

# **Undergraduate Course Syllabus**

**HCM 220: Healthcare Data Management** 

Center: Online Credits: 3

#### **Course Prerequisites**

None

#### **Course Description**

This course examines the design and the use of medical databases. Students will learn how to implement business rules and data modeling to develop medical information management systems. The course further explores database applications for decision support including evidence-based practice, alerts, allergy management, and identification of gaps in care. Students will design databases and systems that reflect privacy and security requirements of HIPAA and HITECH Act.

#### **Course Outcomes**

- Understand the fundamental concepts of relational data modeling and database management including (a) the database development processes and (b) normalization for data integrity
- Apply appropriate data processing methods to support operational decisions in healthcare industry
  including structured query language, forms and reporting, interoperability with other platforms, and user
  interfaces
- Describe different healthcare database environments including hospitals, clinics, physician offices, pharmacies, health insurers, care management units, and other related organizations, the utilization of electronic medical records, and the necessity of data exchange among and within healthcare providers
- Describe the fundamentals of how business intelligence systems are used in supporting managerial and medical decision-making; understand use of data warehouses and data mining for evidence-based medicine, alerts, allergy management, and discovery
- Understand data security, audit, privacy, integrity, access control, and data backup and recovery for HIPAA and HITECH Act compliance
- Identify challenges and opportunities in improving healthcare quality through effective and efficient data management

#### **Required Materials**

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, <u>MBS Direct</u>, rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC. ISBN: 9781433805615

Latour, K. M., Maki, S. E., & Oachs, P. A. (2013). *Health information management: Concepts, principles, and practice* (4th ed.). Chicago: AHIMA Press. ISBN-13: 978-1-58426-359-3

## **Instructor Availability and Response Time**

Your class interaction with your instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be active in Blackboard at least five days a week, and you will normally communicate with your instructor in the open Blackboard discussion forum so that your questions and the instructor's answers benefit the entire class. You should send emails directly to your instructor only when you need to discuss something of a personal or sensitive nature, and in those cases your instructor will generally provide a response within 24 hours.

#### **Grade Distribution**

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussion	8	4	32
Case Study	2	4	8
Course Paper	1	20	20
Quiz	8	5	40
		Total Course Points:	100

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

## **University Grading System: Undergraduate**

	7	Total Points.	100	
<u>Grade</u>	Numerical Equivalent	<u>Points</u>	Points Equivalent	
			Lower	Upper
A	93-100	4	93	100
A-	90-92	3.67	90	92
B+	87-89	3.33	87	89
В	83-86	3	83	86
B-	80-82	2.67	80	82
C+	77-79	2.33	77	79
С	73-76	2	73	76
C-	70-72	1.67	70	72
D+	67-69	1.33	67	69
D	60-66	1	60	66
F	0-59	0	0	59
I	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end of term)			
W	Withdrawn			

<sup>\*</sup>Incomplete and Incomplete/Failure: Any student requesting an "I" grade must complete a Student Petition and Contract for a Grade of Incomplete and submit it to the proper offices prior to the final day of the term/semester. The petition will specify a deadline by which the coursework must be completed. The incomplete automatically becomes an "IF" if work has not been completed and a grade has not been submitted by the specific deadline.

# **Grading Guides**

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

#### **Weekly Assignment Schedule**

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. All assignments are due by 11:59 p.m. Eastern Time on the last day of the module week.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Healthcare Informatics in the United States
	Latour et al. (2013) Chapters 1 - 3
	1-1 Discussion: The American Recovery and Reinvestment Act of 2009
	1-2 Module One Quiz
	1-3 Course Paper: Introduction
2	Data in Healthcare: What It Is, Its Development, and Its Standards
	Latour et al. (2013) Chapters 4 - 6
	2-1 Discussion: Governance of Information
	2-2 Discussion: Course Paper: Milestone 1
	2-3 Module Two Quiz
3	Health Records
	Latour et al. (2013) Chapters 7 - 9
	3-1 Discussion: Security
	3-2 Module Three Quiz
	3-3 Course Paper: Milestone 2
	3-4 Case Study: HIM professionals
4	Electronic Health Records
	Latour et al. (2013) Chapters 10 - 12
	4-1 Discussion: Electronic Health Records
	4-2 Module Four Quiz
	4-3 Course Paper
5	Data in Healthcare
	Latour et al. (2013) Chapters 13 - 15
	5-1 Discussion: Revenue Cycle
	5-2 Module Five Quiz
	5-3 Course Paper
	5-4 Case Study: Clinical Operations
6	Health Information Management
	Latour et al. (2013) Chapters 18 and 19
	6-1 Discussion: Hospital Utilization Statistics
	6-2 Module Six Quiz
	6-3 Course Paper
7	Decision Support
	Latour et al. (2013) Chapters 16 and 17
	7-1 Discussion: Descriptive versus Inferential Statistics
	7-2 Module Seven Quiz
	7-3 Course Paper

8 Compliance and Future Trends

Latour et al. (2013) Chapters 28 and 29

8-1 Discussion: Future Trends in Healthcare Informatics

8-2 Module Eight Quiz

# **Attendance Policy**

Online students are required to post to the Blackboard discussion board during the first week of class. If a student does not submit a posting to the discussion board during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the <u>full attendance policy</u>.

#### **Late Assignments Policy**

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the <u>full late assignment policy</u>.

## **SNHU College of Online and Continuing Education Guide to Student Success**

Review the guide to student success.

# **Diversity and Disability Statement**

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as possible. We will work with you and your instructor to address needs and concerns.

We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services. We look forward to hearing from you. Our contact information is below.

Disability Resource Center (DRC) (877) 591-4723 (select option 4) (877) 520-8916 (fax) drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns.

## **Academic Honesty Policy**

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the <u>full academic honesty policy</u>.

# **Copyright Policy**

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the <u>full copyright policy</u>.

# **SNHU College of Online and Continuing Education Withdrawal Policy**

Review the full withdrawal policy.

# **Southern New Hampshire University Policies**

More information about SNHU policies can be found on the policy page.