



## Undergraduate Course Syllabus

### IT 380: Cybersecurity and Information Assurance

Center: Online

#### Course Prerequisites

UC: IT-201; COCE IT-340

#### Course Description

This course explores the basic concepts in cybersecurity and information assurance. Topics include security policies, models, and mechanisms for secrecy, integrity, and availability of communications and information. The course also covers approaches to prevent, detect and recover from the loss of information, cryptography and its applications, vulnerability scanning, functions of a chief security officer software applications and web services for maintaining information security and security in computer networks and distributed systems.

#### Course Outcomes

- Articulate the value of cybersecurity principles for effectively assessing and mitigating risk within business environments
- Illustrate the core tenets of cybersecurity as they relate to balancing information security needs with functional business requirements
- Select general network defense policies and practices for safeguarding the confidentiality, integrity, and availability of information for users and organizations
- Compare and contrast methods for detecting, controlling, and mitigating specific types of malicious cyberattacks

#### Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through the [SNHU Online Bookstore](#) 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.

*TestOut Security Pro*

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#### 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.

### Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	4	25	100
Case Study Analyses	3	50	150
Test Out Quizzes	6	40	240
Final Project			
Milestones	2	100	200
Final Project Submission	1	310	310
			<b>Total Course Points: 1,000</b>

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W	Withdrawn	

\* Please refer to the [policy page](#) for information on the incomplete grade process.

### Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the

Assignment Guidelines 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	Fundamentals of Cybersecurity 1-1 Discussion: Personal Cyberpolicy 1-2 Activity: Getting Started With TestOut (Non-graded) 1-3 TestOut Quiz: Cybersecurity Fundamentals 1-4 Final Project Review
2	Access Controls and Identity Management 2-1 TestOut Quiz: Access Controls and Identity Management 2-2 Case Study Analysis: Cybersecurity Analysis 2-3 Milestone One: Training Manual Introduction
3	Cryptography and Policies 3-1 TestOut Quiz: Cryptography Modules 3-2 Discussion: Encryption 3-3 Case Study Analysis: Cryptography
4	Host and Application Defenses 4-1 TestOut Quiz: Host and Application Modules 4-2 Discussion: Ransomware in Hospitals 4-3 Final Project Check-in
5	Physical Security and Perimeter Defense 5-1 TestOut Quiz: Physical Security and Perimeter Defense 5-2 Milestone Two: Policy Development
6	Network Defense and Data Defense 6-1 TestOut Quiz: Network Defense and Data Defense 6-2 Case Study Analysis: Preventing Fraud
7	Assessment and Auditing 7-1 Final Project: CyberLeet Training Manual
8	The Future of Cybersecurity 8-1 Discussion: Future Trends 8-2 Reminder: Security Pro Certification

### 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 [full attendance policy](#).

### **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**

In accordance with Section 504 of the Rehabilitation Act of 1973, Title III of the Americans with Disabilities Act (ADA) of 1990, and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008, Southern New Hampshire University does not discriminate on the basis of disability, including intellectual disability, in admission, treatment, or access to its programs or activities, nor does it discriminate in employment in its programs or activities.

The university prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. A disability is a condition or impairment that impacts a “major life activity” or “major bodily function.”

- **Major life activities** include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working.
- **Major bodily functions** include, but are not limited to, functions of the immune system, normal cell growth, and digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions. Disabilities include physical, medical (including pregnancy), mental health, and learning needs.

At the beginning of each term, or as soon as you become aware of a disability or accessibility concern, we encourage you to contact the Online Accessibility Center (OAC) to discuss accommodations for which you may be qualified. Reasonable accommodations are established through an interactive process between the student and the OAC.

Note that accommodations are not retroactive and that disability accommodations are not provided until acceptable documentation of a disability and its impact is received and an accommodation letter has been processed. If you are unsure whether your condition qualifies as a disability or accessibility concern, please contact the OAC for determination.

### **Contact Information:**

Online Accessibility Center

Phone: 866-305-9430

Email: [ovac@snhu.edu](mailto:ovac@snhu.edu)

**For questions concerning support services, documentation guidelines, or general disability issues, please visit the [Online Accessibility Center](#) website.**

If you feel you have been denied appropriate disability-related accommodations, including appropriate auxiliary aids and services, you may file a grievance as described in the ADA/504 Grievance Policy found on the [Disability and Accessibility Services](#) website.

#### **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 [full academic honesty policy](#).

#### **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 [full copyright policy](#).

#### **SNHU Withdrawal Policy**

Review the [full withdrawal policy](#).

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

More information about SNHU policies can be found on the [policy page](#).

#### **Student Work Samples**

For the purpose of continuous improvement of our educational training, Southern New Hampshire University may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you would like to withdraw permission for use of your work, please complete the [Student Work Sample Survey](#).