

Course Learning Objectives

HI 4426 Health Data Analytics

1. Explain the principles of the data analytic process
2. Differentiate primary and secondary data analysis
3. Demonstrate use of exploratory data analysis techniques
4. Summarize analytical techniques to evaluate healthcare data
5. Develop expertise in using various statistical packages used in data analysis
6. Illustrate use of data mining techniques and packages for mining healthcare data

HI 5500 U.S. Health System

1. Examine the history of the U.S. Health System
2. Explain major Federal regulations that have impacted the U.S. Health System
3. Classify types of health professions, organizations, and care settings present within the U.S. Health System
4. Explain the goals and methods of data and information collection, production, and dissemination occurring throughout the healthcare system
5. Explain medical terminologies, knowledge, and classification systems used in the U.S.
6. Understand general concepts associated with revenue generation in the U.S. Health System including billing, coding, reimbursement, and revenue cycle
7. Evaluate current challenges of healthcare delivery within the U.S.

HI 5520 Health Informatics

1. Review the history, present state, future trends of Health Informatics & Health Information Technology
2. Evaluate concepts, theories, and methods of Health Informatics
3. Describe national and regional initiatives and regulations related to Health Informatics
4. Explain concepts related to information infrastructure, data types, data and information relationship, and uses of healthcare data and information
5. Examine information interoperability and Health Information Exchange (HIE)
- 6.. Apply Database Management Systems (DBMS) concepts to real world situations

7. Discuss ethical and legal issues related to Health Informatics and use of technology in healthcare

HI 5522 Health Information Governance

1. Describe the roles, functions, and practices for successfully managing healthcare data as an enterprise asset
2. Explain the context in which health information exists in the healthcare industry
3. Illustrate ways people, processes, technology, and data content are intermingled, related, and dependent on each other
4. Describe the major functional areas that will transform the way Health Information management is viewed and practiced
5. Apply health information governance concepts, theories, and frameworks to real-world settings using case studies

HI 6635 Health Information Systems & Interoperability

1. Explain the basic principles, definitions, concepts, and scope of Health Information Systems
2. Describe Health Information System strategy, planning, and governance
3. Discuss concepts associated with managing implementation of Health Information Systems
4. Demonstrate an understanding of the concept, purpose, and potential of health data analysis
5. Summarize how emerging technologies affect Health Information System initiatives
6. Explain Electronic Health Record system selection, contract negotiation, and implementation
7. Describe the value and trade-offs of evolving Health Information Systems and technology

HI 6540 Health Informatics Internship

Upon the completion of the internship, the student will be able to:

1. Apply health informatics skills and competencies learned in the academic setting in a real-world setting
2. Understand health informatics tasks and responsibilities performed within healthcare organizations

HI 6660 Health Informatics Project

1. Demonstrate knowledge, skill, and competency in *Health, Information Science and Technology* and *Social & Behavioral Aspects of Healthcare*, the three foundational domains of Health Informatics, at a level commensurate with a Health Informatics graduate

2. Identify a problem/issue related to Health Informatics and formulate a solution to address the problem/issue
3. Present and defend a proposed solution to the Health Informatics problem/issue to Health Informatics faculty and update the project with feedback received
4. Design and carry out a project specific to Health Informatics that will address the problem/issue identified
5. Present and defend the outcome of the project to Health Informatics faculty