

Core Courses

HIMT 301: Digital Literacy in Healthcare

**3
Credits**

This course provides an overview of medical clinical workflow, with emphasis on inter-professional electronic documentation and functionalities of the electronic health record (EHR). Through hands-on experience, this course advances the students' understanding of the electronic health record, health IT policies, data and database management systems in support of the EHR.

[HIMT 301 course syllabus](#)

HIMT 310: Healthcare Systems and Organizations

**3
Credits**

This course provides an overview of how healthcare and public health are organized and how their services are delivered in the United States. Topics to be covered include public policy (including U.S. health reform initiatives); organization of healthcare systems; components and operation of healthcare organizations, including e-health delivery; professional roles and accreditation; and legal and regulatory issues, including licensure requirements.

[HIMT 310 course syllabus](#)

HIMT 320: Survey of Information Technology in Healthcare

**3
Credits**

This course surveys essential healthcare information technologies that are used for delivering and documenting healthcare services. Popular healthcare information systems include electronic medical record systems that keep record of patients' history; the computerized provider order-entry systems that record the history of the procurement of medications and other services; telemedicine, which allows doctors to deliver patient care from a distance; telehealth e-prescribing, which prescribes medicine electronically; medication administration, which keeps information for medical doctors and other hospital staff members; and nursing and ancillary service systems.

This course requires the purchase of EHRGo, a certified electronic medical records system.

[HIMT 320 course syllabus](#)

HIMT 330: Healthcare I: Terminology and Body Systems

**3
Credits**

This course will examine specific terminology and vocabulary used healthcare providers and support staff. The focus of this course is on medical terminology which covers human anatomy and physiology, body systems, and diagnoses and procedures. The structure of medical terms will be examined—such as prefixes, suffixes, roots, and combined forms. Topics will also include healthcare taxonomies and nomenclatures (ICD-9-CM, ICD-10, etc.).

Prerequisite(s): College biology or equivalent

[HIMT 330 course syllabus](#)

HIMT 340: Ethical Issues, Security Management, and Compliance **3 Credits**

This course introduces three broad subjects: (1) evidence-based medical ethics pertaining to healthcare information management; (2) framework of healthcare information security management, including security principles, policies and procedures, security management models, risk assessment, and protection mechanisms; (3) healthcare regulations and compliance with focuses on the legislative systems, policies, and legal environment of healthcare in the U.S. and the existing health information laws, regulations, and standards. Also addressed are the elements and development of compliance programs.

[HIMT 340 course syllabus](#)

HIMT 350: Statistics for Healthcare **3 Credits**

This is an introductory course in statistical methods for the health sciences. The course will emphasize the principles of statistical reasoning, underlying assumptions, hypothesis testing, and careful interpretation of results. Some topics covered: major study designs, descriptive statistics, graphical displays of data, probability, confidence intervals and tests for means, differences of means, sample size and power, differences of proportions, chi-square tests for categorical variables, regression, multiple regression, and non-parametric statistics.

Prerequisite(s): College algebra or equivalent

[HIMT 350 course syllabus](#)

HIMT 360: Healthcare II: Survey of Disease and Treatments **3 Credits**

This course further investigates the topics covered in HIMT 330 Health Care I: Terminology and Body Systems. On the basis of each body system, the course will further expand into the topics of human disease, human health issues, and classification of disease/health issues, including diagnostics, treatment, and clinical procedures that are currently in practice. In addition, the course will incorporate pharmacotherapeutic concepts (drugs and therapies to treat/prevent/control human disease/health issues), investigating the variety of drugs used for disease treatment for each body system. This will include the current biologicals that are used for treatment. Topics will include how the drugs and biologicals work, their limitations, and the current diversity of available drugs and biologicals.

Prerequisite(s): HIMT 330 Healthcare I: Terminology and Body Systems

[HIMT 360 course syllabus](#)

HIMT 370: Healthcare Systems: Analysis and Design**3
Credits**

This is the first course in a two-course sequence that addresses methods and techniques of healthcare information system analysis and design as performed within the system development life cycle. Included will be techniques for problem definition, requirements gathering, analysis, logical design, and selection and evaluation of alternative healthcare information systems solutions from the point of view of the health provider and user. An emphasis is placed on analysis, selection, and evaluation of information systems as they relate to healthcare. This course requires the purchase of EHRGo, a certified electronic medical records system.

Prerequisite(s): HIMT 301

[HIMT 370 course syllabus](#)

HIMT 380: Healthcare Billing, Coding, and Reimbursement**3
Credits**

This course examines the coding and reimbursement connection; topics include managed care plans, prospective payment systems, Medicare-Medicaid reimbursement, Resource-Based Relative Value Scale, case mix management, and revenue cycle management.

Prerequisite(s): HIMT 330 Healthcare I: Terminology and Body Systems; and HIMT 360 Healthcare II: Survey of Disease and Treatments

[HIMT 380 course syllabus](#)

HIMT 400: Healthcare Information and Technology—Data**3
Credits**

This course explores the sources and data contents of healthcare information as well as the proper presentation of it for different usage levels. Topics addressed include: (1) data structure and use of health information (individual, comparative, and aggregate), (2) type and content of health record, (3) data quality assessment, (4) secondary data sources, (5) healthcare data sets, (6) health information archival systems, and (7) National Healthcare Information Infrastructure (NHII). The course will also cover topics in bioinformatics.

Prerequisite(s): HIMT 360 Healthcare II: Survey of Disease and Treatments

[HIMT 400 course syllabus](#)

HIMT 410: Healthcare Systems: Implementation and Integration**3
Credits**

Covers the back-end stages of healthcare systems development life cycle through the procurement route: development of technical design specifications, procurement procedures (RFP, RFQ, vendor evaluation and selection, and contracting), systems configuration and integration, installation, conversion, operation, and maintenance. Pre-installation testing and post-conversion auditing and monitoring will be emphasized to address the upcoming requirements of federal certification of EHR systems.

Prerequisite(s): HIMT 301 and HIMT 370 Healthcare Systems: Analysis and Design

[HIMT 410 course syllabus](#)

HIMT 420: Healthcare Systems: Project Management**3
Credits**

This course addresses the phenomenal impact information system (IS) projects have had on healthcare delivery. Students learn how healthcare IS projects affect organizations, doctors, patients, and chronic-illness treatments, as well as individuals interested in managing their own healthcare. Concepts and tools for effective healthcare IS project management, process re-engineering, and work redesign are introduced. The purpose of this course is to expose students to IS project management activities in healthcare settings. Topics covered include recent healthcare IS project trends, budgeting, scheduling, resource management, scope, risk analysis, and deployment controls. The genesis of healthcare project management is covered using specific cases and examples.

[HIMT 420 course syllabus](#)

HIMT 430: Quality Assessment and Improvement**3
Credits**

This course examines the quality assessment and quality improvement cycle (plan, do, check, act) and the role of the HIT/HIM professional in the process. Tools used in quality and risk management processes will be examined.

Prerequisite(s): HIMT 350 Statistics for Healthcare

[HIMT 430 course syllabus](#)

HIMT 440: Group Processes, Team Building, and Leadership**3
Credits**

This course introduces students to the necessary group/team processes that are at the root of building, developing, and maintaining medical/healthcare work teams and the effective functioning of such teams. The course also provides an overview of leadership development techniques. Also included is a focus on the uses of various communication technologies in the team-building and functioning processes.

[HIMT 440 course syllabus](#)

HIMT 450: Healthcare Information and Technology—Standards**3
Credits**

This course will be an introduction to healthcare information technology standards, including standards and regulations for documentation, and will cover health information standards. The course will also investigate software applications and enterprise architecture in healthcare and public health organizations.

Prerequisite(s): HIMT 400: Healthcare Information and Technology—Data

[HIMT 450 course syllabus](#)

HIMT 489: Pre-Capstone**1
Credits**

This course is designed to help each student prepare for the capstone course and complete all required paperwork for submission in a timely manner. In addition to being an orientation to the capstone, the pre-capstone course serves as an RHIA/CAHIMS exam prep course. View our map of [capstone sites](#) for a list of participating capstone organizations.

[Capstone Project ideas](#)

Prerequisite(s): At least one semester prior to being eligible to enroll in the capstone

[HIMT 489 course syllabus](#)

HIMT 490: Capstone**3
Credits**

This course is the capstone course for both tracks of the degree program. Students are required to find an internship site that is related to healthcare and set up a semester-long project from which they can gain hands-on experience in the areas of their concentration. Project setup will be jointly done by the student, site sponsor, and the faculty of this course, whereas internship supervision will be performed by the site supervisor and the course instructor.

For inspiration and ideas, explore [past capstone projects](#).

Prerequisite(s): HIMT 420 Healthcare Systems: Project Management

Last semester of study/last course before graduation/can be concurrent; approval from academic adviser and pre-capstone coordinator

[HIMT 490 course syllabus](#)

Health Information Management**HIMT 355: Principles of Management for HIMT Professionals****3
Credits**

This course provides an overview of basic principles involved in management and communication. Topics include basic management principles, communication skills, interpersonal communication competence, negotiation technique, team/consensus building, professional development, and problem solving/decision-making processes.

[HIMT 355 course syllabus](#)

HIMT 365: Healthcare Economics**3
Credits**

Applications of microeconomic theory to analyze the behavior of health and healthcare markets. Topics will include: supply and demand of healthcare services, private health insurance markets, government provision of healthcare services and health insurance, and healthcare policy.

[HIMT 365 course syllabus](#)

HIMT 415: Human Resource Management in Healthcare**3
Credits**

This course examines the role of the HIM professional in managing human resources to facilitate staff recruitment, retention, and supervision.

[HIMT 415 course syllabus](#)

HIMT 445: Application of Leadership and Management in Healthcare Technology**3
Credits**

This course assimilates and integrates concepts and applications of management and leadership in healthcare, advancing on the topics covered in HIMT 355, 365, and 415. Topics will include strategic leadership concepts, exploring key factors that impact management and planning, change management, and critical organizational behaviors for leadership and management, focusing on best practices, organizational accountability, and assessment models.

Prerequisite(s): HIMT 355 Principles of Management for HIMT Professionals; HIMT 365 Healthcare Economics; and HIMT 415 Human Resource Management in Healthcare

[HIMT 445 course syllabus](#)

Health Information Technology

HIMT 345: Programming for HIMT Professionals

**3
Credits**

Fundamental concepts of programming using a contemporary data analysis language. Topics include variables, conditional execution, functions and methods, iteration, strings, files, and data structures. Applications will be taken from the Healthcare Information Systems.

[HIMT 345 course syllabus](#)

HIMT 375: Database Structures and Management Systems

**3
Credits**

Analyze and design databases to support computer-based information systems. Develop and implement relational database management systems using SQL. Topics include: data-modeling techniques such as entity-relationship modeling, extended entity-relationship modeling, database constraints, database normalization techniques, and basic and advanced features of database query language SQL, etc.

Prerequisite(s): HIMT 345 Programming and Software Development

[HIMT 375 course syllabus](#)

HIMT 425: Data Warehousing and Mining

**3
Credits**

Examine the concept of the data warehouse and its effectiveness in supporting strategic decision making. Address the process of creating data warehouse/data-mart solutions from the identification of the enterprise informational and analytical needs to producing business intelligence by extracting information from the data warehouse by using data-mining methods and models.

Prerequisite(s): HIMT 375 Database Structures and Management Systems

[HIMT 425 course syllabus](#)

HIMT 435: Data Communications and Networks in Healthcare

**3
Credits**

This course provides fundamentals of data communications and networking techniques, and examines the linkage of information technology strategies and technological solutions enabling effective communication within and between healthcare organizations. Major topics include fundamental concepts of data communications and applications, network communication devices, basic technologies of the local-area network, wireless local-area network, wide-area network, Internet and the Web, the OSI stack, healthcare information systems standards, and the HIE, RHIN, and NHIN.

Prerequisite(s): HIMT 301

[HIMT 435 course syllabus](#)