

# HEALTH SCIENCE (HS)

## 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 health care setting. Topics covered include principles of pharmacology, 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 increasing awareness of the upstream root causes of health disparities and inequities. It will explore ecological solutions to achieving health equity, by understanding social risk factors and addressing social determinants of health, increasing health literacy, promoting cultural humility, and utilization of diversity, equity, and inclusion (DEI) and community-based participatory research (CBPR) theoretical and action-based frameworks. You will assess lessons-learned, best practices, and emerging evidence on sustainable change strategies to close health status gaps.

Quarter Credit Hours: 5 | Prerequisite: None

## HS165M1: Cultural Humility in Health Care

Illustrate the importance of cultural humility 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, equity, and inclusion on patients, colleagues, and provider interactions.

Quarter Credit Hours: 1 | Prerequisite: None

**HS165M4: Health Equity in the Workplace**

Investigate opportunities to advance health equity in the workplace.

Quarter Credit Hours: 1 | Prerequisite: None

**HS165M5: Improving Health Literacy**

Recommend strategies for improving 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**

In this foundational course you will be introduced to a broad survey of the field of human diseases. You will explore the basics of disease processes, vaccinations, and the economic impact of chronic disease. You will be able to recognize the causes, signs, and symptoms of common diseases and the diagnostic procedures, treatment, and prevention of common diseases.

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 will familiarize you with the scope and practice of health care administration. You will learn about the theoretical basis, development, and resources that make up the U.S. health care delivery system. You will study how health care policy can impact the cost, access, and quality of the system. You will learn about the types of patients and the different environments where health services are delivered. You will study how laws and ethics guide health care delivery. Finally, you will tie everything together by reviewing the roles and responsibilities of administering, managing, and leading health care organizations.

Quarter Credit Hours: 5 | Prerequisite: None

**HS230M1: Leading Health Care Organizations**

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

Quarter Credit Hours: 1 | Prerequisite: None

**HS230M2: Forces That Impact Health Care**

Explain how health care policy can impact cost, access, and quality in the U.S. health care delivery system.

Quarter Credit Hours: 1 | Prerequisite: None

**HS230M3: Health Care Access**

Summarize the types of patients and various environments in which health care services are delivered.

Quarter Credit Hours: 1 | Prerequisite: None

**HS230M4: Legal and Ethical Challenges for Health Care Organizations**

Show how laws and ethics guide health care delivery.

Quarter Credit Hours: 1 | Prerequisite: None

**HS230M5: Resources in Health Care Organizations**

Describe the theoretical basis, development, and resources of the U.S. health care delivery system.

Quarter Credit Hours: 1 | Prerequisite: None

**HS240: Medical Office Accounting**

This course will introduce you to fundamental concepts of accounting applicable to the health care environment. 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

**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

**HS340: Epidemiology**

In this course, you will explore basic methods and procedures of epidemiology, especially as applied to infectious disease, policy, and social determinants of health. You will interpret health measures, identify data sources, and discuss the concepts of association and causality. A focus on visual representation of data will be introduced. In addition, you will demonstrate analytical skills by proposing solutions to a health issue based on epidemiological data.

Quarter Credit Hours: 6 | Prerequisite: None

**HS345: Biostatistics**

This course introduces strategies for analyzing and presenting health science data for the purpose of solving problems and making recommendations. Topics include descriptive and inferential statistics, with a focus on t-tests, analysis of variance and visualization. You will also work with mined data and identifying trends and patterns in datasets.

Quarter Credit Hours: 6 | Prerequisite: None

**HS350: Health Coaching**

This course is designed to provide you with the knowledge, tools, and resources to facilitate behavior changes in a structured, supportive role as a health and wellness coach. In this course, you will learn how to identify risk factors for chronic disease, the use of biometric measures, coaching theories, and current lifestyle recommendations for optimizing health. As a health and wellness coach, it is important in the coaching practice to recognize potential imminent danger and medical red flags and know when and how to refer to another health care professional.

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

**HS420: Health Informatics**

This course provides an overview of health information and health informatics, a field of computing focused on improving health care delivery. The key components of information systems and health informatics are introduced including Electronic Health Records (EHRs), Health Information Exchange (HIE), and Personal Health Records (PHRs). How technology and regulations are applied in the delivery of healthcare are explored.

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**

Analyze the current financial environment in health care and factors affecting it.

Quarter Credit Hours: 1 | Prerequisite: None

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

Summarize the health care facility revenue cycle including the role of diagnosis and procedure coding in reimbursement and pricing strategies.

Quarter Credit Hours: 1 | Prerequisite: None

**HS440M3: Financial Reporting in Health Care**

Analyze major financial reports used in health care organizations to inform decision making.

Quarter Credit Hours: 1 | Prerequisite: None

**HS440M4: Financial Operations and Quality Control in Health Care Organizations**

Evaluate cost accounting and management under rate control and competition.

Quarter Credit Hours: 1 | Prerequisite: None

**HS440M5: Capital Investment and Cost Analysis in Health Care Organizations**

Differentiate between 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 Organizations**

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

Quarter Credit Hours: 1 | Prerequisite: None

**HS450: Strategic Planning and Change Management 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 strategic planning techniques for organizational change associated with mission, vision, ethics, and/or culture of a health care organization.

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 leadership factors and skills that affect organizational strategies needed for strategic change initiatives.

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 change management principles and models for their impacts 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

**HS470: Cultural Health Experience**

In this health-oriented education abroad experience, you will explore the skills needed to build competency in working with a globally diverse population. Topics covered include exploring acculturation experiences, analyzing cultural differences in the delivery and utilization of health-related services, and communicating effectively across cultures. You will utilize these skills as part of either a virtual or in-person international trip as you experience the local culture and health practices. You may be eligible to receive the Global Scholar micro-credential, which recognizes learners who have distinguished themselves as global scholars through advanced intercultural skill development and participation in a virtual or travel Education Abroad experience. NOTE: There is an additional course fee for participation in the field experience. Please contact PG Education Abroad ([educationabroad@purdueglobal.edu](mailto:educationabroad@purdueglobal.edu)) for detailed pricing.

Quarter Credit Hours: 5 | Prerequisite: Enrollment in any undergraduate-level degree program and permission from School of Health Sciences.

**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