

# **Undergraduate Course Syllabus**

HIM 425: Healthcare IT Infrastructure and Network Management

Center: Online Credits: 3

## **Course Prerequisites**

None

## **Course Description**

In this course, students learn about the primary infrastructure components of the modern healthcare information systems including hardware, software, and storage systems relevant to maintaining the healthcare network. Students will learn about planning, maintaining and auditing data communications and networks in an organization. Students engage in assignments focused on long and short-term planning, operations, maintenance and forecasting.

### **Course Outcomes**

- Analyze how current privacy and safety standards and regulations are applied to healthcare technology management for ensuring security of protected health information
- Evaluate internal and external secure communication systems and protocols for their ability to ensure seamless health information exchange that complies with current standards and regulations
- Assess the extent to which risk management policies and procedures in healthcare technology ensure integrity of information
- Analyze potential healthcare technology applications that comply with information privacy and security standards and regulations for informing technology decisions that ensure protection of health information

### **Required Materials**

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

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). ISBN: 978-1-4338-3216-1

Murphy, S., & Seymour, D. M. (2015). *Healthcare information security and privacy*. New York, NY: McGraw-Hill. eBook ISBN: 978-1-260-12125-4

A portion of the following textbook is available for free here.

Wager, K.A., Lee, F.W., & Glaser, J.P. (2013) *Health Care Information Systems: A Practical Approach for Health Care Management*, Third Edition. San Francisco, CA: Jossey-Bass.

The excerpt contains the following case studies:

- Case 3: Selection of a Patient Safety Strategy
- Case 7: Implementing a Telemedicine Solution
- Case 9: Conversion to an EHR Messaging System
- Case 12: Implementing a Syndromic Surveillance System
- Case 13: The Admitting System Crashes
- Case 14: Breaching the Security of an Internet Patient Portal

## **Diversity, Equity, and Inclusion**

As indicated in our core values, SNHU is committed to "embrace diversity where we encourage and respect diverse identities, ideas, and perspectives by honoring difference, amplifying belonging, engaging civilly, and breaking down barriers to bring our mission to life."

This may or will be reflected in SNHU's curriculum as we embrace and practice diversity, equity, and inclusion (DEI) to provide the most transformative experience for our students, faculty, and staff. Because topics pertaining to DEI can be sensitive, please remember that embodying and practicing diversity, equity, and inclusion is one of our core values that you will encounter throughout the academic experience. In higher education, we are expected to think and engage critically. Use a growth mindset to embrace the diverse readings, course assignments, and experiences of your peers and faculty.

For more information about DEI at SNHU, please visit our website at the Office of Diversity and Inclusion.

### **Instructor Availability and Response Time**

Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours. Instructors will post grades and feedback (as applicable) within seven days of an assignment's due date, or within seven days of a late submission.

### **Grade Distribution**

Assignment Category	Number of	Point Value per Item	Total Points
	Graded Items		Total Follies
Discussions	4	40	160
Journals	4	40	160
Short Papers	3	60	180
Final Project			
Milestone One	1	75	75
Milestone Two	1	75	75
Final Submission	1	350	350
	1	- 1	Total Course Points: 1,000

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**

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

<sup>\*</sup> Please refer to the <u>policy page</u> for information on the incomplete grade process.

## **Grading Guides**

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignments and Rubrics section of the course.

## **Weekly Assignment Schedule**

All reading and assignment information can be found within each module of the course. Assignments and

discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

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

Module	Topics and Assignments
1	Introduction to Technology in Healthcare
	1-1 Discussion: Technology in Healthcare
	1-2 Journal: Choosing a Case Study
2	Standards and Regulations
	Healthcare Information Security and Privacy, Chapters 1 and 3
	2-1 Short Paper: Terminology and Data Sets Standards
	2-2 Discussion: Government Regulations
3	Risk Management
	Healthcare Information Security and Privacy, Chapters 4 and 5
	3-1 Journal: Managing Risk
	3-2 Milestone One: Problem Statement and Analysis
4	Security and Privacy
	Healthcare Information Security and Privacy, Chapters 6 and 7
	4-1 Short Paper: Responding to a Data Breach
5	Cybersecurity
	Healthcare Information Security and Privacy, Chapter 8
	5-1 Journal: Security and Mobile Devices
	5-2 Milestone Two: Potential Solution
6	Security and Health IT
	Healthcare Information Security and Privacy, Chapter 11
	6-1 Journal: Cybersecurity
	6-2 Short Paper: Cyber Attacks
7	Security Management
	Healthcare Information Security and Privacy, Chapters 9 and 10
	7-1 Discussion: Who Does the Data Belong to?
	7-2 Final Project Submission: Case Study Analysis and Technology Solution Brief
8	The Future of Technology in Healthcare
	8-1 Discussion: Future of Technology
	8-2 Reminder: Archive Your Final Project (Non-graded)

## **Attendance Policy**

Online students are required to submit a graded assignment/discussion during the first week of class. If a student does not submit a graded assignment/discussion during the first week of class, the student is **automatically dropped** 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 full late assignment policy.

#### **SNHU Student Handbook**

Review the student handbook.

## **ADA/504 Compliance Statement**

Southern New Hampshire University (SNHU) is dedicated to providing equal access to individuals with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and with Title III of the Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008.

SNHU prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. The university has adopted this policy to provide for prompt and equitable resolution of complaints regarding any action prohibited by Section 504, the ADA, or the ADAAA.

For questions about **support services**, **documentation guidelines**, **general disability issues**, **or pregnancy accommodations**, please visit the <u>Online Accessibility Center</u> (OAC).

As a student, you must complete an interactive intake process, with supporting documentation, in order to be granted accommodations. Once reasonable accommodations are approved by the OAC, you will receive an accommodations letter. You are then responsible for sharing the letter with your instructor. Accommodations are not retroactive.

If you feel you've been subject to discrimination on the basis of disability, by any party, you may file a complaint or grievance. For more information on the ADA/504 Grievance Policy, go to the <u>Disability and Accessibility Services</u> website.

## **Academic Integrity 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 integrity 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 Withdrawal Policy**

Review the <u>full withdrawal policy</u>.

### **Southern New Hampshire University Policies**

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