Health Informatics (HI)

Courses

HI 3330 Health Informatics: 3 semester hours.
Introduction to and overview of the evolution of Health Informatics and Health Information Systems to support health services in the healthcare industry, its current state and future directions and challenges. Students will learn the regulatory requirements and standards that drive the data content and structure, collection, storage, retrieval, dissemination, and transmission, as well as legal issues related to collection, use, and the security of health information. The course will survey cross-functional factors and ethical concerns in the design and implementation of informatics solutions and information technologies (clinical, administrative, and learning), knowledge management principles, professional practice trends, and explore emerging information technology in healthcare. D

HI 4422 Health Information Governance: 3 semester hours.
The aim of this course is to provide a broad base of understanding of the governance of healthcare data and files within the healthcare industry. Issues relating to privacy/security, information governance and information risk assessment will also be covered. Students will be exposed to healthcare governance, privacy and security aspects of healthcare including the larger regulatory environment in which healthcare organizations operate. This course will investigate various modes of data storage and delivery including digital and cloud-based Electronic Health Records data and third party-developed health applications. Finally, students will be exposed to interventions that can help mitigate data quality, storage, privacy and security risks. PREREQ: HI 3330. D

HI 4424 Healthcare Workflow Process Analysis and Redesign: 3 semester hours.
The aim of this course is to provide a broad-based understanding of workflow processes in the healthcare industry. In particular, the course will develop skills necessary to critically analyze and redesign the processes and utilize health information technology in the administrative and clinical landscape to achieve greater operational efficiency and provide higher quality of care to patients. Quality improvement methods and tools, as well as process change implementation, improvement, and management will be discussed in this course. PREREQ: HI 3330. D

HI 4426 Health Data Analytics: 3 semester hours.
Introduction to and the use of intermediate analytical skills to identify trends, correlations to predict outcomes and provide meaningful recommendations. Variety of data sources and structures are identified and transformed into relevant information in the clinical context to recommend new treatments and technologies, improve effectiveness and efficiency, design and plan policy and programs, improve service delivery and operations, enhance sustainability, mitigate risk, and provide a means for measuring and evaluating critical organizational data that helps the healthcare organization to achieve increased quality of care and patient satisfaction. PREREQ: HI 3330. D