

# Biomedical and Health Information Sciences (BHIS)

## Courses

### **BHIS 399. Undergraduate Research Experience in Health Informatics. 1-3 hours.**

An introduction of Biomedical and Health Informatics research to undergraduate students under the guidance of a Health Informatics faculty research advisor. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Offered on-campus only (not online). Prerequisite(s): Open only to sophomores, juniors, and seniors; and consent of the instructor. Minimum GPA 3.0.

### **BHIS 405. Medical Sciences and Human Pathophysiology. 3 hours.**

Introduction of fundamental concepts in pathophysiology. Specific disorders of major organ systems including etiology, manifestations, diagnostic tests, treatment modalities, pharmacotherapy and complications. Course Information: Extensive computer use required. Meets eight weeks of the semester. Taught fully online. Students must have an active UIC NetID with valid password and access to a computer and the Internet. Prerequisite(s): Grade of C or better in KN 251 and Grade of C or better in KN 252; or Grade of C or better in KN 253 and Grade of C or better in KN 254; or consent of the instructor.

### **BHIS 406. Medical Terminology for Health Information Management. 2 hours.**

An Introduction to medical terminology and pharmacology, necessary to understanding the use of clinical vocabularies and classification systems in health information systems. Course Information: Extensive computer use required. Meets eight weeks of the semester. Taught fully online. Students must have an active UIC NetID with valid password and access to a computer and the Internet. Restricted to students in the Department of Biomedical and Health Information Sciences or consent of the Instructor.

### **BHIS 410. Health Data Structures and Management. 3 hours.**

Data structures in clinical information systems, including database design and management, networking and security. Emphasis on "intrapreneurial" skills required to solve organizational information management problems. Course Information: Prerequisite(s): BHIS 460 and BHIS 461 and BHIS 480.

### **BHIS 428. Consumer Health: Engaging Patients Through Technology. 3 hours.**

Provides an opportunity to apply patient engagement frameworks through mixed method assessment of health information accessed using health information technology. Course Information: Extensive computer use required. Extensive computer use required. Course is offered over 16 weeks for undergraduate students.

### **BHIS 433. Principles of Evidence-Based Health Care. 2 hours.**

Qualitative and quantitative assessment of human subject clinical research: locating, evaluating, comparing scientific papers as bases for health care education and practice. Course Information: Same as MHPE 433. Prerequisite(s): Graduate or professional standing and approval of the school.

### **BHIS 437. Health Care Data. 3 hours.**

Review of data types in a health care information system. How data is transformed into information and then again transformed into knowledge through integrated computer systems. Course Information: Taught online only. A UIC netid is required. Prerequisite(s): Graduate standing or consent of the instructor.

### **BHIS 460. Introduction to Health Informatics. 1 hour.**

Introduction to information technology and systems in a healthcare setting. Course Information: Extensive computer use required. Meets eight weeks of the semester. Taught online. Students must have an active UIC NetID with valid password and access to a computer and the Internet. Prerequisite(s): Credit or concurrent registration in HIM 410 or equivalent experience. Students should demonstrate basic computing skills including knowledge of an office productivity suite (MS Office or other), electronic mail, and Internet browsers. Recommended background: IDS 200 or the equivalent.

### **BHIS 461. Information Systems for Health Information Management. 2 hours.**

Advanced topics in information technology and systems in a health care setting; collection, analysis and management of health care data; special issues related to the role of health information administrators. Course Information: Extensive computer use required. Prerequisite(s): IDS 200 and credit or concurrent registration in BHIS 460. Class Schedule Information: To be properly registered, students must enroll in one Laboratory and one Lecture-Discussion.

### **BHIS 480. Management and Business Practices. 3 hours.**

Principles of management with emphasis on business functions, procedures, and organizational structure as applied to various health care settings including private and institutional practice. Course Information: Prerequisite(s): Advanced undergraduate or graduate standing in the Department of Biomedical and Health Information Sciences or consent of the instructor. Class Schedule Information: To be properly registered, students must enroll in one Lecture-Discussion and one Lecture.

### **BHIS 499. Information Sources in Biomedical & Health Information Sciences. 1 hour.**

Prepares students to locate, interpret and evaluate pertinent research information sources. Course Information: Meets eight weeks of the semester. Extensive computer use required. Taught fully online. Students must have an active UIC netid with valid password and access to a computer and the internet. Prerequisite(s): Junior standing or above required; or consent of the instructor.