

HEALTH SCIENCES (HSCI)

HSCI 1000 - Introduction to Health Sciences

1 Credit

Introduction to health sciences and health information management is designed to familiarize students with the various careers in the allied health and medical professions. Student will learn skills necessary for their healthcare career pathway including: working with others, communication skills, legal and ethical responsibilities, cultural and geriatric considerations in the healthcare industry, problem solving, decision making, accepting personal responsibility and self-management.

Restrictions:

Enrollment is limited to students with a program in Health Sciences.

Attributes: UUC:Self in Community

HSCI 2000 - The US Health Care System

3 Credits

The purpose of this course is to introduce the U.S. Healthcare system and identify the impact historical and current healthcare policies have had or may have on healthcare delivery. Global healthcare systems will also be explored. After 4 weeks of restriction to HIMH, HSCI, MRI, NMT, and RADT.

Restrictions:

Enrollment is limited to students with a program in Health Information Mgmt, Health Sciences, Magnetic Resonance Imaging, Nuclear Medicine Tech or Radiation Therapy.

Attributes: UUC:Global Interdependence, Urban Poverty - Health Care

HSCI 2100 - Health Care Management

3 Credits

This course will discuss management and project management from the standpoint of a healthcare manager who must organize, plan, implement and control tasks. Students will learn to apply management theory and project management tools and techniques to achieve an organization's schedule, budget and performance objectives.

Restrictions:

Enrollment is limited to students with a major in Health Information Mgmt, Health Sciences, Magnetic Resonance Imaging, Nuclear Medicine Tech or Radiation Therapy.

HSCI 2200 - Medical Terminology

3 Credits

This comprehensive online course teaches the basic language related to medical science and allied health professions; word analysis, construction, pronunciation, spelling, definition, and use of terms pertaining to anatomy, pathology, disease, abbreviations, and medical procedures. After 4 weeks of Doisy College restricted registration, it is open to all students in the University. (Offered each semester)

HSCI 2400 - Professional Development Seminar

1 Credit

This one-credit-hour course supports Health Sciences students to reflect and prepare for their educational journey, personal values, and vocational aspirations. Grounded in the Ignatian tradition, the course emphasizes holistic development by inviting students to develop essential professional skills for academic and career success. Through interactive discussions, workshops, and experiential activities, students will consider how their experiences—both inside and outside the classroom—shape their sense of purpose and future pathways. The seminar fosters dialogue on identity, vocation, and advocacy through understanding workplace expectations and leveraging resources to contribute meaningfully to their communities and professions.

Prerequisite(s): CORE 1500*

* Concurrent enrollment allowed.

Restrictions:

Enrollment limited to students in the Clinical Health Sciences department.

Attributes: UUC:Self in Contemplation

HSCI 2500 - Human Development across the Lifespan

3 Credits

This course will explore the developmental process throughout the life span including physical, motor, social and some personality development.

Restrictions:

Enrollment limited to students in the Doisy College Health Sciences college.

HSCI 3200 - Aspects of Health Law

3 Credits

The course will provide the student with the study of the US healthcare system including legislation, regulations, and standards as they apply to the practice of medicine. (Offered in Fall)

Prerequisite(s): (HSCI 2000* with a grade of C or higher or IPE 2100 with a grade of C or higher)

* Concurrent enrollment allowed.

Restrictions:

Enrollment is limited to students with a program in Health Sciences, Magnetic Resonance Imaging, Nuclear Medicine Tech or Radiation Therapy.

Attributes: UUC:Dignity, Ethics & Just Soc

HSCI 3300 - Anatomy & Physiology I

3 Credits

This course provides a comprehensive study of the structure and function of the human body. Topics include anatomical terminology; body organization; homeostasis; cytology; histology; and the integumentary, skeletal, muscular, and nervous systems.

Prerequisite(s): (BIOL 1240 with a grade of C or higher, BIOL 1260 with a grade of C or higher, CHEM 1110 with a grade of C or higher, CHEM 1120 with a grade of C or higher, or CHEM 1080 with a grade of C or higher); (HSCI 2200 with a grade of C or higher or NURS 1400 with a grade of C or higher)

HSCI 3310 - Anatomy & Physiology I Lab

1 Credit

This lab is a supplement to the Anatomy and Physiology I lecture (HSCI 3300) and will cover the same topics. Laboratory work includes interactive study using detailed models, microscopic study, lab activities, multimedia presentations, and group learning. After 4 weeks of Doisy College restricted registration, it is open to all students in the University.

Prerequisite(s): (HSI 2200 with a grade of C or higher or HSCI 2200 with a grade of C or higher); (BIOL 1240 with a grade of C or higher, CHEM 1110 with a grade of C or higher, BIOL 1260 with a grade of C or higher, CHEM 1120 with a grade of C or higher, or CHEM 1080 with a grade of C or higher)

HSCI 3400 - Anatomy and Physiology Lecture II

3 Credits

This course is a continuation of Anatomy and Physiology I (HSCI 3300). Topics include general and special senses; hemocytology; fluid and electrolyte balance; and the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. In the Spring, after 4 weeks of Doisy College restricted registration, it is open to all students in the University.

Prerequisite(s): (HSCI 2200 with a grade of C or higher or NURS 1400 with a grade of C or higher); (BIOL 1240 with a grade of C or higher, BIOL 1260 with a grade of C or higher, CHEM 1110 with a grade of C or higher, CHEM 1120 with a grade of C or higher, or CHEM 1080 with a grade of C or higher)

Restrictions:

Enrollment limited to students in the Doisy College Health Sciences college.

Attributes: Bio-Chemical Biology Elective

HSCI 3410 - Anatomy & Physiology II Lab

1 Credit

This lab is a supplement to the Anatomy and Physiology II lecture (HSCI 3400) and will cover the same topics. Laboratory work includes interactive study using detailed models, microscopic study, lab activities, multimedia presentations, and group learning. After 4 weeks of Doisy College restricted registration, it is open to all students in the University.

Prerequisite(s): (HSI 2200 with a grade of C or higher or HSCI 2200 with a grade of C or higher); (BIOL 1240 with a grade of C or higher, BIOL 1260 with a grade of C or higher, CHEM 1110 with a grade of C or higher, CHEM 1120 with a grade of C or higher, or CHEM 1080 with a grade of C or higher)

Corequisite(s): HSCI 3400

Restrictions:

Enrollment limited to students in the Doisy College Health Sciences college.

Attributes: Bio-Chemical Biology Elective

HSCI 3510 - Physiological Processes in the Human Body

3 Credits

An introductory course in the fundamental mechanisms of human physiology. Emphasis is given to the interrelationships amongst the systems that maintain homeostasis in the human body within normal and abnormal physiological functions.

HSCI 3700 - Research Methods

3 Credits

This course will define research methods and its importance for improving the health care of society. This course will also focus on the research process and the relationship between theory, data and statistical methods. Lab includes sessions in R Studio.

Prerequisite(s): STAT 1300; Minimum Earned Credits of 60; CORE 1000; CORE 1500*; CORE 1900

* Concurrent enrollment allowed.

Restrictions:

Enrollment limited to students in the Health Sciences department.

Attributes: IPE - Research, UUC:Collaborative Inquiry, UUC:Writing Intensive

HSCI 3800 - Global Perspectives in Epidemiology

3 Credits

This course is an overview of epidemiological investigation, including introduction to the tools of descriptive and basic analytical epidemiology, as well as basic socio-demographic concepts. Basic concepts in statistical inference are discussed as they relate to epidemiological applications.

Prerequisite(s): STAT 1300

Attributes: UUC:Global Interdependence

HSCI 3910 - Internship

1-3 Credits (Repeatable for credit)

HSCI 3910 provides an introductory experiential learning opportunity designed to help students connect classroom learning with real-world practice in health sciences and related fields. Approved experiences may include paid or unpaid internships, employment already being performed in a healthcare setting, research activities that benefit the greater community, or structured volunteer or service experiences. Students work with a site supervisor and faculty sponsor to explore health sciences, healthcare delivery, and healthcare operations while developing foundational professional skills.

Prerequisite(s): CORE 1000; CORE 1500*

* Concurrent enrollment allowed.

Attributes: UUC:Reflection-in-Action

HSCI 3930 - Special Topics

1-3 Credits (Repeatable for credit)

HSCI 4000 - Neuroscience in Everyday Life

3 Credits

This course will explore the translation of neuroscience into understanding our behavior and actions in daily life. Broad applications for life decisions such as education, employment, sexuality, health and lifestyle will be explored, in addition to understanding adverse health events such as a stroke, traumatic brain injury, dementia, developmental defects, and mental health disorder in the context of neuroscience as it is applied to life choices. (Offered every Fall)

Prerequisite(s): (HSCI 3300 with a grade of C or higher or ANAT 1000 with a grade of C or higher); (HSCI 3400 with a grade of C or higher or PPY 2540 with a grade of C or higher)

Restrictions:

Enrollment is limited to students with a major in Health Sciences.

HSCI 4100 - Healthcare Technology and Informatics

3 Credits

This course will explore the use and management of technology in healthcare and how it is changing the practice of medicine.

Prerequisite(s): (HSCI 2000 with a grade of C or higher, IPE 2100* with a grade of C or higher, or HMP 1300 with a grade of C or higher)

* Concurrent enrollment allowed.

Attributes: Health Management Major Electi

HSCI 4500 - Hot Topics in Health Care

3 Credits

This course will focus on examining key issues confronting healthcare today. The students will reflect on current issues and trends facing healthcare.

Prerequisite(s): HSCI 3200 with a grade of C or higher

Restrictions:

Enrollment limited to students with a classification of Senior.

Enrollment is limited to students with a major in Health Sciences.

HSCI 4700 - Quality Assurance and Performance Improvement

3 Credits

This course focuses on basic elements to achieve safe, efficient and quality health care in the United States. Quality indicators will be assessed along with opportunities to monitor improvement. Identifying and utilizing analytical and graphic quality and performance tools will assist in the evaluation of improvement. Various standards, initiatives, and mandatory reporting of quality measures, including for the Joint Commission and Centers for Medicare and Medicaid Services, will be discussed.

Prerequisite(s): (HSCI 2000 with a grade of C or higher, IPE 2100 with a grade of C or higher, or HMP 1300 with a grade of C or higher)

Attributes: Health Management Major Electi

HSCI 4910 - Internship

1-3 Credits (Repeatable for credit)

HSCI 4910 offers an advanced experiential learning opportunity that allows students to build upon prior academic and applied experiences in health sciences. Approved experiences may include paid or unpaid internships, employment already being performed in a healthcare setting, research activities that benefit the greater community, or structured volunteer or service experiences. Students work with a site supervisor and faculty sponsor to deepen their understanding of health sciences, healthcare delivery, and healthcare operations while demonstrating increased independence, responsibility, and professional competence.

Prerequisite(s): CORE 1500* ; CORE 1000

* Concurrent enrollment allowed.

Attributes: UUC:Reflection-in-Action

HSCI 5910 - Internship

1-3 Credits

Internship.

HSCI 6080 - Directed Independent Study

1 Credit

The Directed Independent Study is a unique and flexible course offering a high-level of autonomy for each student and their faculty mentor to tailor the student's learning experience to be in alignment with their specific program of study and dissertation research. Students work closely with their faculty mentors who provide guidance, support, and expertise in the student's program of study. The course is structured in a way that provides one-on-one mentorship, allowing for personalized attention and an individualized learning plan.

HSCI 6220 - Foundations of Scholarly Excellence

2 Credits

This course is designed to equip students with fundamental skills and knowledge necessary to excel in the realm of academic scholarship. Topics include, (1) analysis of research to strengthen critical thinking skills, (2) verbal presentation strategies to a variety of audiences, (3) academic integrity, ethical conduct, and responsible research practices, and (4) scholarly reflection.

HSCI 6980 - Graduate Independent Study in Health Sciences

1-3 Credits (Repeatable up to 6 credits)

Independent Study.

HSCI 6990 - Dissertation Research

0-6 Credits (Repeatable for credit)

Dissertation Research.