REGIS UNIVERSITY

COLLEGE OF COMPUTER & INFORMATION SCIENCES

Syllabus

Course Number: HIM 415
Course Title: Data Systems and Structures

Course Description:

Introduces the student to health care data sets, data sources and the roles and functions of Health Information Management in all health care delivery systems: acute care, home health, long term care, hospice, ambulatory care and consulting practices. Additional focus is provided on the electronic health record, data standards such as SGML, XML and HL7 and planning for and implementing the EHR.

Prerequisite Courses:

HIM 313: Introduction to Health Information Management

Course Outcomes:

Upon completion of this course, learners should be able to:
(HIM Domains in parenthesis)

- Describe the role of the health information manager in all health care settings.
- Describe, use and report data obtained from data sets such as OASIS, HEDIS, UHDDS.
- Apply knowledge of EHR principles in all health care delivery settings.
- Design and enforce confidentiality and security measures to protect electronic health information (IV.D.1.)
- Implement and manage use of technology, including hardware and software to ensure data collection, storage, analysis and reporting of information.(IV.A.3.)
- Design and generate administrative reports using appropriate software and databases.(IV.C.4.)
- Manage health data (clinical indices, data elements, data sets, databases) and registries.(II.A.1.)
- Analyze & respond to information needs of all customers in a variety of delivery systems.
- Coordinate privacy requirements in various health care delivery systems
- Manage the use of clinical data required in reimbursement systems in all delivery systems.
- Understand and explain data sets such as MDS, OASIS, ORYX and how they are used.
- Understand and explain data standards such as ANSI, ASTM, LOINC, UMLS, Mesh, HL7.
- Develop strategic and operational plans for facility-wide information systems. (V.C.1)

- Demonstrate and apply knowledge of cost-benefit analysis techniques to justify resource needs. (I.B.3.)
- Identify and use the standards in health care delivery systems to achieve system interoperability.
- Apply appropriate electronic or imaging technology for data and record storage. (IV.C.1)
- Compare and contrast the various clinical, administrative and specialty service applications used in healthcare organizations. (IV.E.1.)
- Identify and assist in planning the migration path for the EHR.
- Interpret and apply current laws, accreditation and regulations for health information initiatives for all delivery systems.

Required Texts:

Amatayakul, M. Electronic Health Records. 5th Edition. 2012. AHIMA.

Abdelhak, M. et al. Health Information: Management of a Strategic Resource. **5th Edition**. (Previously used in HIM313)

Technology Tools:

AHIMA Virtual Lab

Pre-Assignment:

Online Format: Sign on to D2L (Home Page) and become familiar with the course navigation of the Web Curriculum.

Pre-Assignment Due Dates:

Online Format: The instructor will specify the due date for this assignment.

Course Assignments and Activities:

	Topics	Readings	Activities Assignments and Associated Points
1	HIM Systems	**Management of a Strategic Resource** Chapter 1: Pages 15-30 Chapter 5 Chapter 13: Pages 484-497 **Electronic Health Records text** Chapter 1 Regis University Hospital Case Study	EHR Quiz 1 (20) Discussion - Introductions Discussion 1 - Barriers to EHR Implementation (10)
2	EHR Planning	**Electronic Health Records text** Chapter 2 Chapter 3 Chapter 4	Virtual Lab Registration Patient Registration Activity (20) Merging Duplicates Activity (20) EHR Case Study 1 (20) Discussion: A HIM Department Without Walls (10)
3	Goal Setting, Impact on Quality of Care and the EHR MIgration Path	**EHR Textbook** Chapter 5 Chapter 6	EHR Scavenger Hunt (20) EHR Case Study 2 (20) Discussion: Goal Setting, Quality & Healthcare Reform (10)
4	Assessments	**Electronic Health Records text** Chapter 7 Chapter 8 Chapter 9 Chapter 10	Data Management Activity (20) EHR Quiz 2 (20) Discussion: Emerging Technology (10)
5	Return on Investment, Selection, & Implementation	**Electronic Health Records text** Chapter 11 Chapter 12 Chapter 13	EHR Case Study 3 (20) Discussion: Return on Investment (10)

6	Acute Care, Ambulatory Care, & Specialty Specific EHRs	**Electronic Health Records text** Chapter 15 Chapter 16 Chapter 17	EHR Quiz 2 (20) Discussion: Safety Risks of Computerized Systems (10) Discussion: TimeSaver (10)
7	Enterprise Content, Personal Health Records & Health Information Exchange	**Electronic Health Records text** Chapter 14 Chapter 18 Chapter 19	Encoder Virtual Lab Activity (20) EHR Case Study 4 (20) Discussion: PHR (10)
8	Review	Final Exam Review	Final Exam (80)
			Maximum Points Possible: 400

Course Policies and Procedures:

Health Information Management Domains:

This course contains the following domains, subdomains, and tasks recommended in the accreditation guidelines of the American Health Information Management Association.

I. Domain: Health Data Management
- A. Subdomain: Health Data Structure, Content and Standards
  - 1. Manage health data (such as data elements, data sets and databases.)
- B. Subdomain: Healthcare Information Requirements and Standards
  - 2. Maintain organizational compliance with regulations and standards
- C. Subdomain: Clinical Classification Systems
- 1. Select electronic applications for clinical classification and coding

II. Domain: Health Statistics, Biomedical Research and Quality Management
- A. Subdomain: Health care statistics and research
  - 1. Manage clinical indices/databases/registries

III. Domain: Health Services Organization and Delivery
- A. Subdomain: Health Care Delivery Systems
  - 1. Monitor the impact of national health information initiatives on the health care delivery systems for application to information system policies and procedures.
  - 3. Analyze and respond to the information needs of internal and external customers throughout the continuum of health care services.
- B. Subdomain: Health Care Privacy, Confidentiality, Legal and Ethical Issues
  - 1. Coordinate the implementation of legal and regulatory requirements related to the health information infrastructure

IV. Domain: Information Technology and systems

A. Subdomain: Information and communication Technologies

1. Implement and manage use of technology including hardware and software to ensure data collection, storage, analysis and reporting of information.

3. Interpret the derivation and use of standards to achieve interoperability of health care information systems.

B. Subdomain: Data Storage and Retrieval

1. Apply appropriate electronic or imaging technology for data/record storage.

E. Subdomain: Health Care Information Systems

1. Compare and contrast the various clinical, administrative and specialty service applications used in health care organizations.

CC&IS Grading Scale

Letter Grade	Percentage	Grade Point
A	93 to 100	4.00
A–	90 to less than 93	3.67
B+	87 to less than 90	3.33
B	83 to less than 87	3.00
B–	80 to less than 83	2.67
C+	77 to less than 80	2.33
C	73 to less than 77	2.00
C–	70 to less than 73	1.67
D+	67 to less than 70	1.33
D	63 to less than 67	1.00
D-	60 to less than 63	.67
F	Less than 60	0

Additional information about grading can be found in the latest edition of the University Catalog, available at http://www.regis.edu/Academics/Course%20Catalog.aspx.

CC&IS Policies and Procedures

Each of the following CC&IS Policies & Procedures is incorporated here by reference. Students are expected to review this information each term, and agree to the policies and procedures as identified here and specified in the latest edition of the University Catalog, available at http://www.regis.edu/Academics/Course%20Catalog.aspx or at the link provided.

- The CC&IS Academic Integrity Policy.
- The Student Honor Code and Student Standards of Conduct.
- Incomplete Grade Policy, Pass / No Pass Grades, Grade Reports.
- The Information Privacy policy and FERPA. For more information regarding FERPA, visit the U.S. Department of Education.

- The HIPPA policies for protected health information. The complete Regis University HIPAA Privacy & Security policy can be found here: http://www.regis.edu/About-Regis-University/University-Offices-and-Services/Auxiliary-Business/HIPAA.aspx.
- The Human Subjects Institutional Review Board (IRB) procedures. More information about the IRB and its processes can be found here: http://regis.edu/Academics/Academic-Grants/Proposals/Regis-Information/IRB.aspx.

The CC&IS Policies & Procedures Syllabus Addendum summarizes additional important policies including, Diversity, Equal Access, Disability Services, and Attendance & Participation that apply to every course offered by the College of Computer & Information Sciences at Regis University. A copy of the CC&IS Policies & Procedures Syllabus Addendum can be found here: https://in2.regis.edu/sites/ccis/policies/Repository/CCIS%20Syllabus%20Addendum.docx.