

HEALTH SCIENCE (HS)

HS100: Introduction to Health Science Professions

In this introductory course, you will identify current issues in health science and how they relate to chosen health science professions. Educational and credentialing requirements will be defined for health science occupations. You will review your chosen degree plan, exploring appropriate electives and identifying specific career options based on personal goals and research of the profession. Professional traits and skills for success in the field will be explored as well as discussion of roles and responsibilities of selected health professionals.

Quarter Credit Hours: 5 | Prerequisite: None

HS100M1: Education, Certification, and Credentials

Define the required education, certification, and credentials needed at the national and state level for a given health care profession.

Quarter Credit Hours: 1 | Prerequisite: None

HS100M2: Roles and Responsibilities of Health Science Professionals

Discuss the roles and responsibilities of selected health science professionals.

Quarter Credit Hours: 1 | Prerequisite: None

HS100M3: Health Science Career Resources

Compile relevant career resources and support materials for a health science profession.

Quarter Credit Hours: 1 | Prerequisite: None

HS100M4: Current Issues in Health Science Professions

Describe how current issues in health sciences relate to health science professions.

Quarter Credit Hours: 1 | Prerequisite: None

HS100M5: Traits and Skills of Health Science Professionals

Define the professional traits and skills needed to be successful in the field of health science.

Quarter Credit Hours: 1 | Prerequisite: None

HS101: Medical Law and Bioethics

This course emphasizes the basic principles and applications of law, ethics, and bioethics as they relate to the medical arena. It covers legal terms, consent, contracts, physician/patient relationships, professional liability, and various medical issues. Through lectures, class discussions, case studies, and library research, students acquire knowledge of the importance of their professional, legal, and ethical responsibilities.

Quarter Credit Hours: 5 | Prerequisite: None

HS101M1: Legal and Ethical Standards

Discuss the implications of legal and ethical standards for health care professionals.

Quarter Credit Hours: 1 | Prerequisite: None

HS101M2: Health Care Regulations

Discuss federal and state health care regulations.

Quarter Credit Hours: 1 | Prerequisite: None

HS101M3: Health Care Certifications

Apply ethical standards in accordance with applicable certification agencies.

Quarter Credit Hours: 1 | Prerequisite: None

HS101M4: Medical Records and Privacy

Explain legal and ethical principles of confidentiality, documentation, and risk management.

Quarter Credit Hours: 1 | Prerequisite: None

HS101M5: Current Topics in Health Care

Identify current topics in health care.

Quarter Credit Hours: 1 | Prerequisite: None

HS111: Medical Terminology

This course provides a logical understanding of the language of medicine. Basic prefixes, suffixes, word roots, and rules for taking a singular term and making it plural are studied, along with word analysis, word building, spelling, and pronunciation. These principles are applied to the study of the following systems: integumentary, skeletal, muscle/joints, blood and lymphatic, nervous, respiratory, and cardiovascular. Each body system is reviewed with anatomy and physiology; diagnostic, lab, and surgical procedures; and pharmacology for interest and knowledge.

Quarter Credit Hours: 5 | Prerequisite: None

HS111M1: Elements of a Medical Term

Differentiate the word elements of a medical term.

Quarter Credit Hours: 1 | Prerequisite: None

HS111M2: Formulating Definitions of Medical Terms

Formulate proper definitions of presented medical terms.

Quarter Credit Hours: 1 | Prerequisite: None

HS111M3: Using Medical Terminology to Interpret Medical Reports

Interpret simulated medical reports using medical terminology.

Quarter Credit Hours: 1 | Prerequisite: None

HS111M4: Translating Medical Terminology Into Layman's Terms

Demonstrate the ability to translate medical terminology and information into layman's terms for nonmedical personnel or patients.

Quarter Credit Hours: 1 | Prerequisite: None

HS111M5: Composing Accurate Medical Terms

Compose accurate medical terms, based on established medical terminology guidelines.

Quarter Credit Hours: 1 | Prerequisite: None

HS140: Pharmacology

This course is a systematic study of basic pharmacology principles with emphasis on the skills and information needed to succeed in a working environment. Topics covered include drug classes, dosage calculations and measurement conversions, drug administration routes, and proper medication documentation procedures.

Quarter Credit Hours: 5 | Prerequisite: None

HS155: Fundamentals of Patient Safety

This course is designed to create systems-thinking professionals who are prepared to identify, evaluate, and improve systemic issues that may lead to adverse events if left unchecked. This course builds upon a working knowledge of a pharmacy environment as experienced by a pharmacy technician and prepares you to critically evaluate why your work environment operates the way it does and how that environment contributes to outcomes observed. You will explore errors associated with each step in the medication use process, common sources of error at each point, and strategies to minimize the impacts of these errors. Coursework includes analysis of adverse drug event cases, root cause analysis, suggesting process improvements, and designing ways to objectively measure the impact of these changes.

Quarter Credit Hours: 5 | Prerequisite: None

HS155M1: Defining and Identifying Medication Errors

Evaluate how complex medication use systems and the terms used to classify them generate various types of adverse events seen in pharmacy practice.

Quarter Credit Hours: 1 | Prerequisite: None

HS155M2: Strategies to Reduce Medication Errors

Differentiate common types of medication errors and the effective strategies available to reduce these errors.

Quarter Credit Hours: 1 | Prerequisite: None

HS155M3: Root Cause Analysis and Medication Safety

Practice root cause analysis to assess an adverse drug event.

Quarter Credit Hours: 1 | Prerequisite: None

HS155M4: Designing Safe Medication Use Systems

Synthesize optimum work processes for a pharmacy practice, given the use of human factor analysis of various pharmacy systems and the professionals who interact with those systems.

Quarter Credit Hours: 1 | Prerequisite: None

HS155M5: Measuring Medication Safety Systems

Design an objective measurement system that can be used to quantify systems improvements and associated adverse events.

Quarter Credit Hours: 1 | Prerequisite: None

HS165: 🌐 Cultural Competence and Communication for Health Professionals

This course focuses on assessing cultural competency, cultural blindness, and the importance of cultural competence in a health care context. The impact of diversity on patient, colleague, and provider interactions is discussed. Strategies to help patients improve their health literacy are explored. This course also examines the policy of conscientious objection and its legal implication.

Quarter Credit Hours: 5 | Prerequisite: None

HS165M1: Cultural Competence in Health Care

Illustrate the importance of cultural competence in a health care context.

Quarter Credit Hours: 1 | Prerequisite: None

HS165M2: Culture and Effective Health Care Communication

Identify strategies for effective communication with differing cultures.

Quarter Credit Hours: 1 | Prerequisite: None

HS165M3: Diversity Considerations in Provider Interactions

Discuss the impact of diversity on patient, colleague, and provider interactions.

Quarter Credit Hours: 1 | Prerequisite: None

HS165M4: Conscientious Objection and Health Care

Evaluate the policy of conscientious objection.

Quarter Credit Hours: 1 | Prerequisite: None

HS165M5: Health Literacy for Patients

Recommend strategies to help patients improve their health literacy.

Quarter Credit Hours: 1 | Prerequisite: None

HS175: 🌐 Special Topics in Retail Pharmacy Practice

This course explores special topics in retail pharmacy practice. There is flexibility built into the course to provide options to synthesize and apply current concepts into your own retail pharmacy practice.

Quarter Credit Hours: 5 | Prerequisite: None

HS175M1: Integrating Knowledge for Allied Health Practice

Integrate knowledge from behavioral and pharmacy experience as a basis for allied health practice.

Quarter Credit Hours: 1 | Prerequisite: None

HS175M2: Technology for Health Care Tasks

Use current technology for a variety of health care tasks.

Quarter Credit Hours: 1 | Prerequisite: None

HS175M3: Career Skills in Health Care

Demonstrate competencies relevant to a career focus area within health sciences.

Quarter Credit Hours: 1 | Prerequisite: None

HS175M4: Problem Solving in Health Care

Apply problem-solving skills to real and simulated health care scenarios.

Quarter Credit Hours: 1 | Prerequisite: None

HS175M5: Professionalism in Pharmacy Practice

Exhibit behavior consistent with the professional, ethical, and legal standards of pharmacy practice.

Quarter Credit Hours: 1 | Prerequisite: None

HS185: 🌐 Emerging Trends in the Pharmaceutical Industry

This course will explore emerging trends within the health industry, with special emphasis on the pharmaceutical industry. You will identify various topics and trends that could impact future professional practices and how those impact decision making. You will apply a variety of strategies to propose solutions and manage quality with an ethical foundation.

Quarter Credit Hours: 5 | Prerequisite: None

HS185M1: Future Professional Practice

Identify contemporary and relevant topics that will impact future professional practices.

Quarter Credit Hours: 1 | Prerequisite: None

HS185M2: Health Care Trends and Decision-Making

Analyze industry trends to facilitate decision-making.

Quarter Credit Hours: 1 | Prerequisite: None

HS185M3: Solutions for Pharmacy Practice

Propose solutions to pharmacy-based problems using evidence-based approaches.

Quarter Credit Hours: 1 | Prerequisite: None

HS185M4: Ethics and Goals in Health Care Settings

Integrate personal and professional ethics to achieve organizational goals.

Quarter Credit Hours: 1 | Prerequisite: None

HS185M5: Managing Quality and Performance in Health Care Settings

Apply tools and techniques in the management of quality and performance in a health care setting.

Quarter Credit Hours: 1 | Prerequisite: None

HS200: Diseases of the Human Body

Studies include principles of vaccinations and disease prevention, chronic diseases, diagnosis and treatments, and the economic impact. You will also learn about infectious diseases, disease etiology, symptoms, diagnostic tests, therapeutic methods, and disease prognosis. In addition, genes, mutations, inheritance, genetic diseases, cancer, and cancer treatments will be reviewed.

Quarter Credit Hours: 5 | Prerequisite: None

HS210: Medical Office Management

This course explores procedural guidelines for accomplishing various administrative tasks in the health care setting. Topics include management of patient information, operational functions, and general workplace competencies of health care employees.

Quarter Credit Hours: 5 | Prerequisite: None

HS215: Medical Insurance and Billing

This course provides an understanding of health care insurance billing and insurance concepts in practice today. It includes medical insurance billing theory and methodology, and covers specific reimbursement theories, health care concepts, and the practical application of third-party insurance rules.

Quarter Credit Hours: 3 | Prerequisite: None

HS220: Medical Coding and Insurance

Using various coding methodologies, students learn basic coding principles used in filing insurance claims. Students also become acquainted with various types of health insurance and insurance terminology.

Quarter Credit Hours: 5 | Prerequisite: None

HS230: Health Care Administration

This course discusses the scope and practice of health care administration. Students learn various models of health care delivery systems and social, political, individual, and organizational forces that impact health care delivery. Studies will include marketing, operations, financial, and human resources management, as well as effective communication strategies involved in health care administration.

Quarter Credit Hours: 5 | Prerequisite: None

HS230M1: Leading Health Care Organizations

Describe the roles and responsibilities of administering, managing, and leading health care organizations.

Quarter Credit Hours: 1 | Prerequisite: None

HS230M2: Forces That Impact Health Care

Distinguish among the forces that influence the health care delivery and systems.

Quarter Credit Hours: 1 | Prerequisite: None

HS230M3: Health Care Access

Compare the United States health care delivery system in contrast to other countries in regard to health care access.

Quarter Credit Hours: 1 | Prerequisite: None

HS230M4: Legal and Ethical Challenges for Health Care Organizations

Explore a solution to a legal and ethical challenge by using a strategic leadership approach appropriate for health care organizations.

Quarter Credit Hours: 1 | Prerequisite: None

HS230M5: Operational Principles of Human Resources in Health Care Organizations

Identify the principles of change management, staffing, and leadership within the planning of human resources in a health care facility.

Quarter Credit Hours: 1 | Prerequisite: None

HS240: Medical Office Accounting

This course will introduce students to the fundamental concepts and practice of medical office accounting. Topics include basic bookkeeping procedures, accounts receivable, payroll, banking processes, petty cash, and billing and collection procedures.

Quarter Credit Hours: 3 | Prerequisite: None

HS290: Associate's Capstone in Health Science

Designed to be a culminating educational experience, the Associate of Science in Health Science capstone course integrates coursework, knowledge, and skills to enable you to demonstrate mastery of learning across the curriculum. You will complete a summary portfolio addressing requirements in selected career focus areas. Submissions will include, but will not be limited to, assessments demonstrating knowledge and skills, and reflections on learning.

Quarter Credit Hours: 5 | Prerequisite: Final term

HS292: Billing and Coding Practicum

This course is designed to build on the concepts and skills of program courses, specifically medical billing and coding. You will gain practical experience in medical billing, coding, and administrative functions in both an online virtual lab setting and in a health care facility.

Quarter Credit Hours: 3 | Prerequisite: Last term or permission from the Dean

HS298: Externship Extension Course

This course will provide you with a mentored learning experience in the content area and site selected by you and approved by the Clinical Coordinator. This course may be taken after a health sciences externship course for the specific purpose of externship hour completion.

Quarter Credit Hours: 0 | Prerequisite: HI499, MA295, or MO290

HS305: Research Methods for Health Sciences

This course enables you to explore ethics within the health industry, research methods, and the evaluation of scientific literature. You will engage with health data through database querying, data extraction, and data mining opportunities. You will learn to procure appropriate metrics for analysis, utilize data mining to generate insights into health organizational outcomes, and evaluate health data to make evidence-based decisions. You will use computer software applications to manage data throughout this course.

Quarter Credit Hours: 6 | Prerequisite: None

HS305M1: Ethics in Health Science Research

Show competency in protecting human subjects and adherence to Institutional Review Board (IRB) processes and policies.

Quarter Credit Hours: 1 | Prerequisite: None

HS305M2: Research Methods and Literature Review

Apply principles of research and clinical literature evaluation to improve outcomes.

Quarter Credit Hours: 1 | Prerequisite: None

HS305M3: Data Visualization and Analysis

Analyze results to facilitate decision making.

Quarter Credit Hours: 1 | Prerequisite: None

HS305M4: Data Collection, Mining, and Extraction

Create reports by database querying and data exploration, mining and extraction techniques, and methodologies to facilitate information retrieval.

Quarter Credit Hours: 1 | Prerequisite: None

HS305M5: Data-Driven Decision Making

Formulate organizational action based on knowledge obtained from data exploration and mining.

Quarter Credit Hours: 1 | Prerequisite: None

HS305M6: Data Evaluation

Combine various metrics that produce insight into health trends.

Quarter Credit Hours: 1 | Prerequisite: None

HS311: Epidemiology and Biostatistics I

In this course, you will explore the use of descriptive statistics within the health industry. You will learn to summarize data by the data center (i.e., central tendency) and data spread (i.e., variability). A focus on visual representation of data will be introduced. You will demonstrate your data analytical skills by proposing recommendations to a health industry issue based on summary statistics and/or health care or epidemiological formulae.

Quarter Credit Hours: 6 | Prerequisite: None

HS312: Epidemiology and Biostatistics II

You will collect and analyze data in order to solve health and clinical problems. In this course, you will study inferential statistics and advanced epidemiological constructs. You will study epidemiology and biostatistics as it applies to peer-reviewed, health-based publications. Quarter Credit Hours: 6 | Prerequisite: HS311

HS315: 🌐 Practices in Public Health

This course guides students through the practice of public health. Real-world public health issues are presented and evaluated through the use of case study analysis. Case studies cover fundamental competencies of the public health practitioner, including community health assessment and health policy development. In addition, students will examine problem-solving strategies through problem-based learning. Quarter Credit Hours: 6 | Prerequisite: None

HS315M1: Best Practices for Community Health Assessment

Show how best practices can be used in community health assessment. Quarter Credit Hours: 1 | Prerequisite: None

HS315M2: Using Systems Thinking to Build Stakeholder Relationships

Apply systems thinking to build relationships with public health stakeholders. Quarter Credit Hours: 1 | Prerequisite: None

HS315M3: Health Policy and Law

Analyze how health policy is used to address current public health challenges. Quarter Credit Hours: 1 | Prerequisite: None

HS315M4: Health Promotion

Create strategies to promote health within a community. Quarter Credit Hours: 1 | Prerequisite: None

HS315M5: Environmental Health and Emergency Preparedness and Response

Evaluate a public health response to a disease within a population. Quarter Credit Hours: 1 | Prerequisite: None

HS315M6: Evidence-Based Public Health

Propose solutions for public health problems using evidence-based approaches. Quarter Credit Hours: 1 | Prerequisite: None

HS320: Microbiology

This course introduces students to a diverse world of microorganisms including their role in health and disease. Properties of prokaryotes and eukaryotes are discussed, with emphasis on different characteristics of microorganisms including morphology, metabolism, physiochemical characteristics, and genetics. Students learn how microorganisms contribute to all areas of everyday life including food, water, environment, and industry. Important microbial diseases and the immune system and its role in fighting microbial diseases are also explored. Quarter Credit Hours: 6 | Prerequisite: None

HS410: 🌐 Organization and Management for Health Care

This course centers on the foundations of health care organizations and systems, particularly the outside influences of licensing and accrediting agencies. The clinical classification systems, clinical vocabularies, and nomenclatures are detailed. The nontraditional role of the health information professional in management and administrative roles is also discussed. Quarter Credit Hours: 6 | Prerequisite: None

HS410M1: Language of Health Care

Analyze taxonomies, clinical vocabularies, terminologies, and nomenclature used in health care settings. Quarter Credit Hours: 1 | Prerequisite: None

HS410M2: Applying Management Principles to Resource Utilization

Utilize available resources to achieve objectives within a health care organization or system. Quarter Credit Hours: 1 | Prerequisite: None

HS410M3: Accreditation and Licensure for Health Care Organizations

Compare the roles of governmental and nonprofit agencies in accreditation and licensure of health care organizations and professionals. Quarter Credit Hours: 1 | Prerequisite: None

HS410M4: Standards and Regulations

Evaluate the impact of standards and regulations on the management of health information. Quarter Credit Hours: 1 | Prerequisite: None

HS410M5: Professional Ethics in Health Care

Integrate personal and professional ethics to achieve organizational goals. Quarter Credit Hours: 1 | Prerequisite: None

HS410M6: Principles of Management

Evaluate organization and management principles in health care settings. Quarter Credit Hours: 1 | Prerequisite: None

HS415: Environmental Health

This course addresses environmental health issues and the principles, scope, and practice of environmental health, including environmental epidemiology and toxicology; food safety and water quality; waste management and risk assessment; the sources of air, water, land, soil, radioactive, noise, aesthetic, and light pollution; occupational health and injury prevention; environmental and occupational health organizations and environmental justice; environmental health laws, regulations, policies, and programs; emerging issues in environmental health; and the future challenges faced by environmental health professionals. Quarter Credit Hours: 6 | Prerequisite: None

HS420: Advanced Health Informatics

The health information field is strongly influenced by data and data standards. This course focuses on the structure and use of health information, storage methods, data sets, and e-health delivery. In addition, the development of clinical, financial, and decision support systems are addressed. Quarter Credit Hours: 6 | Prerequisite: None

HS440: 🌐 Finance for Health Care

This course provides you with a description of the current financial environment in which health care organizations operate. It also supplies you, as a future health care decision-maker, with an understanding of key health care finance concepts, basic managerial and accounting principles, the budget process, and tools used for financial analysis. You will be provided focused information on financing, funding, and reimbursement of health services including for-profit, nonprofit, and managed care organizations, as well as governmental programs such as Medicare and Medicaid. Discussions on the application of financial information give students useful information to make financial decisions to better the cost-effectiveness of an organization. Quarter Credit Hours: 6 | Prerequisite: None

HS440M1: The Financial Environment of Health Care

Describe the current financial environment in health care and its influence on decision-making.

Quarter Credit Hours: 1 | Prerequisite: None

HS440M2: Cost Structure, Reimbursement, and Financial Analysis in Health Care

Describe international standard diagnosis classification use in the U.S. health care reimbursement and billing system.

Quarter Credit Hours: 1 | Prerequisite: None

HS440M3: Financial Reporting in Health Care

Analyze major financial reports used in health care organizations.

Quarter Credit Hours: 1 | Prerequisite: None

HS440M4: Financial Operations and Quality Control in Health Care Organizations

Utilize financial analysis to inform management decisions.

Quarter Credit Hours: 1 | Prerequisite: None

HS440M5: Capital Investment and Cost Analysis in Health Care Organizations

Explain the methodologies and processes used in preparing budgets for health care organizations.

Quarter Credit Hours: 1 | Prerequisite: None

HS440M6: Financing Health Care Reform Mandates in Health Care

Explain the financial impact of health care reform on health services organizations.

Quarter Credit Hours: 1 | Prerequisite: None

HS450: Strategic Planning and Organizational Development for Health Care

This course provides a foundation in strategic management for health care organizations built on professional ethics, personal integrity, and respect for all persons. You will explore the theoretical, procedural, and cultural aspects of change management through strategic planning and organizational analysis. Evidence-based management skills are explored using the tools and techniques that monitor quality and performance compliance throughout a health care facility.

Quarter Credit Hours: 6 | Prerequisite: None

HS450M1: Mission, Vision, and Values in Health Care

Assess the impact of leadership, mission, vision, ethics and culture on the foundation for strategic planning.

Quarter Credit Hours: 1 | Prerequisite: None

HS450M2: Team Building and Strategic Planning in Health Care

Demonstrate how effective team building optimizes the implementation of strategic planning.

Quarter Credit Hours: 1 | Prerequisite: None

HS450M3: Leadership and Organizational Strategies in Health Care

Describe the leadership factors that affect organizational strategy among clinical engagement and the health care system.

Quarter Credit Hours: 1 | Prerequisite: None

HS450M4: Management of Quality and Performance in Health Care

Apply tools and techniques in the management of quality and performance in a health care setting.

Quarter Credit Hours: 1 | Prerequisite: None

HS450M5: Impacts of Leadership on Employee Perception and Productivity

Evaluate the impact of leadership on employee motivation, productivity, and job satisfaction.

Quarter Credit Hours: 1 | Prerequisite: None

HS450M6: Training Strategies in Health Care Organizations

Construct organizational training strategies that resolve emerging issues in a health care environment.

Quarter Credit Hours: 1 | Prerequisite: None

HS460: Project Design and Management for Health Care

The departments of quality assessment, utilization management, and risk management work closely with the health information department. This course teaches you the principles of project management, reengineering, and work redesign, which are important to the health information professional when working within these departments.

Quarter Credit Hours: 6 | Prerequisite: None

HS460M1: Quality Management Tools

Design quality assessment and management tools.

Quarter Credit Hours: 1 | Prerequisite: None

HS460M2: Risk Management Programs

Differentiate the components of risk management programs.

Quarter Credit Hours: 1 | Prerequisite: None

HS460M3: Utilization Management

Explain the role of quality assessment in the utilization management process.

Quarter Credit Hours: 1 | Prerequisite: None

HS460M4: Health Information Projects

Evaluate health information projects.

Quarter Credit Hours: 1 | Prerequisite: None

HS460M5: Project Management Techniques

Apply project management techniques to ensure efficient planning of workflow.

Quarter Credit Hours: 1 | Prerequisite: None

HS460M6: Project Management Facilitation

Facilitate project management by executing project tasks and activities.

Quarter Credit Hours: 1 | Prerequisite: None

HS481: Independent Direct Study in Health Sciences

In this course, you will engage in an independent, directed studies project focused on a self-selected research project. There is flexibility built into the course with the intent of giving you options to synthesize and apply current health science concepts into your own unique health profession, community, and professional goals.

Quarter Credit Hours: 1 | Prerequisite: None

HS484: Independent Direct Study in Health Sciences

In this course, you will engage in an independent, directed studies project focused on a self-selected research project. You will define your professional goals and select a topic of inquiry aligned to those goals. There is flexibility built into the course with the intent of giving you options to synthesize and apply current health science concepts into your own unique health profession and community.

Quarter Credit Hours: 4 | Prerequisite: None

HS490: Health Science Internship

The health sciences undergraduate internship course provides you with the opportunity to focus on acquiring additional knowledge, skills, and abilities to enhance professional success. Opportunities to focus on specific career paths and/or topics in health sciences related to your degree will be emphasized.

Quarter Credit Hours: 6 | Prerequisite: Permission from School of Health Sciences Dean and internship directors

HS499: Bachelor's Capstone in Health Science

This capstone course is the culminating experience for the Bachelor of Science in Health Science. This course builds on the concepts of all the courses students have taken within the program of study. The capstone course provides students with the opportunity to integrate and synthesize the knowledge and skills acquired throughout their coursework in an original comprehensive project, and to assess their level of mastery of the stated outcomes of their degree program in health sciences.

Quarter Credit Hours: 6 | Prerequisite: Last term