HI 3310. Health Informatics.
This course provides an introduction to health informatics and information management to include hardware components, systems architecture, operating systems, languages, software applications, tools, electronic health record systems, and related concepts.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

HI 3311. Databases in Healthcare.
This course provides an overview and introduction to healthcare databases and data management. Topics in the course will include database theory, information infrastructure, and data analytics. Implementing healthcare information systems and decision making will also be examined.
3 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

HI 3321. Population, Public, and Precision Health Informatics.
This course provides an overview of how informatics principles and practices apply to population, public, and precision health. Students will explore how health informatics and data analytics apply to foundational topics including health disparities, social determinants of health, behavior change strategies, and digital patient engagement.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 3323. Electronic Health Records & Clinical Decision Support.
This course explores clinical decision support (CDS) systems and electronic health records (EHR), focusing on the role of information in healthcare delivery and decision-making by providers and patients. Students will examine key EHR tools and techniques, knowledge base development and maintenance, usability considerations, and evaluation methods for CDS systems. The course also addresses ethical and legal challenges in CDS implementation, patient portals and consumer informatics, as well as best practices for optimizing system effectiveness.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 3324. Change Management & Workflows in HIIM.
This course explores change management related to health information systems that impact clinical workflows. Digital health technologies and use of artificial intelligence in healthcare delivery will be explored. Students will gain foundational knowledge of change management principles, clinical workflow design, cognitive support tools, and decision-making processes in healthcare settings.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 4325. Health Data Standards and Interoperability.
This course explores the principles and applications of interoperability and data standards in healthcare. Students will examine foundational interoperability concepts, standard development organizations, and health information exchange. Topics include claims-based coding systems, laboratory and imaging standards, clinical and pharmacy terminologies, and healthcare messaging protocols.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 4326. Advanced Health Data Analytics.
This course introduces contemporary methods for advanced technology in health informatics and health data analytics. Topics include big data analytics, predictive analytics, mobile health, telemedicine, clinical decision support, cloud computing, machine learning, and artificial intelligence.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 4327. Applied Health Informatics.
This course provides an overview of contemporary applications of health informatics, focusing on the use of information technology to improve healthcare delivery and patient outcomes. Topics include information retrieval methods, the Learning Health System framework, patient portals, mobile health applications, and Master Patient Index systems. Students will explore evolving technologies and practices such as cloud computing, artificial intelligence, medical devices, and patient-generated data, as well as their role in generating real-world evidence.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 4401. Advanced Health Informatics and Security.
This course includes the integrated use of health information technology throughout the healthcare organization. Students will evaluate how technology impacts the overall hospital operations from both clinical and administrative perspectives. Students will also use planning and assessment tools to simulate health information technology system implementation and explore securing those systems.
4 Credit Hours. 3 Lecture Contact Hours. 2 Lab Contact Hours.
Course Attribute(s): Dif Tui- Health Professions
Grade Mode: Standard Letter

HI 5321. Health Systems and Population Health for HIIM.
This course examines the structure and function of health systems and their impact on population health informatics. Students will explore key topics including the business of healthcare, health disparities, social determinants of health, and the roles of public and population health informatics initiatives. Additional focus is placed on applying health data for behavior change strategies, patient engagement, case management, and disease management. The course also covers behavioral health, substance abuse, and the integration of healthcare technology and research in improving health outcomes from a health informatics perspective.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 5326. Advanced Technology in Health Informatics.
This course introduces methods for advanced technology in health informatics and health data analytics. Topics include big data analytics, predictive analytics, mobile health, telemedicine, clinical decision support, cloud computing, machine learning, and artificial intelligence.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 5327. Advanced Applied Health Informatics.
This course explores advanced topics in applied health informatics, focusing on the integration of health information systems and their impact on patient care and healthcare operations. Key topics include healthcare terminology and standards, information governance, human factors, workflow optimization, and cognitive engineering. Students will also examine clinical decision support, interoperability, and master patient index management. The course concludes with an analysis of patient portals and mobile health applications.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 5345. Geospatial Data Analysis for Healthcare.
This course introduces methods for geospatial data analysis for healthcare. The focus is on analyzing healthcare data sets with geospatial programming languages and software tools for monitoring healthcare outcomes. Topics include geospatial data analysis, data visualization, and mapping.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

HI 5393. Program and Project Management for HIIM.
This course explores program and project management principles as applied to health informatics and information management. Students will explore key topics such as communication and planning, organizational structures, staffing and performance appraisal, budgeting, and performance management. Emphasis is placed on leadership skills, managing change of health information systems, stakeholder analysis, and strategic planning. The course also covers project organization, risk management, and the role of committees in successful program execution in healthcare.
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter