

HIM Program Course Descriptions Fall 2024

Course Descriptions:

BDAN 250: INTRODUCTION TO ANALYTICS (3)

Prerequisite: NONE

An introduction to data analytics techniques and their application in business. Students will learn how data analytics can improve decision making. Real-world cases and examples are explored to place analytical methods in context.

BDAN 305: Data Modeling and Analysis (3)

Prerequisite: NONE

The basis of information systems and how data is used in a decision making environment. An introduction to data analysis in relation to managing information systems.

BIOL 131. HUMAN ANATOMY AND PHYSIOLOGY. (4)

A basic anatomy and physiology course designed for students in physical education and health science careers. Emphasis is placed upon the concept of homeostasis and relationship of structure and function. Course Fee | Colonnade E-NS (SL)| NS | SL

HIM 100. HEALTH DATA CONTENT AND STRUCTURE (4)

Emphasis on the health information profession, interdisciplinary relationships, health care data management, documentation standards, and methods of access and retention of image-based information and maintenance of health information in acute and non-acute care facilities. Procedures for maintaining vital statistics and specialized registries will be included. Course Fee

HIM 225. LEGAL ISSUES IN HEALTH INFORMATION MANAGEMENT. (2) Advanced course relating concepts and principles of law, the health record as a legal document, confidential communication, consents and authorization, release of information and current trends in health legislation.

HIM 230. COMPUTER SYSTEMS AND APPLICATIONS IN HEALTH INFORMATION MANAGEMENT (3)

Exploration of health information systems (HIS). Examine health informatics concepts for the management of health information. Topics include electronic health record systems, information governance, privacy and security, data collection, storage, retrieval and analysis. Various software applications will be utilized.

HIM 252. HEALTHCARE PAYMENT SYSTEMS. (3)

Overview of management of health care payment systems including insurances, billing and collection processes, case mix analysis, corporate compliance, HIPAA, and other current reimbursement issues.

HIM 290. MEDICAL TERMINOLOGY. (2)

A course designed to acquaint the student with the specialized language of medicine and to develop communication skills in areas where use of medical terms is necessary and appropriate.

HIM 291. PATHOPHYSIOLOGY AND ADVANCED MEDICAL TERMINOLOGY. (3)

Prerequisite: AH 290 or HIM 290 or consent of instructor.

Terminology of diseases, operations and treatment modalities.

HIM 292. PHARMACOLOGY AND LABORATORY DIAGNOSTICS. (2)

Study of pharmacology, laboratory tests and diagnostics as they relate to the management of health information.

HIM 330. ELECTRONIC HEALTH RECORD SYSTEMS. (3)

Utilization, application, analysis, and evaluation of an electronic health record system for data collection, communication, storage, reporting, and exchange of health information.

HIM 350. HEALTH INFORMATICS RESEARCH. (3)

Prerequisites: PH 383 OR MATH 183 OR SOCL 300

Applies principles and methods of scientific research to selected topics in health informatics and relevant healthcare issues.

HIM 353. MANAGEMENT OF CLINICAL CLASSIFICATION SYSTEMS. (3)

Prerequisite: BIOL 131

Evaluation of EHR and coding systems to manage coding classifications, reimbursement, revenue cycle, clinical documentation improvement, and compliance.

HIM 421. HEALTH INFORMATION LEADERSHIP AND MANAGEMENT. (3)

Application, evaluation, and creation of operational, managerial, and strategic planning for health information including project management, budgeting, human resources, professional development, and other administrative functions.

HIM 422. CLINICAL EVALUATION AND OUTCOMES. (3)

Prerequisite: PH 383 OR MATH 183 OR SOCL 300

Advanced course in applying measurements, evaluations, and reports to processes, structures, and outcomes in improving the efficiency and effectiveness of health information management and clinical services.

HIM 430. HEALTH DATA MANAGEMENT AND ANALYTICS. (3)

Prerequisite: PH 383 OR MATH 183 OR SOCL 300

Acquisition, analysis, display, interpretation, reporting, transformation, and management of healthcare data to respond to needs, trends, and changes in clinical practice, management, health care quality, regulations, legislation, accrediting bodies and marketplace.

HIM 450. APPLICATION & ANALYSIS OF HIM THEORY. (3)

Restricted to 529- Health Information Management Major; junior or senior.

Advanced study in application and analysis of HIM theory in healthcare settings.

HIM 495. CAPSTONE PROFESSIONAL PRACTICE EXPERIENCE. (3-6)

Restricted to 529- Health Information Management Major; senior.

Professional practice experience in a health-related setting. Students are responsible for their own travel. **Lab component required

PH 383. BIostatISTICS IN THE HEALTH SCIENCE. (3)

Prerequisite(s): MATH 109 or MATH 116 or higher.

Introduction to statistical methods, scientific structure of study design, hypothesis formation and verification and study classification. Includes descriptive statistics, data presentation, data sources, questionnaire construction, interviewing techniques and use of computer technology.

OR

MATH 183

OR

SOCL 300

RESTRICTED ELECTIVE (6 CREDIT HOURS)- CHOOSE FROM THE COURSES BELOW.

BDAN 310. BUSINESS DATA ANALYTICS. (3)

Prerequisite: BDAN 250

An introduction to the application of data analytics methods to business issues. Topics include business case studies, data analytics, model building techniques, and communications of results. Course Fee

BDAN 320: WEB ANALYTICS (3)

Prerequisite: BDAN 250

An introduction to measuring, collecting, analyzing and reporting on online digital Web data using digital analytics and business intelligence.

BDAN 330. STRUCTURED DATA ANALYSIS. (3)

Prerequisite: BDAN 250

An introduction to the practical analysis and interpretation of different forms of data, emphasizing how and when to use particular tools, techniques, and metrics to maximize decision-making. Course Fee

BDAN 350: DATA MANAGEMENT (3)

Prerequisite: BDAN 250

An introduction to managing the data used in business data analytics. Topics include data sources, acquisition, conditioning, storage, and security.

BDAN 410. DECISION SUPPORT SYSTEMS ANALYSIS AND DESIGN. (3)

Prerequisite: BDAN 250

An exploration of the analysis and design processes used to develop and deploy decision support systems (DSS) in businesses, which are technology-based tools that support decision-making activities. Course Fee

BDAN 420. PREDICTIVE MODELING. (3)

Prerequisite: BDAN 310

An introduction to predictive modeling and the demonstration of extraction principles from data stored in large heterogeneous volumes and how organizations can analyze data from multiple perspectives.

BDAN 430. DATA VISUALIZATION AND DIGITAL DASHBOARDS. (3)

Prerequisite: BDAN 310

An introduction to the accumulation, analysis, and visualization of complex data sets for businesses, including the analysis of complex data sets and developing digital dashboards and scorecards.

Course Fee

BDAN 440. SPECIAL TOPICS- ANALYTICS & INFORMATION SYSTEMS. (3)

Study of an advanced topic not normally covered in other Business Data Analytics courses. (Some topics may require additional prerequisites).

CIS 320. PERSONAL TECHNOLOGIES with ARTIFICIAL INTELLIGENCE: (3)

Prerequisite: CIS 141

The management and deployment of personal productivity technologies, including management of facilities, workstations and support services. Particular emphasis is placed on using technology tools to increase productivity and quality.

CIS 321. EMERGING TECHNOLOGIES with ARTIFICIAL INTELLIGENCE (3)

Prerequisite: CIS 141

Overview of the most recent tools and techniques in information technology and their utilization in the business environment.

DATA 301. BIG DATA WITH ITS APPLICATIONS (3)

Prerequisite: 2 hours of Foundations and Explorations Courses, or junior status.

The course examines how an individual, company, or organization interacts with a system of big data including i) data collection (policy and mechanisms), ii) data protection, iii) data analytics, iv) inference and decision making. Case studies of big data are drawn from areas such as politics, social network, humanities, and healthcare.