

# HLSC - Health Sciences

## **HLSC 318 Principles of Nutrition (3 Credit Hours)**

This course is designed especially for those entering the health education or health care field, covering the physiology of each of the major body systems as a basis for understanding those aspects of its function that reflect the importance of various nutrients.

**Prerequisites:** CHEM 105N-CHEM 106N or CHEM 121N-CHEM 122N and CHEM 123N-CHEM 124N; BIOL 240, BIOL 241, BIOL 250 or BIOL 251, or permission of the instructor

## **HLSC 320 Health Equity and Disability Culture (3 Credit Hours)**

This course will explore the history of health equity and disability and how prejudice and discrimination against people with disabilities impact health. Students will learn how to apply health equity frameworks, theories, and research to address disability-specific models of health disparities and to achieve health equity in populations with disabilities.

**Prerequisites:** RT 261 with a grade of C- or higher or PUBH 200 with a grade of C or higher or HLTH 120G with a grade of C or higher

## **HLSC 335 Population Health (3 Credit Hours)**

This course provides a population-based approach to professional work in disease management, chronic care management and politics, in addition to students studying public health, health policy, quality and patient safety, health care administration, medicine, nursing, pharmacy, social work and other related clinical professions.

**Prerequisites:** RT 261 with a grade of C- or higher or PUBH 200 with a grade of C or higher or HLTH 120G with a grade of C or higher

## **HLSC 390 The U.S. Healthcare Delivery System (3 Credit Hours)**

The uniqueness of the U.S. healthcare delivery system will be explored in terms of a systems framework and its complexity. The basic characteristics that differentiate the U.S. healthcare delivery system from that of other countries will be presented.

**Prerequisites:** RT 261 with a grade of C- or higher or PUBH 200 with a grade of C or higher or HLTH 120G with a grade of C or higher

## **HLSC 395 Topics in Health (1-3 Credit Hours)**

Study of selected topics.

**Prerequisites:** Permission of the instructor

## **HLSC 405 Interprofessional Study Abroad on Global Health (1-3 Credit Hours)**

This study abroad service learning course will introduce the student to the political, social, cultural, and ethical issues involved in prevention and health promotion globally. Students will travel to another country and learn the incidence/prevalence, morbidity/mortality, and identified public health problems in specific regions and countries.

**Prerequisites:** ENGL 110C

## **HLSC 425/525 Health Aspects of Aging (3 Credit Hours)**

Identifies major issues and problems in meeting health care needs of the aged. Emphasis on role of social assets and supports in determining effects of life changes on the aging process.

**Prerequisites:** PUBH 200

## **HLSC 430W/530 Community Health Resources and Health Promotion (3 Credit Hours)**

Designed to provide information about community health resources and health promotion theory. This is a writing intensive course.

**Prerequisites:** ENGL 110C and ENGL 211C or ENGL 221C or ENGL 231C with a grade of C or better, and a major in Health Sciences-Health Services Administration or a minor in Community Health

## **HLSC 440/540 Finance and Budgeting in Healthcare (3 Credit Hours)**

This course covers financial management functions in healthcare organizations including operating and capital budgeting processes along with budgeting and financial controls.

**Prerequisites:** Junior standing and a declared major in the BSHS Health Services Administration program

## **HLSC 445/545 Health Sciences Research Methods (3 Credit Hours)**

This course focuses on the principles and statistical procedures used in health sciences research and its application in health care settings.

**Prerequisites:** STAT 130M with a C or higher grade

## **HLSC 450/550 Public and Community Health Administration (3 Credit Hours)**

A review of the principles and practice of administering public and community health organizations and programs at federal, state, and local levels. Constitutional, statutory and administrative bases for organizing and conducting public/community health programs will be discussed.

**Prerequisites:** A major in the BSHS Health Services Administration program, BS in Public Health program, or minor in Community Health

## **HLSC 461/561 Managerial Epidemiology (3 Credit Hours)**

This course will blend theory and application of epidemiology. This course will also provide a comprehensive introduction to epidemiology and explain how to use epidemiological concepts and tools to improve decisions about the management of health services.

**Prerequisites:** STAT 130M and a declared major in the BSHS Health Services Administration program or approval of the program director

## **HLSC 465/565 Policy and Politics of Health (3 Credit Hours)**

This course will explore both health policy and the politics of health. Students will develop an understanding of the systematic and analytical framework for developing health and health care policy issues.

**Prerequisites:** A major in the BSHS Health Services Administration program or minor in Community Health

## **HLSC 468 Internship (1-3 Credit Hours)**

The internship will allow a student new to the Bachelor of Science in Health Science degree program to complete a capstone internship to gain entry skills for a beginning career pathway in the profession. The course is intended to provide clinical field experience and assimilation of the theoretical aspects learned in the coursework in a practical/work setting. A minimum of 120 hours is required for the 3-credit internship.

**Prerequisites:** Major in BSHS and senior standing

## **HLSC 475/575 Healthcare Marketing (3 Credit Hours)**

This course provides a basic understanding of marketing in a health care setting. It will cover the following: the history of marketing in a health care setting, health care markets, marketing techniques, and leadership skills in managing and supporting the marketing efforts.

**Prerequisites:** A major in BSHS Health Services Administration or BS in Public Health

## **HLSC 480/580 Health Ethics and the Law (3 Credit Hours)**

This course provides the students with a basic knowledge of health law and examines legal issues confronting health services administrators in various health care environments.

**Prerequisites:** A declared major in the BSHS Health Services Administration program

## **HLSC 483/583 Artificial Intelligence Applications in Health (3 Credit Hours)**

This course offers an exploration of how artificial intelligence (AI) is transforming healthcare delivery and improving patient outcomes. Building on foundational knowledge from AI Ethics and Policy and AI Methods and Models, students will dive deeper into the integration of AI in clinical and operational contexts. Key topics include the role of AI in diagnostics and personalized medicine and other AI implementations in healthcare.

**Prerequisites:** Permission of instructor

## **HLSC 485/585 Health Informatics (3 Credit Hours)**

This course focuses on healthcare informatics (information systems) and applications in health care organizations. It provides an overview of health information system concepts, management, and integration of technology in healthcare organizations as applicable to the majors in Health Sciences.

**Prerequisites:** Declared BSHS major

## **HLSC 495/595 Topics in Public/Community Health Administration (1-3 Credit Hours)**

This course provides the opportunity for the study of selected topics in public/community health under the supervision of a faculty member.

**Prerequisites:** Permission of the instructor

**HLSC 498 Directed Research in Health Services Administration (1-6 Credit Hours)**

Supervised research on a specific problem in health services administration. Regular meetings with faculty and a written/oral report are required.

**Prerequisites:** Permission of the instructor

**HLSC 525 Health Aspects of Aging (3 Credit Hours)**

Identifies major issues and problems in meeting health care needs of the aged. Emphasis on role of social assets and supports in determining effects of life changes on the aging process.

**Prerequisites:** Permission of the instructor

**HLSC 530 Community Health Resources and Health Promotion (3 Credit Hours)**

Designed to provide information about community health resources and health promotion theory.

**Prerequisites:** Permission of the instructor

**HLSC 540 Finance and Budgeting in Healthcare (3 Credit Hours)**

This course covers financial management functions in healthcare organizations including operating and capital budgeting processes along with budgeting and financial controls.

**Prerequisites:** Permission of the instructor

**HLSC 545 Health Sciences Research Methods (3 Credit Hours)**

This course focuses on the principles and statistical procedures used in health sciences research and its application in health care settings.

**Prerequisites:** STAT 130M or permission of the instructor

**HLSC 550 Public and Community Health Administration (3 Credit Hours)**

A review of the principles and practice of administering public and community health organizations and programs at federal, state, and local levels. Constitutional, statutory and administrative bases for organizing and conducting public/community health programs will be discussed.

**Prerequisites:** Permission of the instructor

**HLSC 561 Managerial Epidemiology (3 Credit Hours)**

This course will blend theory and application of epidemiology. This course will also provide a comprehensive introduction to epidemiology and explain how to use epidemiological concepts and tools to improve decisions about the management of health services.

**Prerequisites:** STAT 130M or permission of the instructor

**HLSC 565 Policy and Politics of Health (3 Credit Hours)**

This course will explore both health policy and the politics of health. Students will develop an understanding of the systematic and analytical framework for developing health and health care policy issues.

**Prerequisites:** Permission of the instructor

**HLSC 575 Healthcare Marketing (3 Credit Hours)**

This course provides a basic understanding of marketing in a health care setting. This course will cover the following: the history of marketing in a health care setting, health care markets, marketing techniques, and leadership skills in managing and supporting the marketing efforts.

**Prerequisites:** Permission of the instructor

**HLSC 580 Health Ethics and the Law (3 Credit Hours)**

This course provides the students with a basic knowledge of health law and examines legal issues confronting health services administrators in various health care environments.

**Prerequisites:** Permission of the instructor

**HLSC 583 Artificial Intelligence Applications in Health (3 Credit Hours)**

This course offers an exploration of how artificial intelligence (AI) is transforming healthcare delivery and improving patient outcomes. Building on foundational knowledge from AI Ethics and Policy and AI Methods and Models, students will dive deeper into the integration of AI in clinical and operational contexts. Key topics include the role of AI in diagnostics and personalized medicine and other AI implementations in healthcare.

**HLSC 585 Health Informatics (3 Credit Hours)**

This course focuses on healthcare informatics (information systems) and application in health care organizations. It provides an overview of health information system concepts, management, and integration of technology in healthcare organizations as applicable to the majors in Health Sciences.

**Prerequisites:** Permission of the instructor

**HLSC 595 Topics in Public/Community Health Administration (1-3 Credit Hours)**

This course provides the opportunity for the study of selected topics in public/community health under the supervision of a faculty member.

**Prerequisites:** Permission of the instructor

**HLSC 701 Introduction to Health Services (3 Credit Hours)**

Focuses on the complexities involved in providing health services to populations. Presents issues related to public health, community health, urban and rural health, healthy people/communities and health care delivery in traditional and non-traditional settings.

**HLSC 702 Health Management (3 Credit Hours)**

This seminar will provide students with an understanding of health care organizations and effective management. Particular attention will be given to the issues of access, cost and quality.

**HLSC 705 Interprofessional Study Abroad on Global Health (1-3 Credit Hours)**

This study abroad service learning course will introduce the student to the political, social, cultural, and ethical issues involved in prevention and health promotion globally. Students will travel another country and learn the incidence/prevalence, morbidity/mortality, and identified public health problems in specific regions and countries.

**HLSC 706 Leadership in Complex Systems and Organizations (3 Credit Hours)**

This course will focus on the leadership that comprises two types: informal and formal leadership. Competencies will include communication, knowledge of health care environment, leadership, professionalism, and business skills.

**HLSC 707 Informatics and Healthcare Technology (3 Credit Hours)**

This course will cover the use of data in health care as well as other informatics applications. Students will explore healthcare technology used to improve the delivery and evaluation of care.

**HLSC 708 Evidence-Based Management for Quality Healthcare (3 Credit Hours)**

The focus of the course is on the development of system processes to ensure quality health care. The evidence-based model will be applied to organizational systems.

**HLSC 709 Multidisciplinary Approach to Health Services Research (3 Credit Hours)****HLSC 710 Research Design and Application (3 Credit Hours)**

Emphasis is on exploring the advantages/disadvantages and uses of non-experimental, quasi-experimental, and experimental designs in health-related research with application to management, education, and clinical practice.

**HLSC 712 Qualitative Research Methods (3 Credit Hours)**

An exploration of qualitative research methods including participant observation, ethnography and the generation of grounded theory. Individual interviews and focus group methods will be covered and historical, content analysis, phenomenological and montage approaches will also be discussed. Health related examples of published research in a variety of fields will be utilized to exemplify the methods.

**HLSC 713 Measurement of Health Phenomena (3 Credit Hours)**

An overview of measurement theory with emphasis on the development, testing, and refinement of norm- and criterion-referenced data collection instruments for health-related research.

**HLSC 714 Theory in the Health Sciences (3 Credit Hours)**

Introduces the philosophy of science by studying the nature and purposes of theory for the health sciences. Standards for evaluation of theories will be described. Selected theories and supporting research from the health services literature will be discussed and critically evaluated.

**HLSC 716 Competitive Resource Design and Utilization (3 Credit Hours)**

This course focuses on the competitive design and utilization of organizational and human resources. Emphasis will be placed on the strategic process to ensure that resources are applied in ways to ensure high-quality care and excellent patient outcomes. The course will cover the business models for effective financial and personnel management of healthcare organizations. Analysis of the costs and quality of care will be performed.

**HLSC 746 Epidemiology (3 Credit Hours)**

This course examines epidemiology as a method for viewing inborn community health problems and as a body of knowledge derived from this method. Skills in using epidemiology as a method and as knowledge to solve community health problems will be included.

**HLSC 751 Developmental Neonatal Physiology (2 Credit Hours)**

This course provides an in-depth examination of human genetics, embryologic development and normal physiologic functioning of developing body systems. Mechanisms involved in cell division, gametogenesis, and inheritance patterns will be addressed. Basic genetics and epigenetics will be included. The structural and functional development of fetal systems, during critical periods, will be emphasized. Abnormalities and alterations in fetal development will be explored.

**HLSC 764 Health Economics (3 Credit Hours)**

This course describes the application of economic tools to analyze the operation of markets for health care and insurance. Topics covered include the consumption and costs of health care in the United States, the viewpoints of players in the health care market, and an overview of both supply and demand analysis and cost effectiveness analysis. Complexities of economics unique to health care will be detailed. Further, students will employ these principles in several case studies of current and classic issues in health economics.

**HLSC 768 Practicum in Global Health (2 Credit Hours)**

Global health related field placement (112 hours).

**HLSC 771 Foundations of Advanced Neonatal Care (3 Credit Hours)**

The foundations of advanced neonatal care course provides the theoretical and practical knowledge for the neonatal nurse practitioner or physician assistant to manage the health care needs of the neonate in the newborn nursery or level II neonatal intensive care unit.

**HLSC 772 Policy and Politics of Health (3 Credit Hours)**

This course enables the student to develop a systematic and analytical framework for understanding health care policy issues. The policy process is covered in detail. Timely policy issues also are discussed.

**HLSC 773 Pharmacology for Advanced Neonatal Care (3 Credit Hours)**

This course offers scientific inquiry into the use of pharmacologic agents in the advanced nursing care of infants, including fetal, neonatal life, and early childhood. Pharmacokinetics, pharmacodynamics, drug use in pregnancy and lactation, pharmacologic agents used in disease prevention and treatment, drug monitoring and drug safety in the home are explored.

**HLSC 774 Advanced Neonatal Care: High Risk Management I (3 Credit Hours)**

This course develops the students' ability to manage high-risk neonates. This is the second of three sequential management courses that provide the theoretical and practical knowledge for the neonatal nurse practitioner to manage the health care needs of the neonate at the highest level of nursing practice.

**HLSC 775 Advanced Neonatal Care: High Risk Management II (3 Credit Hours)**

An organ systems approach is used to explore the diagnosis and management of neonates requiring surgery and advanced technologies. Additional topics will include developmental follow-up of the medically fragile infant and withdrawal of life support in the NICU.

**HLSC 776 Global Health (3 Credit Hours)**

This course will introduce the student to the political, social, cultural and ethical issues involved in disease prevention and health promotion globally. Specific emphasis will be on incidence/prevalence, morbidity/mortality, and identified health problems in specific regions and countries. This course will also identify international health prerogatives aimed at improving health status through education and intervention.

**HLSC 778 Global Environmental Health (2-3 Credit Hours)**

The goal of this course is to guide students with a public health perspective to develop skills to identify and analyze environmental health problems globally. It is designed to provide knowledge on recognizing and evaluating major environmental health issues and risk factors in developed and developing countries by using group discussions and real-life case studies.

**HLSC 780 Monitoring & Evaluating Global Health Programs (2 Credit Hours)**

This course familiarizes students with the basic concepts, issues, theories, approaches and models in evaluation in a global public health context. Students in this course will begin to develop technical skills to conceptualize and design evaluations of global public health programs or projects. These practices include determining which evaluation approach to use in a given context, developing an evaluation plan and appropriate evaluation questions, determining the data needed to answer the evaluation questions and establishing reporting processes to provide information to program developers.

**HLSC 782 One Health, One Medicine (2 Credit Hours)**

This course will teach students the applications of multidisciplinary competencies towards solving human health challenges. The course will identify all areas of global health issues that require human, veterinary and environmental applications for solutions. One Health One Medicine is an important course for all students in Health or Environmental Sciences that are called upon to integrate multidisciplinary competencies as part of their education and career experiences.

**HLSC 784 Creating Sustainable Environmental Futures (3 Credit Hours)**

This course examines the interrelationships between individual and societal decisions and the global environment, and analyzes the consequences these interrelationships have for public health and sustainability. The course will review food, environmental quality, climate variability, sea-level rise and public health, homes-workplaces-communities, and environmental health and sustainability in the region, the nation and around the world.

**HLSC 785 Issues and Opportunities in Global Health Research (3 Credit Hours)**

This course focuses on global health research with an emphasis on cultural, political and economic influences on health in various regions and provides students opportunities to engage in inter-professional teamwork to brainstorm problem-based issues and establish research proposals.

**HLSC 795 Topics in Health Sciences (1-3 Credit Hours)**

Designed to provide the advanced student with an opportunity to study independently or in small groups and investigate specific topics of current interest in health services or health sciences.

**HLSC 798 Supervised Research (1-6 Credit Hours)**

Supervised research on a specialized topic. Can be repeated.

**HLSC 801 Introduction to Health Services (3 Credit Hours)**

Focuses on the complexities involved in providing health services to populations. Presents issues related to public health, community health, urban and rural health, healthy people/communities and health care delivery in traditional and non-traditional settings.

**HLSC 802 Health Management (3 Credit Hours)**

This seminar will provide students with an understanding of health care organizations and effective management. Particular attention will be given to the issues of access, cost and quality.



**HLSC 804 Methods of Program Evaluation (3 Credit Hours)**

Examination of various methodologies for designing and conducting public health program evaluation and research. Experimental, quasi-experimental and non-experimental procedures will be covered. Departmental approval required.

**Prerequisites:** HLSC 810 or PAUP 853

**HLSC 805 Interprofessional Study Abroad on Global Health (1-3 Credit Hours)**

This study abroad service learning course will introduce the student to the political, social, cultural, and ethical issues involved in prevention and health promotion globally. Students will travel another country and learn the incidence/prevalence, morbidity/mortality, and identified public health problems in specific regions and countries.

**HLSC 806 Leadership in Complex Systems and Organizations (3 Credit Hours)**

This course will focus on the leadership that comprises two types: informal and formal leadership. Competencies will include communication, knowledge of health care environment, leadership, professionalism, and business skills.

**HLSC 807 Informatics and Healthcare Technology (3 Credit Hours)**

This course will cover the use of data in health care as well as other informatics applications. Students will explore healthcare technology used to improve the delivery and evaluation of care.

**HLSC 808 Evidence-Based Management for Quality Healthcare (3 Credit Hours)**

The focus of the course is on the development of system processes to ensure quality health care. The evidence-based model will be applied to organizational systems.

**HLSC 809 Multidisciplinary Approaches to Health Services Research (3 Credit Hours)**

Uses theory and research findings from areas such as Biology, Psychology, Sociology, Economics, Urban Studies, and Health Services to achieve an understanding of health services issues and problems. Emphasizes methods of analysis and of developing alternatives related to multidisciplinary perspectives.

**HLSC 810 Research Design and Application (3 Credit Hours)**

Emphasis is on exploring the advantages/disadvantages and uses of non-experimental, quasi-experimental, and experimental designs in health-related research with application to management, education, and clinical practice. (cross-listed with PT 810).

**Prerequisites:** graduate-level courses in research design and statistics or permission of the instructor

**HLSC 811 Quantitative Research Methods in Health Care (3 Credit Hours)**

An applied approach to the selection and application of bivariate and multivariate statistical techniques in health services research. Emphasis is placed on handling large data sets and the use of a computer for manipulation of quantitative data.

**Pre- or corequisite:** HLSC 710 or HLSC 810

**HLSC 812 Qualitative Research Methods (3 Credit Hours)**

An exploration of qualitative research methods including participant observation, ethnography and the generation of grounded theory. Individual interviews and focus group methods will be covered and historical, content analysis, phenomenological and montage approaches will also be discussed. Health related examples of published research in a variety of fields will be utilized to exemplify the methods.

**HLSC 813 Health Outcomes Research (3 Credit Hours)**

An overview of measurement theory with emphasis on the development, testing, and refinement of norm- and criterion-referenced data collection instruments for health-related research.

**Prerequisites:** graduate-level courses in research design and statistics or permission of the instructor

**HLSC 814 Theory in the Health Sciences (3 Credit Hours)**

Introduces the philosophy of science by studying the nature and purposes of theory for the health sciences. Standards for evaluation of theories will be described. Selected theories and supporting research from the health services literature will be discussed and critically evaluated.

**HLSC 815 Decision Analysis in Health Care (3 Credit Hours)**

This course teaches students the art and science of decision making. It covers expected utility theory, decision tree analysis, cost-benefit analysis, and the psychological aspects of the decision-making process in the context of health policy research.

**HLSC 816 Competitive Resource Design and Utilization (3 Credit Hours)**

This course focuses on the competitive design and utilization of organizational and human resources. Emphasis will be placed on the strategic process to ensure that resources are applied in ways to ensure high-quality care and excellent patient outcomes. The course will cover the business models for effective financial and personnel management of healthcare organizations. Analysis of the costs and quality of care will be performed.

**HLSC 820 Health Care Delivery System (3 Credit Hours)**

This course provides the student with an opportunity to analyze the American health care system. The health care system is composed of complex organizational dynamics and structures which predicate the interaction between the major components of the system: personnel who provide service; institutions in which care is provided; financing mechanisms which pay for care; and the government which attempts to regulate it. This course is designed for in-depth analysis and synthesis of all aspects of health care delivery with an emphasis on improving the delivery and access to care.

**HLSC 846 Epidemiology (3 Credit Hours)**

This course examines epidemiology as a method for viewing inborn community health problems and as a body of knowledge derived from this method. Skills in using epidemiology as a method and as knowledge to solve community health problems will be included.

**HLSC 861 Advanced Quantitative Methods (3 Credit Hours)**

This course adopts an applied approach to teaching health professions students the necessary competencies and skills in advanced quantitative methods. Topics include handling missing data, survey design and exploratory factor analysis, mediation and moderation analysis, and an introduction to confirmatory factor analysis and structural equation modeling (SEM).

**Prerequisites:** HLSC 811

**HLSC 864 Health Economics (3 Credit Hours)**

This course describes the application of economic tools to analyze the operation of markets for health care and insurance. Topics covered include the consumption and costs of health care in the United States, the viewpoints of players in the health care market, and an overview of both supply and demand analysis and cost effectiveness analysis. Complexities of economics unique to health care will be detailed. Further, students will employ these principles in several case studies of current and classic issues in health economics.

**HLSC 868 Internship in Health Sciences (3 Credit Hours)**

Supervised health services field experiences or health sciences laboratory experiences. A completed research project which is publishable or presentable at a professional conference is required to complete the course.

**HLSC 872 Policy and Politics of Health (3 Credit Hours)**

This course enables the student to develop a systematic and analytical framework for understanding health care policy issues. The policy process is covered in detail. Timely policy issues are also discussed.

**HLSC 873 Planning Proposals and Developing Grants in Health Research (3 Credit Hours)**

Designed as a 'hand-on' approach in effective grantsmanship, this course will guide the student from the identification of potential funding sources through proposal development. Highlights include program planning, nonprofit status, governmental/foundation corporate trends, local resources and grants administration.

**HLSC 874 Administration in Health Sciences (3 Credit Hours)**

This course will provide an overview of health delivery systems, organizational behavior, and theoretical foundations for managerial and executive leadership in health care facilities. Emphasis will be placed on utilizing best practices in leadership to promote motivation and quality improvement, strategic planning, information technology, and cultural awareness.

**HLSC 875 Comprehensive Health Planning (3 Credit Hours)**

This course emphasizes the principles and processes of program planning, including a consideration of objectives, priorities, policy choices, assessment of resources, implementation, and evaluation. The student will gain practical experience in program development by developing a planning document.

**HLSC 876 Global Health (3 Credit Hours)**

This course will introduce the student to the political, social, cultural and ethical issues involved in disease prevention and health promotion globally. Specific emphasis will be on incidence/prevalence, morbidity/mortality, and identified health problems in specific regions and countries. This course will also identify international health prerogatives aimed at improving health status through education and intervention.

**HLSC 881 Dissertation Seminar (3 Credit Hours)**

This course will assist students in developing a dissertation proposal. Steps in the research process will be reviewed as students submit drafts of their proposal for faculty and peer review. Problem formulation, integrating theoretical frameworks, preparing for human subjects review and outlining data analysis techniques for hypothesis testing will be discussed. Students will be introduced to University guidelines related to dissertations and other resources to assist them in their task.

**HLSC 889 Colloquium I (1 Credit Hour)**

This course is the first in a series of colloquial courses in which doctoral level students receive presentations and present research and current topics of interest in health related professions.

**HLSC 890 Colloquium II (1 Credit Hour)**

This course is the second in a series of colloquial courses in which doctoral level students receive presentations and present research and current topics of interest in health related professions.

**HLSC 891 Colloquium III (1 Credit Hour)**

This course is the third in a series of colloquial courses in which doctoral level students receive presentations and present research and current topics of interest in health related professions.

**HLSC 892 Colloquium IV (1 Credit Hour)**

This course is the fourth in a series of colloquial courses in which doctoral level students receive presentations and present research and current topics of interest in health related professions.

**HLSC 895 Topics in Health Sciences (1-3 Credit Hours)**

Designed to provide the advanced student with an opportunity to study independently or in small groups and investigate specific topics of current interest in health services.

**Prerequisites:** Ph.D. standing or permission of the graduate program director

**HLSC 897 Independent Study (1-3 Credit Hours)**

Individualized study selected by the student in collaboration with a faculty member. Area of study to be supervised and approved by a faculty member with the approval of the graduate program director.

**Prerequisites:** Admission to Health Services PhD program and permission of graduate program director

**HLSC 898 Supervised Research (1-6 Credit Hours)**

Supervised research on a specialized topic. Can be repeated.

**HLSC 899 Dissertation (1-12 Credit Hours)**

Available for pass/fail grading only. An approved research project written under the supervision of a faculty advisor, in which the student demonstrates the capacity to design and complete independent applied research. The completed project must be approved by the dissertation committee.

**HLSC 999 Doctoral Graduate Credit (1 Credit Hour)**

This course is a pass/fail course doctoral students may take to maintain active status after successfully passing the candidacy examination. All doctoral students are required to be registered for at least one graduate credit hour every semester until their graduation.