HEALTH SCIENCE (HS)

**HS100: Introduction to Health Science**
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

**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

**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

**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

**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

**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: MA265 and MA275 or permission from the Dean

**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

**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

**HS250: Cardiac Rhythm Analysis and Telemetry**
This course provides an in-depth overview of telemetry and why it is important to monitor a heart's electrophysiology. The course covers basic cardiac terminology, anatomy related to the heart, electrophysiology, an introduction of monitoring principles, and an analysis of common and potentially lethal dysrhythmias, including sinus, atrial, junctional, and ventricular arrhythmias, heart blocks, pacemakers, and special considerations. Additionally, students will become familiar with regulatory and compliance standards to include patient safety, emergency response, documentation, and patient interaction skills.
This course prepares students to sit for the Certified Rhythm Analysis Technician Examination offered by Cardiovascular Credentialing International.
Quarter Credit Hours: 5 | Prerequisite: None

**HS255: Sterile Processing for Surgical Technologists**
This course covers the regulatory standards and recommended practices for surgical technologists. Emphasis is placed on the principles of aseptic and sterile technique, encompassing decontamination and disinfection, and their pertinence in safe patient care practices. Core concepts such as preparation, packaging, and surgical instrumentation are addressed. Knowledge of anatomy and physiology and medical terminology are reinforced from the perspective of surgical technology.
Quarter Credit Hours: 5 | Prerequisite: None

**HS275: Professionalism in Health Care**
This course introduces students to professionalism in the medical setting. Emphasis is placed upon communication, appearance, diversity, emergency preparedness, and preparation of the professional portfolio. Students prepare a portfolio that contains job search documents.
Quarter Credit Hours: 2 | 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 the student with a mentored learning experience in the content area and site selected by the student 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, MA290, 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

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

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

HS415: Environmental Health
This course addresses environmental issues and the principles, scope, and practice of environmental sciences, including investigative methodologies, natural resource management, pollution prevention, and pollution control. The local, state, and federal environmental agencies and regulations governing environmental health are discussed.
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

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
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

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