

# HEALTH SCIENCE AND LEADERSHIP

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## Department Mission

The Health Science and Leadership Department provides a fundamental and thorough education in the liberal arts tradition while concurrently providing pre-professional preparation in the field of health and wellness education. Mastery of the liberal arts core as well as communication skills built sequentially into the major curriculum support the graduate as they enter and adapt to changes in the professions and contributes to their success as a mature and responsible citizen beyond graduation.

The program is designed to prepare students for careers immediately after graduation and/or graduate school, as well as professional schools for medicine, dentistry, podiatry, and veterinary medicine, as well as other programs such as physician assistant, occupational therapy, physical therapy, and radiological sciences.

## Program Student Learning Outcomes

### Health Promotion and Sciences

PLO 1: Identify the ethical consideration associated with planning, implementing and evaluating health promotion programs.

PLO 2: Demonstrate respect and understanding of diverse populations and achieve a level of cultural competency appropriate for professional working environments.

PLO 3: Investigate, analyze, write, and present well-documented research papers based on complex health problems.

PLO 4: Identify programmatic strategies to meet the needs of specific populations

### Health Care Management

PLO 1: Apply course content of the internship experience.

PLO 2: Demonstrate respect and understanding of diverse populations and achieve a level of cultural competency appropriate for professional working environments.

PLO 3: Work constructively and collaboratively in a working/research group or committee solving case studies in healthcare management.

PLO 4: Experience working in a professional work environment as part of an internship experience.

PLO 5: Investigate, analyze, write and present well-documented research papers based on complex healthcare management problems.

PLO 6: Formulate strategic plans for a health care facility based on managerial and legal practices.

### Radiological Science

PLO 1: Demonstrate knowledge of x-ray physics and related math.

PLO 2: Exhibit professional conduct and ethical decision making.

PLO 3: Work in a team while conducting patient procedures.

PLO 4: Explain the different modalities for examining patients.

## Biomedical (Podiatric Medicine)

PLO 1: Design and perform experiments that demonstrate the scientific method, incorporate vocabulary and collect and analyze data, and write a cogent lab report.

PLO 2: Make oral presentations that demonstrate the scientific method.

PLO 3: Demonstrate connections among population biology, ecology and evolution, molecular and cellular biology and organismal biology, and among biology, chemistry and physics.

PLO 4: Make qualitative and quantitative assessments of their own data as well that in scientific literature.

PLO 5: Create and explain illustrations of biological phenomena.

## Programs

*No results were found.*

## Courses

### HC-1001 Introduction to American Health Service Delivery I (3 Credits)

An introduction to the pluralistic health system of 21st-century America; institutions, manpower, consumers, financing, and government. This foundation course will survey topics covered in higher-level courses, as well as describe the broader environment in which individual services are grounded. Topics include public, private, and voluntary services; the impact of laws and regulations at the local, state, and federal levels; the public health hierarchy; the influences of fiscal intermediaries on health care.

**Typically offered:** Fall Only

### HC-1003 Introduction to Gerontology (3 Credits)

An overview of issues concerning the aging population and process; stereotypes, retirement issues, physical and psychological changes, legal and financial needs, family supports. Traditional facilities as well as innovative concepts and programs are introduced.

**Typically offered:** Fall Only

### HC-2001 Organization and Management of Health Institutions (3 Credits)

**Requisite(s):** HC-1001 with a grade of C or higher  
Introduction to basic organization with emphasis on acute-care hospitals and departmental structure. The managerial functions and supervisory skills for the middle manager; comparison of managerial styles.

**Typically offered:** Fall Only

### HC-2002 Legal Issues in Health Care (3 Credits)

**Requisite(s):** HC-1001 with a grade of C or higher.  
An overview of legal issues confronting health care personnel. Topics include contracts, informed consent, patient rights, record keeping, liability for negligence and malpractice, as well as other ethical topics.

**Typically offered:** Fall Only

### HC-2003 Decision-Making in Health Field (3 Credits)

**Requisite(s):** HC-1001 with a grade of C or higher  
An in-depth workshop approach to management problems in health care delivery. The emphasis is on case study and an experiential method of problem-solving. Specific cases will be used to illustrate problem-solving and decision-making techniques of practical use to health care professionals. Interpersonal skills and group dynamics are also developed.

**Typically offered:** Fall Only

**HC-3001 Personnel Management in the Health Field (3 Credits)****Requisite(s):** HC-1001 with a grade of C or higher.

Introduction to the effective management of human resources. Topics covered include recruitment, training and supervision, discipline, evaluation, and termination. The course applies personnel theories and techniques to the health field.

**Typically offered:** Spring Only**HC-3002 Health Planning and Research (3 Credits)****Requisite(s):** HC-1001 with a grade of C or higher.,MAT-2301

Students will examine and analyze the health care research literature with an emphasis on understanding and then applying statistics in novel health care situations.

**Typically offered:** Fall Only**HC-3003 Evaluation and Quality Assurance in Health Care (3 Credits)****Requisite(s):** HC-1001 with a grade of C or higher.,MAT-2301

Introduction to the efforts to assure quality in health services, professionals, and institutions; peer review, utilization review, medical audit, credentialing and continuing education, accreditation. diagnosis-related groups or DRG'S, ambulatory payment classifications or APC's, Medicare and Medicaid reimbursements, Accountability within professions vs. external controls. Evaluation models as applied to health programs and services.

**Typically offered:** As Needed**HC-3004 Financial Management for the Health Fields (3 Credits)****Requisite(s):** HC-2001

Survey of the principles of accounting theory with emphasis on their application to the health field. Managerial accounting as it relates to planning, budgeting, staffing, and rate setting. Designed for the middle manager.

**Typically offered:** As Needed**HC-3005 Long-Term Care Management (3 Credits)****Requisite(s):** HC-1003,HC-2001

The principles, skills and knowledge involved in organizing and managing a long-term care facility. Special attention is given to the needs of the aged in various levels of care, financing mechanisms, federal, state, and local regulations, and criteria/standards which must be met to secure licensure in New York State as a nursing home administrator.

**Typically offered:** Spring Only**HC-3006 Alternate Care for the Aged (3 Credits)****Requisite(s):** HC-1003,HC-2001

This course includes learning about topics such as Elderly Waiver (EW) and Alternative Care (AC) programs that fund home and community based services (HCBS) for people age 65 and older who may need the level of care provided in a nursing home, but choose to live in the community. Case management, home health care, and special provisions such as respite care will be covered

**Typically offered:** As Needed**HC-3007 Mental Health: Concepts & Administration (3 Credits)****Requisite(s):** HC-2001,PSY-1100

A study of basic principles of mental health, as well as an overview of maladjustment. Programs, treatment modalities, facilities designed to maintain or restore mental health, and long-term custodial institutions will be discussed.

**Typically offered:** As Needed**HC-4990 Field Placement in the Health Field I (1-5 Credits)****Requisite(s):** Complete 15 credits in HC subject with a grade of B, senior,standing and departmental approval.

Observation and supervised experience in selected health care settings; participation in administrative meetings and training sessions. Includes on-campus seminar to discuss problems and progress. May be taken for two semesters with the approval of the approval of the chairman only.

**Typically offered:** All Sessions**HC-4991 Field Placement in the Health Field II (1-3 Credits)****Requisite(s):** Complete 15 credits in HC subject with a grade of B, senior,standing and departmental approval.

Observation and supervised experience in selected health care settings; participation in administrative meetings and training sessions. Includes on-campus seminar to discuss problems and progress. May be taken for two semesters with the approval of the approval of the chairman only.

**Typically offered:** All Sessions**HC-4995 Independent Study I (1-3 Credits)****Requisite(s):** Complete 15 credits in HC courses with a 3.0 GPA and,departmental approval.

Independent investigation into selected topics in health care management under the direction of a department faculty member. Pre-requisite: 15 credits in HC courses with B<sup>+</sup> average and Departmental approval.

**Typically offered:** All Sessions**HC-4996 Independent Study II (1-3 Credits)****Requisite(s):** Complete 15 credits in HC courses with a 3.0 GPA and,departmental approval.

Independent investigation into selected topics in health care management under the direction of a department faculty member. Pre-requisite: 15 credits in HC courses with B<sup>+</sup> average and Departmental approval.

**Typically offered:** All Sessions**HC-4998 Seminar in Health Management Issues (3 Credits)****Requisite(s):** Senior standing

Senior seminar dealing with the ethical aspects of current issues in the health field. Topics may include organ transplantation, managed care, informed consent, confidentiality of patient records, reproductive technology, genetic research, and whistle blowing. Designed to be taken in the student's final year, this course is the capstone experience for both content and skills. Fulfilling the college requirement of a comprehensive project, each student will make a major presentation and write a mid-length thesis-quality paper. Taken in the last semester, with the approval of the chairman.

**Typically offered:** Spring Only**HC-6001 U.S. Health Care Delivery and Markets (3 Credits)**

Graduate students only. This course will explore the U.S. health care industry, one of the most controversial and changing industries in the global economy. Topics of discussion will include characteristics of the components of U.S. health care systems, the roles of the public and private sector, the impact of managed care, health care markets, and health care reform strategies.

**Typically offered:** As Needed

**HC-6002 Leadership and Innovation in Health Care (3 Credits)****Requisite(s):** HC-6001

Graduate students only. This course will explore how leaders develop and implement innovations in health care. Topics will include design thinking, evaluating new opportunities, leadership theories, overcoming organizational resistance to change, and the roles of entrepreneurship and intrapreneurship and reforms in the current health care environment.

**Typically offered:** As Needed**HC-6003 Health Care Finance and Reimbursement (3 Credits)****Requisite(s):** ACC-6601,FIN-6001

Graduate students only. This course will explore health care financial management and reimbursement systems in the U.S. Students will focus on the practical application of financial concepts and skills in health care settings. Topics will include third-party payers, Medicare/Medicaid payments, managing working capital, resource allocation, and the impact of local and federal health care reforms.

**Typically offered:** As Needed**HC-6004 Special Topics in Health Care Management (3 Credits)**

Graduate students only. This course will explore specific, identified topics in health care management. The subject matter will be chosen by the instructor prior to registration, with the approval of the department chair. Topics may include information technology, marketing, project management, or other contemporary concerns in health care management.

**Typically offered:** As Needed**HS-1001 Health Issues (2 Credits)**

Provides an overview of select current issues in the area of health. Data necessary for making informed decisions will be presented. Personal and societal attitudes, beliefs, and values implicit in the decision-making process will be discussed as they relate to health behavior and, consequently, health outcomes. 2 CREDITS. EVERY SEMESTER. DAY. EVENING. NOTE This course does not fulfill the 2-credit core requirement for HCM majors.

**Fulfills General Education Requirement:** FH2**Typically offered:** All Sessions**HS-1201 Community Health (3 Credits)**

An introductory course in community health issues, including basic concepts of community health; overview of government, foundations, private agencies, and voluntary health organizations; health care reform issues; the nine different areas of community health programming, such as chronic and communicable disease control measures, health promotion, and health education.

**Fulfills General Education Requirement:** FH2**Typically offered:** Fall Only**HS-1206 Safety and First Aid (3 Credits)**

A survey of home, school, and community programs in safety and first aid. Methods of safety research, Haddon's matrix, rating calculation, identification of accident types, methods to control causation and responsibilities of individuals, and the community for safe living. Procedures for temporary care of victims of accidents and sudden illness. Successful completion of this course leads to American Red Cross Certification in Standard First Aid and Personal Safety (includes Adult CPR).

**Fulfills General Education Requirement:** FH2**Typically offered:** All Sessions**HS-1207 Nutrition (3 Credits)**

An introductory course in human nutrition that includes its importance to optimum physical and emotional health. The nutrients—carbohydrates, proteins, lipids, water, vitamins, and minerals—are studied as to their composition, usage in the human body, where found in foods, how digested and utilized in the human body. Body requirements, patterns of diet for various groups, and specific conditions, as well as social and cultural influences on food selection are studied.

**Fulfills General Education Requirement:** FH2**Typically offered:** All Sessions**HS-1302 Consumer Health (3 Credits)**

Consumer problems are viewed in terms of economic, sociological, psychological, and biological consequences to the individual and the community; consumer attitudes and behavior regarding needs, desires, and response to advertising, incorrect labeling, health insurance, life insurance, Medicare, over-the-counter drugs, cosmetics, health fads and quackery, consumer protection agencies, evaluation of products, and other topics of interest to the consumer.

**Fulfills General Education Requirement:** FH2**Typically offered:** Fall Only**HS-1305 Coping with Stress (3 Credits)**

This interdisciplinary course explores theories, research, and techniques related to the impact and management of stress. Emphasis upon the application of stress reduction techniques through class exercises in progressive muscle relaxation, autogenic and imagery training, systematic desensitization, assertiveness training, time management, and problem-solving.

**Fulfills General Education Requirement:** FH2**Typically offered:** All Sessions**HS-1306 Healing and Wholeness (3 Credits)**

Exploring healing and wholeness from many perspectives, this course is an overview of healing from the traditions of the shaman to contemporary faith healers, from ancient roots through modern medicine—Chinese medicine, Ayurvedic medicine, and homeopathy as well as alternative medicines and holistic therapies and ways to self-healing through dream journals and meditation.

**Fulfills General Education Requirement:** FH2**Typically offered:** Spring Only**HS-1403 Women's Health Issues (3 Credits)**

Accurate information about their own health needs enables women to become more active participants in their own health care. Issues include physicians attitudes toward women, knowing ones own body, contraception, pregnancy, rape, family violence, hysterectomy and mastectomy, mental health issues, and patients rights in the health system. 3 credits. Fall; evening.

**Fulfills General Education Requirement:** FH2**Typically offered:** Fall Only**HS-1419 "Death, Loss, and Grief" (3 Credits)**

Investigates the processes of death, loss, and grief while focusing upon the manner in which patterns of dealing with death are interwoven with patterns of living. The family, religion, medicine, economy, law, and community are considered. Specific issues addressed include the moral and legal aspects of euthanasia and the right to die; the hospital, hospice, and home as alternative sites for dying; definitions of life and death; religious and cultural burial customs; and the bereavement process. The implications of these issues are explored for health care practitioners and other individuals in the helping professions as well as for people in their daily lives. 3 credits. Spring; evening.

**Fulfills General Education Requirement:** FH2**Typically offered:** Spring Only

**HS-1501 Introduction to Public Health (3 Credits)**

An introductory course in the study of public health the content of course will focus on basic material related to the five public health foundation: Health Services, Epidemiology, Social/Behavioral, Science, Environmental Health and Biostatistics. Discussion will include the biomedical basis of public health, some historical developments of public health, and the role of health ethics especially in research and future challenges. The course will also present an introduction to the cross-cutting areas of public health including: communication, and informatics, diversity and culture, leadership, public health biology, professionalism, program planning, and systems thinking.

**Fulfills General Education Requirement:** FH2

**Typically offered:** Fall Only

**HS-2150 Methods in Teaching Health (3 Credits)**

Development and application of health education methods to trainers who will teach disease prevention and health promotion to diverse audiences. Focus on developing health literacy across the lifespan for each constituency. 3 credits. Fall semester; day.

**Fulfills General Education Requirement:** FH2

**Typically offered:** Fall Only

**HS-2151 Theory & Research in Health Promotion (3 Credits)**

Review of empirical research including basic interpretation of elementary statistical tests and techniques. Literature review of behavior maintenance, adoption, change and management theories drawn from the public health and social sciences. Prerequisite: HS 2150. 3 credits. Spring semester; day

**Fulfills General Education Requirement:** FH2

**Typically offered:** Spring Only

**HS-2240 Introduction to Environmental Public Health (3 Credits)**

This introductory course will examine the root causes and the scientific understanding of the major environmental health problems associated with urban communities. The course will examine key historical trends and look at current trends and new emerging issues facing densely-populated urban cities. Topics covered include an examination of both indoor and outdoor environmental pollutants and biological hazards related to food, water, sanitation, air quality, noise, radiation, and occupational or indoor hazards. Specific pollutants of interest will be discussed, including asbestos, heavy metals, pesticides, PCBs, radiation, mold, tobacco smoke and other allergens with relevance to their impact on public health. Environmental disasters, either naturally occurring or artificially induced, i.e., as acts of terrorism, will also be examined as a potential vehicle of disease and threat to public health. The course will also look at current trends in novel urban design, construction, and urban planning (so-called green construction™) as a means of mitigating environmental hazards and promoting public health. The course will conclude with an examination of the scientific basis for policy decisions and regulations that aim to control environmental hazards and lessen their impact on the health of urban communities.

**Fulfills General Education Requirement:** FH2

**Typically offered:** Fall Only

**HS-2406 Epidemiology (3 Credits)**

An introductory study of the factors influencing the nature and causes of communicable diseases and chronic conditions in human populations. The study of principles, practices, theories, and methods related to the control and prevention of disease prepares the student for practical application of statistics. Topics include the natural history of diseases in various population groups, environmental and biological factors influencing the emergence of disease, and the investigation of a community health problem.

**Fulfills General Education Requirement:** FH2

**Typically offered:** Fall Only

**HS-3250 Designing Health Promotional Programs (3 Credits)**

**Requisite(s):** HS-2151, Take 2 courses; From Subject HS;

Students are guided through planning and designing a health promotion program in a content area, setting, and population of their own choice.

**Typically offered:** Fall Only

**HS-3251 Implementation and Evaluation of Health Promotion Programs (3 Credits)**

Students are guided through program acceptance, marketing implementation, and evaluation programs. Students will organize and implement a campus-wide health fair and evaluate it.

**Typically offered:** Spring Only

**HS-4000 Special Topic: Obesity - an Epidemic Marine Biology in Belize (3 Credits)**

In this course, students will learn about the prevalence of and rise of obesity in our society. Causes of obesity and its effect on health will be explored. Socioeconomic factors such as cheap high calorie food, and increasing urbanization, as well as genetics, cultural differences in perception of food, and its preparation and consumption will be examined. The biology of the effects of weight on organ systems such as the heart and circulation and diabetes will be considered. Models of successful solutions to this problem will be presented, and students will be encouraged to formulate their own solutions.

**Typically offered:** As Needed

**HS-4350 Intro to Research and Bioethics in HP (3 Credits)**

**Requisite(s):** HPSCI majors: are required to take HS-3251 as a prerequisite, HCMGT majors: no prerequisite required.

Provides a dual introduction to concepts and skills that will culminate in the completion of a senior thesis in the seminar. This course introduces a variety of ethical issues related to health. Research skills from topic selection and narrowing through draft writing will be practiced.

Prerequisite: HS 3251. 3 credits, Fall semester, day, beginning Fall 2009.

**Fulfills General Education Requirement:** FH2

**Typically offered:** Fall Only

**HS-4990 Internship in Allied Health I (1-3 Credits)**

**Requisite(s):** 15 HS credits and permission of chairperson.

Observation and supervised experience in a community setting giving practical application to previously studied concepts and theories related to health promotion or health administration. Minimum of 135 hours in the field placement plus required on-campus meetings as scheduled by the instructor. May be taken for two semesters with the permission of the Chairperson only. Prerequisites: 15 HS credits. 3 credits per semester. Every semester.

**Typically offered:** On Demand

**HS-4991 Internship in Allied Health II (3 Credits)**

**Requisite(s):** 15 HS credits and permission of chairperson.

Observation and supervised experience in a community setting giving practical application to previously studied concepts and theories related to health promotion or health administration. Minimum of 135 hours in the field placement plus required on-campus meetings as scheduled by the instructor. May be taken for two semesters with the permission of the Chairperson only. Prerequisites: 15 HS credits. 3 credits per semester. Every semester.

**Typically offered:** On Demand

**HS-4995 Independent Study in Health Science Promotion (1-3 Credits)**

**Requisite(s):** 15 HS credits with a B average; permission of chairperson and proposal are required.

Independent investigation into a selected health science topic under the direction of a department faculty member. Usually culminates in a major paper. Requires a written proposal accepted by the Chairperson prior to registration. Prerequisites: Approval of the Chairperson and 15 HS credits with a B average. 3 credits per semester. Every semester; day and evening.

**Typically offered:** On Demand

**HS-4996 Independent Study in Health Science II (3 Credits)**

**Requisite(s):** HS-600

Same as HS 600; students may elect a second semester as HS 601.

**Typically offered:** On Demand

**HS-4998 Seminar in Health Science (3 Credits)**

**Requisite(s):** Senior Standing, Co-req HS-4350;

Integrating theory and practical experiences in health promotion, this seminar allows in-depth exploration of issues of importance to the field. Completion of a thesis paper and oral presentation encompass the major work in this course.

**Typically offered:** Fall Only

**HS-5420 Healing in a Cultural Context (3 Credits)**

This course is an interdisciplinary exploration of the interface of medical sciences and spiritual healing arts. It begins with very early attempts of human beings to explain illness and death and to intervene, then traces that process to the present. The course investigates medical, surgical, spiritual, and psychological interventions within their cultural contexts.

Topics include Chinese medicine, Native American healing, and the phenomenon of miracle cures. Open to Honors students only.

**Typically offered:** As Needed

Sylvester  
Underwood  
Williams

## Faculty Chairperson

Dr. Allen Burdowski

## Assistant Professors

Charles  
Joseph  
Mecklenbourg

## Associate Professors

Eaddy

## Adjuncts

Baratta  
Baron-Faust  
Congo  
Pederson