned with public health. (Available for General Education, Social Sciences)

HSCI 170. Emergency Health Procedures (2)

Application of medical self-help principles and procedures to maintain health in emergency situations, with particular emphasis on physiological bases. American Red Cross "Responding To Emergencies" certificate issued upon successful completion of course requirements. (Available for General Education, Lifelong Learning)

HSCI 181. Medical Imaging Sciences I (3)

Prerequisite: Acceptance into the Radiologic Technology Program or instructor consent. Introduction to the role of the Radiologic Technologist. Study of the function and manipulation of equipment and technical factors used in the production of X-ray and in imaging systems used within radiology. Includes a progressive series of radiographic exercises in preparation for clinical experiences. (Offered fall semester)

HSCI 182. Medical Imaging Sciences II (3)

Prerequisite: HSCI 181 or instructor consent. Study of imaging modalities and equipment utilized in radiology. Includes a progressive series of exercises involving radiation protection procedures, problem solving techniques and quality assurance programs to be used during clinical education. Considers the manipulation and use of body section radiography, phototiming, image intensification and stereoscopic equipment. (Offered spring semester)

HSCI 231. Women and Health (3)

Study of factors affecting health and women in our society. (Available for General Education, Lifelong Learning)

HSCI 237. Introduction to Health Education (3)

Recommended Corequisites: ENGL 305 or 306. Introduction to the professional field of health education. Rooted in the broad field of public

health, with an emphasis on the roles of health promotion and illness prevention. Stress is placed upon the relationship between health, the social and physical environment, health care delivery and personal health behavior.

HSCI 280. Radiological Sciences: Clinical Education I (1)
Prerequisite: Acceptance into the Radiologic Sciences Program. Corequisite: HSCI 285. Orientation and introduction to clinical education in medical radiography. At an affiliated hospital each student participates with direct supervision in selected darkroom, clerical and basic radiographic procedures. Includes lectures in hospital organization, departmental administration and medical ethics. (Offered fall semester)

HSCI 281. Radiological Sciences: Clinical Education II (1)
Prerequisite: HSCI 280. Corequisite: HSCI 286. Clinical participation in the radiology department of an affiliated hospital. Includes patient positioning, manipulation of exposure factors, film analysis and methods of patient care. (Offered spring semester)

HSCI 282. Radiological Sciences: Clinical Education III (3)
Prerequisite: HSCI 281. Corequisite: HSCI 283. Clinical participation in the radiology department of an affiliated hospital. Includes patient positioning, manipulation of exposure factors, film analysis and methods of patient care.

HSCI 283. Radiological Sciences: Clinical Education IV (2)
Corequisite: HSCI 282. Clinical participation in the radiology department of an affiliated hospital. Includes patient positioning, manipulation of exposure factors and advanced film analysis. (Offered fall semester)

HSCI 284. Radiological Sciences: Clinical Education V (4)
Prerequisite: HSCI 283. Clinical participation in the radiology department of an affiliated hospital. Includes patient positioning, manipulation of exposure factors and advanced film analysis. (Offered spring semester)

HSCI 285. Radiographic Anatomy and Positioning I (4)
Prerequisite: Acceptance into the Radiologic Technology Program. BIOL 211; 212. Corequisite: HSCI 280. Comprehensive modular approach to radiographic positioning of the appendicular skeleton, vertebral column, genito-urinary tract, chest and abdomen with emphasis on the associated anatomy, physiology and medical terminology.

HSCI 286. Radiographic Anatomy and Positioning II (4)
Prerequisite: HSCI 285 or instructor consent. Corequisite: HSCI 281. Methodologies and elements of pediatric radiology; in-depth positioning of the skull, facial bones, paranasal sinuses, mastoids, intraoral and extraoral radiography; continuation of advanced technical film analysis.

Upper Division

HSCI 302. Basic Pathophysiology (3)
Prerequisite: Approval of faculty advisor. Study of the pathogenesis and clinical picture of common disease processes that impact the self-care of individuals. Focuses on the impact of environmental, genetic, and individual factors in creating or perpetuating disturbed physiology, as well as on physiological adaptive responses and the interdependence of body systems. (See program advisor for information on credit by challenge examination)

HSCI 303. Professional Nursing (3)
Preparatory: Admission to Nursing Program, completion of lower division writing requirement. Focuses on the practice of professional nursing, critical thinking, therapeutic nursing interventions, nursing process, advocacy, humanistic approach to the treatment of human beings, selected bio-psycho-social and nursing theories, spirituality, communication, information technology, role change, values, culture, and oral and written communication skills. Regular written assignments and oral presentations are required.

HSCI 304. Parent/Child Self Care Agency (3)
Use of self care agency relative to application of developmental change and theories for parents and children. Topics cover self care needs from birth through adolescence; cultural influences. Regular written assignments and oral presentations required. (See nursing advisor for information on credit by challenge examination)

HSCI 305. Adult/Aged Self Care Agency (3)
Application of development theories of adulthood and the aging process. Selected topics examined with emphasis on self care agency in relation to developmental and situational stressors and nursing systems. Regular written assignments and oral presentations required. (See nursing advisor for information on credit by challenge examination)

HSCI 306. Supportive/Educative Nursing Systems (3)
Application of nursing knowledge and skills in self care agency with individuals, families, groups, communities and populations. Content includes theories and principles of learning, teaching strategies and methodologies, teaching resources, and evaluation of instruction as applied to the development of nursing systems in the nursing process. Regular written assignments and oral presentations required.

HSCI 307/L. Health Assessment in Self Care Agency and Lab (2/1)
Corequisite: HSCI 307L. Recommended Corequisite: Admission to SNCP or RN/BSN program. Provides skills in complete health assessment of individual health in using bio-psycho-social-spiritual-cultural concepts. Includes nursing assessment through all developmental stages. Emphasis on self care agency. On-campus supervised lab practice and application of concepts from HSCI 307 in self care agency. (three hours lab per week.) Passing grade must be earned in both HSCI 307 and 307L concurrently for credit in both courses.

HSCI 310. Principles of Nursing Research (3)
Prerequisite: MATH 140 or equivalent. Historical philosophical and ethical aspects of nursing research and relationship to nursing science, theory, and practice. Includes principles and methods of research for use in professional role, leadership, and development of nursing systems. Knowledge of the research process is developed and applied to critique of research studies, process of research proposal development and application of research findings to practice. Regular written assignments are required.

HSCI 312. Introduction to Health Administration (3)
Fundamentals of health administration; role integration between health administrators, health professionals, and allied health personnel.

HSCI 313. Health Administration (3)
Preparatory: HSCI 312 and HSCI 314. Theory and practice of health administration in various types of health organizations.

HSCI 314. Organization and Delivery of Health Services (3)
Examines how the behavior and interaction of health system components and consumers and the diverse interest groups in our nation impact the distribution and availability of health care resources, impede or increase access to care, change or create health entitlements such as Medicare and Medi-Cal, and change provider reimbursement mechanisms. US, California and Los Angeles County public and private health systems are overviewed as are systems of health delivery in other nations.

HSCI 315. Pharmacology and Self-Care Agency (2)
This course examines the principles of pharmacokinetics and phrmacodynamics for major drug classes as they impact self-care of the individual. Assessment and management of the therapeutic and toxic effects of pharmacological interventions are emphasized.

HSCI 318/L. Introduction to Professional Nursing (3/4)
Introduction to the practice of professional nursing including critical thinking, assessment, therapeutic nursing interventions, and communication. This course explores related models and theories, professional role, nursing process, and use of nursing skills to promote self and dependent care agency of individuals. Bio-psycho-social-spiritual, cultural, and developmental considerations included. Lab: Supervised clinical laboratory provides opportunities for role development and application of knowledge and skills. Passing grade must be earned in both lecture and lab concurrently for credit in both courses.

HSCI 319. Effective Communications in Professional Nursing (2)
Course explores concepts and theories of human interaction as they relate to nursing. Includes principles, processes, and techniques of effective individual and group communication as they relate to promotion of self-care and dependent-care agency. Supportive-educative nursing system as an intentional caring process is emphasized.

HSCI 321/AL. Adult/Aged Medical-Surgical Nursing (4/8)
Course surveys selected medical-surgical conditions and age-specific health considerations as they relate to the nurse's role in promoting self-care and dependent-care functioning of adult patients. Planning, implementing, and evaluation interventions based on systematic data collection and analysis. Lab 1 (Adult Med-Surg Nursing) Supervised clinical laboratory provides opportunities for role and skills development and application of knowledge. Clinical experience provides opportunities for role development and application of knowledge and skills. Passing grade must be earned in lecture course and medical-surgical lab concurrently for credit in both courses. Lab 2 (Care of Older Adult): Supervised clinical laboratory provides opportunities for role and skills development and application of knowledge in beginning professional role in geriatric nursing. Focuses on the role of the professional nurse in assessing, promoting, maintaining, restoring, and evaluating the self-care and dependent-care function of older adults. Passing grade must be earned in lecture course and geriatric lab concurrently for credit in both courses.

HSCI 321BL. Nursing Care of Older Adult: Clinical Laboratory (1)
Course surveys selected medical-surgical conditions and age-specific health considerations as they relate to the nurse's role in promoting self-care and dependent-care functioning of adult patients. Planning, implementing, and evaluation interventions based on systematic data collection and analysis. Lab 1 (8) (Adult Med-Surg Nursing) Supervised clinical laboratory provides opportunities for role and skills development and application of knowledge. Clinical experience provides opportunities for role development and application of knowledge and skills. Passing grade must be earned in lecture course and medical-surgical lab concurrently for credit in both courses. Lab 2 (1) (Care of Older Adult): Supervised clinical laboratory provides opportunities for role and skills development and application of knowledge in beginning professional role in geriatric nursing. Focuses on the role of the professional nurse in assessing, promoting, maintaining, restoring, and evaluating the self-care and dependent-care function of older adults. Passing grade must be earned in lecture course and geriatric lab concurrently for credit in both courses.

HSCI 335. Holistic Health (3)
Critical examination of the holistic health model and selected holistic techniques.

HSCI 336. Health Aspects of Drug Use (3)
Preparatory: Completion of the lower division writing requirement. In-depth analysis of the factors and problems related to the use and misuse of drugs and their effect on the health and welfare of the individual, family, and society. (Available for General Education, Lifelong Learning)

HSCI 337. Nutrition and Health (3)
Preparatory: Completion of the lowe-division writing requirement. Fundamentals of nutrition emphasizing practices and problems related to consumer and health. Credit not allowed for both HSCI 337 and FCS 207. (Available for General Education, Lifelong Learning.)

HSCI 345. Public Health Issues (3)
Exploration and analysis of the issues that define public health. Economics, politics, history, theory, organization, and contemporary practice methodologies are probed in light of such topics as: infectious and chronic diseases, maternal and child health, drug abuse, ethnic health, mental health, nutrition, poverty, and sexually transmitted diseases. (Available for General Education, Social Sciences)

HSCI 380. Cross-sectional Anatomy for Radiographers (2)
Preparatory: Admission to the Radiologic Technology Program or instructor consent. Introduction to cross-sectional anatomy with the use of advanced imaging techniques, including Computerized Tomography, Magnetic Resonance Imaging, and Ultrasonography. Includes comparisons of the various modalities in demonstrating certain anatomy.

HSCI 382. Mammography (3)
Prerequisites: California State Certificate for Radiologic Technology (CRT) or senior status in an accredited RT program. Study of breast anatomy, physiology and pathology with an emphasis on breast cancer, risk factors, and detection techniques. Additionally, mammography imaging, instrumentation requirements, and mammographic techniques are emphasized. Labs in quality assurance are scheduled off site. (Offered only through Open University, fall semester.)

HSCI 384. Computers in Diagnostic Imaging (2)
Prerequisites: HSCI 181, 182, MATH 105 and PHYS 376 or instructor consent. Study of state-of-the-art equipment and procedures available to radiology departments. Focuses on computer software, algorithms and digitization of imaging data. Topics prepare the student for specific computer applications in advanced imaging course work for MRI, CT and Digital subtraction Angiography. Clinical applications and processes that highlight the course content are conducted at affiliate medical centers.

HSCI 385. Quality Assurance and Evaluation of Radiology Imaging Equipment (2)
Prerequisites: PHYS 376 or instructor consent. Study of quality assurance concepts and application for radiology departments. Includes evaluation of imaging equipment in one of the affiliate medical centers.

HSCI 390/L. Biostatistics and Lab (3/1)
Corequisite: HSCI 390L. Prerequisite: required GE mathematics: Principles, theory, and practice of statistical analysis in health as they apply to health planning, epidemiological research, and experimental research. Three hours lecture, two hours lab.

HSCI 391. Computer Application in Health Sciences (3)
Introduction to computer technology, including legal, and ethical considerations, and its application to health education, health research, health administration, and clinical health practice. Class time is proportioned between lecture-discussion and hands-on computer practice.

HSCI 412. Medical Care Organization in the U.S. (3)
Prerequisite: HSCI 314. Problems in the administration of health services from a societal perspective. Questions of equity in service availability and cost are contrasted with administrative issues. Critique of national health insurance and comparison of the recent and proposed U.S. system with health systems of other nations.

HSCI 413. Leadership and Direction in the Administration of Health Services (3)

Prerequisite: HSCI 412. Lecture, discussion, demonstrations, case analysis. Introduction to the basic principles of leadership and direction for students interested in supervision and management of health programs.

HSCI 414. Health Law (3)

Preparatory: HSCI 312; 314. Overview of the legal aspects of health care delivery and the health administrator's and health professional's responsibility in the area of patient care, consumer rights, and malpractice.

HSCI 415. Health Information Systems (3)

Preparatory: HSCI 412. Introduces the healthcare information systems required in the health care industry and develops an understanding of the scope and applications of these systems. Both clinical and administration information systems in the healthcare industry are covered. Discusses strategic and tactical information management needs of health care executives.

HSCI 416. Utilization of Professional and Allied Health Personnel (3)

Preparatory: HSCI 412. Principles, methods, and procedures in the utilization of professional and allied health personnel in health organizations.

HSCI 418. Health and Aging (3)

Prerequisites: PSY 365 or instructor consent. Provides upper division graduates and graduate students with an overview of critical issues related to aging and health. Topics covered include: physiology of aging, health behaviors, age-related diseases, managing illness, medical care, and death and dying. Students are expected to master a number of theoretical and empirical approaches to health.

HSCI 419. Hospital Administration (3)

Preparatory: HSCI 412. Introduction to the administration, organization, and evaluation of hospital services and the role of the hospital in the community health system. Topics include governance, financing, medical staff relations, and other current topics.

HSCI 422. Health Services for the Elderly and the Mentally Ill (3)

Preparatory: HSCI 412. Problems in planning, financing, delivering, and evaluating health services for the elderly and the mentally ill. Administrative structures and public and private delivery systems are compared and critiqued.

HSCI 423. Topics in Healthcare Insurance and Financing (3)

Preparatory: HSCI 412. Explores the policy side of health care financing through third parties such as the government and private insurance. Advanced topics include the social, economic, and political impact of health care financing and the impact on the provision of health care services. Relevant current topics added each semester.

HSCI 424. Health Planning (3)

Preparatory: HSCI 390; 412. Emphasizes current approaches to the administration of community-wide health planning agencies and the administration of in-house facility health planning programs.

HSCI 425. Financial Planning and Reimbursement in Health Care (3)

Prerequisite: ACCT 220 or equivalent and HSCI 412. Consideration of the highly specialized application of financial planning principles and reimbursement procedures in health organizations, including government regulations and legal restraints.

HSCI 426. Nursing Systems Issues and Ethics (3)

Preparatory: All 300-level Nursing courses. Deals with issues arising within the community, the health care systems and the profession of nursing which influence self-care agency and the development of nursing systems. Discusses ethical aspects of providing therapeutic self care. Regular written assignments required.

HSCI 427/L. Dynamics of Nursing Leadership and Leadership in Nursing Lab (3/2)

Prerequisites: All 300 level Nursing courses, and HSCI 426. Corequisite: HSCI 427L. Focuses on the function of the professional nurse as self care agent through leadership, administration, and chan-ge. Presents theories of group dynamics, leadership, organizations, planned change, power and conflict as they apply in the nursing unit. Regular written assignments are required. Lab: application of self care agency through use of leadership and administration theories and skills in clinical settings. Students synthesize professional nursing roles through individualized learning contract. Credit only be given if a passing grade is earned. Three hours lecture per week. Six hours lab per week.

HSCI 428/L. Community Health Nursing and Lab (3/2)

Prerequisites: All 300 level Nursing courses, and HSCI 426, 488. Corequisite: HSCI 428L. Theory and multicultural society. Study of self care agency and therapeutic self care needs of individuals, families, the community, and society. Regular written assignments required. Clinical experience in community health agencies under the leadership of nursing faculty. Credit only be given if a passing grade is earned. Three hours lecture per week. Six hours lab per week.

HSCI 430/L. Psychiatric/Mental Health Nursing: Clinical Laboratory (2/1)

Focuses on the unique role of the professional nurse in assessing, promoting, maintaining, restoring, and evaluating the self-care and dependent-care function of persons with actual or potential altered mental health processes. Topics include selected theories of human behavior and current knowledge of psychiatric/mental health nursing care, psychopathology, psychiatric treatment, psychopharmacology, environmental management, and influences of family. Lab: Demonstration of beginning professional role in psychiatric/mental health nursing by applying knowledge from lecture corequisite. Passing grade must be earned in lecture course and lab concurrently for credit in both courses.

HSCI 431. Health Behavior (3)

Prerequisites: HSCI 237; PSY 150. Application of current concepts of the behavioral sciences to the health field. Approaches to behavioral changes for healthful living are stressed.

HSCI 433. Counseling of Health Problems (3)

Consideration of concepts and techniques of counseling and guidance as they apply directly to the reduction of specific health problems.

HSCI 435. Health Science for Children and Youth (3)

Examination of biological and environmental factors influencing health of children and youth, and means of solving selected health problems, including cardiopulmonary resuscitation. (Available for General Education, Lifelong Learning--credential candidates only)

HSCI 436. Health Concerns of Adolescents (3)

In-depth study of the health concerns of adolescents, including cardiopulmonary resuscitation. (Available for General Education, Lifelong Learning--credential candidates only)

HSCI 437. Strategies for Making Health Decisions (3)

Undergraduate seminar. Techniques of developing selected strategies for making health decisions.

HSCI 438. International Health (3)

Analysis of health problems in selected countries. Study of the origin, orientation, and purposes of agencies functioning in this field.

HSCI 439. Community Health Action (3)

Basic concepts and techniques of community health action as applied

to the initiation and enhancement of community health and health-related services.

HSCI 440. Family Health (3)
Health aspects of the home and the family, including health and personal qualifications for marriage, prenatal care, pregnancy, infant and maternal mortality, children's diseases, home accidents, health plans for the family, health problems of the older members of the family.

HSCI 441. Community Health Education (3)
Prerequisite: HSCI 431. Program planning and evaluation as applied to the practice of education in the community; factors that influence decision-making about health; barriers to changing health behavior; effective utilization of community health agencies as vehicles of change.

HSCI 442. Health Problems of the Disadvantaged (3)
In-depth study of the interrelationship between the conditions of poverty and wealth. Includes a social-psychological analysis of the interaction between health problems, urban poverty, and minority-group membership.

HSCI 445. Senior Seminar in Health Education (3)
Prerequisites: C- grade or better in HSCI 441 and senior standing. Study of the methodologies in planning, developing, implementing, and evaluating, programs to solve school and community health problems.

HSCI 450. Advanced Topics in Healthcare Budgeting and Finance (3)
Preparatory: ACCT 220, HSCI 425. Addresses the complexity of the financing of health care organizations. Topics include issues such as budgeting, capital financing, reimbursement issues and non-profit and for-profit financing trends.

HSCI 475. Principles of School Nursing Practice (3)
Preparatory: R.N. License. *Recommended Corequisite: Admission to SNCP.* Examines the roll of the School Nurse in relation to current and accepted practices in school health programs as they pertain to the needs of school children and their community.

HSCI 476. School Nursing Field Experience (6)
Prerequisite: All courses in SNCP. Supervised experience in public school nursing consisting of 180 clock hours of observation and participation working with master nurses at the elementary and secondary level. Meets the requirement for the Health Services Credential Authorizing Services as a School Nurse. An Academic Internship Course. (Credit/No Credit Only)

HSCI 478 Seminar in Current Trends (3)
Prerequisite: Senior standing and consent of instructor. Seminar to identify and analyze current trends, issues and challenges in the health care industry. Subject matter varies weekly. Course contains a substantial off-site service learning component that will match students' career objectives.

HSCI 480. Computed Tomography (2)
Prerequisites: HSCI 181, 182; MATH 105, and PHYS 376 or instructor consent. Principles of Computed Tomography provide the Radiologic Technology student with a broad understanding of the applied physics and imaging techniques used in clinical Computed Tomography Imaging. Overviews all five generations of CT imaging. Clinical applications and processes that highlight the course content are conducted at the affiliate medical centers. (Offered fall semester)

HSCI 482. Angiography and Interventional Technology (3)
Prerequisite: instructor consent. Radiographic examinations involving surgical procedures and specialized equipment. (Offered fall semester)

HSCI 485. Principles of MRI (3)
Prerequisites: HSCI 384. Principles of Magnetic Resonance Imaging (MRI) provides the Radiologic Technology student with a basic understanding of the applied physics, imaging techniques and imaged anatomy/pathology used in clinical magnetic resonance imaging. Clinical applications and processes that highlight the course content are conducted at the affiliate medical centers. (Offered spring semester)

HSCI 487. Professional Development for Radiographers (3)
Prerequisites: instructor consent. Seminar includes discussion and application of instructional interventions used in accredited radiography programs. Discussions center on current issues and changes in practice as they apply to continuing curriculum development, the national accreditation process and patient education. Additional discussions center around the professionalization of the radiographer with topics covering professional ethics, professional codes of conduct and management of professionals. (Offered fall semester)

HSCI 488. Epidemiology: Study of Disease (3)
Preparatory: HSCI 390. Nature, transmission, prevention, and control of disease from a public health approach; historical background, current problems, and trends in disease control.

HSCI 494A-F. Academic Internship (1-6)
Supervised internship in official and/or voluntary health agency. Includes staffing conferences. (Credit/No Credit Only)

HSCI 495A-Z. Clinical Advances in Health Sciences (1-3)
Review of research development and clinical applications in the various health professions. Course content to be determined. (See subtitle in appropriate schedule of classes)

HSCI 496A-Z. Experimental Topics Courses in Health Sciences (3)
Course content to be determined. (See subtitle in appropriate schedule of classes)

HSCI 498. Field Assignment and Reports (1-3)
Prerequisite: Consent of the department. Approved experience in voluntary or official health agencies or in administration or coordination of school health programs. Critical analysis of these experiences reported in writing. Maximum of six units is permissible for credit in the major. (Credit/No Credit Only)

HSCI 499A-C. Independent Study (1-3)

Graduate

HSCI 510. Systems for Health Delivery in the US (3)
Introductory course describes the organization of public and private systems of care, role of governments and private health care systems, the evolution of health services in the US, key federal and state legislation and regulation impacting provider reimbursement, health care entitlements, quality of care, preparation of healing arts professionals, and how health care organizations develop and function.

HSCI 511. Health Services Administration Theory and Practice (3)
Preparatory: Bachelor's degree and conditionally classified status for the Master's degree in Health Administration. Introduction to the basic historical and current theory and practice of the administration of health services organizations. Emphasis on the administrator's role in a systems approach to assessing and responding proactively to the external forces in the health services delivery system and in the development of the organization's culture and processes for the provision of quality service.

HSCI 513. Leadership in Health Administration Practice (3)
Preparatory: Classified graduate status in Health Administration. Seminar in which special emphasis is placed on the leadership skills needed in healthcare organizations. Describes basic leadership principles, review literature, examine factors associated with successful leadership, and discuss case studies on leadership strategies used in the health care field.

In addition, a personal assessment of leadership styles are conducted as well as a culminating community class project.

HSCI 515. Seminar in Healthcare Information Management (3)
Preparatory: Graduate standing. Investigates current status of both clinical and administrative healthcare information management systems. Topics include, emerging technology, selection of information systems, management of information, electronic medical record, Internet's impact on a healthcare organization's business processes and other current events. For MSHA, MPT, MPH and other graduate students.

HSCI 517. Health Economics And National Health Policy (3)
Preparatory: Classified graduate status in Health Administration. Application of economic theory and concepts to the analysis and formulation of both managerial decision and health care policy. Provides a basic introduction to the relevant technical and economic aspects of the healthcare industry and local, state and national health policy issues.

HSCI 518. Managed Care (3)
Prerequisites: HSCI 412 or graduate standing. Consideration of alternate health care delivery systems emphasizing the planning, development, start-up, and operation of health maintenance organizations.

HSCI 521. Health Care Ethics (3)
Prerequisite: HSCI 412 or graduate standing. Framework for analysis of ethical issues in the provision of health care including conceptual foundations for defining biomedical ethical problems; societal, institutional and individual dilemmas in health care delivery and financing; ethical problems at the beginning and at the end of life; administration of institutional ethics committees.

HSCI 523. Seminar in Health Care Organization (3)
Preparatory: HSCI 510. Graduate seminar in health care organization examines the structure and interrelationships of health status and health care resources including human resources, facilities, and services. Approach is interdisciplinary; designed to provide the student with an understanding of the issues in health care delivery. Emphasis is placed on providers and populations within the clinical, legal, political, and economic systems.

HSCI 531. Seminar: Health Education Program Planning and Evaluation (3)
Preparatory: Graduate standing as a conditional or fully classified student in the MPH Program. Graduate students not in the program may enroll with permission of course instructor. In-depth study of the conceptual/theoretical and practice-based methodologies of community health education program planning and evaluation.

HSCI 533. Advanced Concepts of Health Behavior (3)
Critical analysis of theoretical issues and current methodologies related to influencing health behavior. Special emphasis will be given to the selection and application of principles to the field setting. (Offered spring semester)

HSCI 535. Curriculum Development in Health Education (3)
Critical analysis of curriculum theory and its application in the development of education programs in the health sciences. (Offered fall semester)

HSCI 536. Cultural Issues in Health Care (3)
Preparatory: Graduate standing or instructor consent. Provides the health professions student with an increased understanding of the cross-cultural factors that can influence health and disease practices across a wide range of cultural groups. Using readings, classroom excercises, and student-developed case studies, participants explore the cultural variables impacting the delivery of health promotion/disease prevention programs and services.

HSCI 537. Communications in Health Education (3)
Analysis, development and utilization of media communication in Health Education.

HSCI 538. Seminar: Community Health Action (3)
Comprehensive analysis of methods and techniques appropriate to community health action. (Offered spring semester)

HSCI 539. Seminar: Current Issues in Health Education (3)
Theory, principles and research applicable to health education. Investigation of problems of social, economic, cultural, and educational origin as they apply to sound health education programs. (Offered fall semester)

HSCI 540. Grantsmanship for Health and Human Development (3)
An introductory course in grant writing for graduate students. The course will focus on the fundamental characteristics of grant writing for the health and human services including: identifying sources of funding, writing a proposal narrative, developing a realistic budget, reviewing and editing proposal content, and understanding how to manage an awarded grant. The course will examine the criteria for fundable projects in the health and human service arena and provide students with knowledge and tools for producing a grant application.

HSCI 541. Administration, Supervision and Consultation in Health Education (3)
In-depth exploration of the organization, administration and legal aspects of health education programs, and the principles of supervision and consultation as applied to health education. (Offered spring semester)

HSCI 545. Seminar: Mental Health (3)
Preparatory: HSCI 432. Critical analysis of selected literature concerning mental health education, psychosomatic disease, and addiction.

HSCI 552. Seminar: Consumer Health (3)
Critical analysis of literature related to consumer health.

HSCI 587. Seminar: Epidemiology (3)
Prerequisite: HSCI 488 or graduate standing. Critical analysis of literature related to the newer concepts of epidemiology as applied to preventative medicine, health care management and public health.

HSCI 588. Epidemiology of Infectious Diseases (3)
Prerequisites: HSCI 390; 455; 488. Critical review of infectious diseases, their transmission, control, prevention and significance in the past, present and future.

HSCI 589. Epidemiology of Common Chronic Diseases (3)
Preparatory: HSCI 588; 592. Selected models to evaluate, analyze and investigate risk factors related to common chronic diseases.

HSCI 591. Quantitative Demography for Health Science (3)
Preparatory: HSCI 592. Principles, theory and quantitative aspects of epidemiological demographic methods utilized in Health Science.

HSCI 592. Advanced Biostatistics for the Health Sciences (3)
Preparatory: HSCI 390, 488, and graduate standing. Combines data collection, design of data gathering instruments, data analysis, statistical methods, and statistical reasoning for the health sciences.

HSCI 595A-Z. Experimental Topics Courses (1-3)

HSCI 613. Managing Change in Health Care Organizations (3)
Prerequisite: HSCI 513 and classified graduate status in Health Administration. Graduate seminar on administrative trends, issues, and new developments in health service delivery.

HSCI 614. Health Administration: Financial Management (3)
Prerequisite: Accounting course and classified graduate status in Health Administration. Theory, analysis, and application of techniques of fiscal management in selected health care systems.

HSCI 615. Information Management for Decision Making and Control (3)
Prerequisite: Classified graduate status in Health Administration. Objective is to improve the student's decision-making capabilities and develop a systematic approach to problem solving. Student develops the ability to structure problems using explicit and logical decision styles, and demonstrate an understanding of the theory and implementation of mathematical models. Emphasis is placed on application of the skills in a variety of health care settings.

HSCI 616. Quality Assurance in Health Care (3)
Prerequisite: HSCI 513 and classified graduate status in Health Administration. Seminar on new developments, government regulations and approaches to quality assurance in health care.

HSCI 618. Strategic Planning in Health Administration (3)
Prerequisite: HSCI 513 and classified graduate status in Health Administration. Market and resource assessment, changing regulatory and other factors in the health services environment and their impact on the strategic planning process and use of strategic plans in health administration practice.

HSCI 619. Third Party Payer Impact On Health Delivery (3)
Prerequisite: Classified graduate status in Health Administration. Examines how third party pay mechanisms including traditional indemnity insurance/fee-for-service, Medicare and Medicaid prospective payment systems, various managed care models and other forms impact provider and consumer behavior and risk management. Other items include, Workers Compensation, disability insurance, and liability insurance for the healing arts professions, self-insured employers, ERISA, and the impact of these mechanisms on access to care, quality, and consumer/provider economic incentives.

HSCI 620. Seminar in Hospital Administration (3)
Preparatory: Classified graduate status in Health Administration. Hospital organization, governance, relationship of administration to the medical staff, inpatient and outpatient services, professional staff organization, implications of changing MediCal and Medicare and private payer reimbursement, payer contracting, Title 22 and 24 requirements, licensing, make vs. buy decisions, community need and community benefit, differences and similarities between public, private nonprofit and private investor-owned hospitals, DSH, and District and teaching hospitals. Course may involve field trips to area hospitals.

HSCI 621. Facility Planning and Materials Management in Health Care Organizations (3)
Preparatory: Classified graduate status in Health Administration. Elements of facility planning, code requirements, work flow, designing health facilities for service delivery, the function and role of materials managements, use of materials management in formulary design, linkages to the purchasing function.

HSCI 625. Integrative Seminar in Health Administration (3)
Prerequisite: Permission of instructor. Last semester of course work. Integrative seminar. Students apply the knowledge and analytic skills obtained from health administration courses to the solution of organization and system-wide problems in health care.

HSCI 693A-C. Supervised Field Training (1-2)
Supervised action research in selected agencies or organizations. May be repeated for up to 4 units credit. (Credit/No Credit Only)

HSCI 694. Research Design (4)
Preparatory: HSCI 390. Critical consideration of research methodology as applied to the health sciences.

HSCI 696. Seminar: Research Methodology (3)
Analysis of research methodology and interpretation and applied directly to student conducted independent research.

HSCI 697. Directed Comprehensive Studies (3)
(Credit/No Credit Only)

HSCI 698. Thesis or Graduate Project (2-4)
Enrollment requires that a signed proposal be on file in the Health Science office. (Credit/No Credit Only)

HSCI 699. Independent Study (1-6)
Preparatory: At least one course at the graduate level. Investigation of a significant problem in the health field.

Gerontology Course List

HHD 501. Interdisciplinary Perspectives on Aging (3)
Prerequisites: Baccalaureate degree in health or human services or equivalent. This course provides an interdisciplinary overview of the fundamental principles, theories, issues and concepts in the field of gerontology. The interdisciplinary emphasis derives from the fact that to understand aging we must consider facts and explanations from a wide array of fields. Social gerontology integrates knowledge that ranges from history, demography, physiology, philosophy, science, ethics, medicine, law, mass communications, social policy among others. The course will emphasize the research literature to consider issues that include work, retirement, leisure, health, technologies and living environments.

HHD 502. Aging Policies and Programs (3)
Prerequisite: Baccalaureate degree in health or human services or equivalent. This course is designed to provide students with knowledge of the policy process, the politics of aging, and an opportunity to explore selected aging policy issues in depth. The content focus is on a few areas that provide fertile ground for policy development and or analysis and offer insight into the historical, social, economic and demographic issues that have influenced the development of federal and state legisl tion and programs for older persons. Projects and papers will provide students with opportunities to examine issues surrounding the design and implementation of particular policies, track current changes in legislation, or undertake critiques of policies already in place.

HHD 503. Gerontology Program Development (3)
Prerequisites: Baccalaureate degree in health or human services or equivalent. Using an interdisciplinary approach, this course critically examines a variety of issues relating to the administration, development, and evaluation of gerontology programs and services for diverse populations of older adults and their families. Topics covered include leadership, organizational planning, ethics in human services, fiscal management, program development and evaluation, personnel management, and marketing. The course emphasizes applications to actual problems facing government agencies and organizations serving older adults.

HHD 504. Current Issues in Aging (3)
Prerequisites: Baccalaureate degree in health or human services or equivalent. This interdisciplinary course addresses selected topics in aging presented at an advanced level. Preference is given to current topics considered key for gerontology professionals. Possible topics include emerging issues in diversity, gender,

Information Systems

See "Business and Economics, College of" for information on the B.A. in Information Systems.