



## CIS 141 Introduction to Cyber Security

DATE: August 2019

INSTRUCTOR: Heidi Schneider

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OFFICE PHONE: 701-662-1580

OFFICE HOURS: MWF 9am-10am, 2pm-3:15pm; TR 8:15-9:30am, 11am-12pm, 1pm-2:30pm

OFFICE #: Room 121

COMMON COURSE NUMBER: CIS 141

COURSE NAME: Introduction to Cyber Security

ROOM #: 128

CLASS #: 14014

SEMESTER: Fall 2019

CREDIT HOURS: 3

CLASS HOURS: 10:00-10:50 MWF

LAB HOURS: During class time

PREREQUISITES: None

**CATALOG DESCRIPTION:** This course will provide an introduction to concepts related to Cybersecurity. Students will learn safe practices which can be deployed to secure computer systems. Students will gain an understanding of different tools which can be used to defend attacks on computer systems. Special emphasis will be given to systems and applications that non-CS majors will likely to encounter in daily life. In addition to lecture classes, security lab exercises will be conducted to perform hands-on experiments on safe security practices.

**MATERIALS OF INSTRUCTION:** Cisco Netacad curriculum online.

**COURSE OBJECTIVES:** Describe the characteristics of criminals and heroes in the cybersecurity realm. Principles of confidentiality, integrity, and availability as they relate to data states and cybersecurity countermeasures. The tactics, techniques and procedures used by cyber criminals. How technologies, products, and procedures are used to protect confidentiality. How technologies, products, and procedures are used to ensure integrity. How technologies, products, and procedures provide high availability. How cybersecurity professionals use technologies, processes, and procedures to defend all components of the network. Purpose of laws related to cybersecurity.

**GENERAL EDUCATION OBJECTIVES:**

I.3. To apply knowledge gained in the educational process and use that knowledge in everyday living - *apply knowledge to the real world*

II. 3. To use information objectively for solving problems and arriving at alternative solutions – *problem solving skills*.

VI. 3. To apply current technologies to access and utilization of information - *application of technology*

VII. 1. To develop a pattern of intellectual curiosity and inquiry which promotes life-long learning - *value of life-long learning*

MAJOR UNITS:	Module 1:	Cybersecurity – A World of Experts and Criminals
	Module 2:	The Cybersecurity Cube
	Module 3:	Cybersecurity Threats, Vulnerabilities, and Attacks

Module 4:	The Art of Protecting Secrets
Module 5:	The Art of Ensuring Integrity
Module 6:	The Five Nines Concept
Module 7:	Protecting a Cybersecurity Domain
Module 8:	Becoming a Cybersecurity Specialist

GRADING:	A	90-100%
	B	80-89%
	C	70-79%
	D	60-69%
	F	BELOW 60%

**Scholastic Dishonesty:** Academic Integrity is intellectual honesty, responsibility, and ethical behavior in scholastic conduct from use of information to actions in a classroom. It is the guide for the “pursuit of knowledge and understanding within a community of inquiry” (American University). *Refer to Section 800.30 Student Conduct.*

**STUDENT OUTCOMES/COMPETENCIES:** Upon successful completion of the course, students will have gained knowledge that will assist in their preparation to take the A+ Essentials Exam. Students will take this exam later, while taking CIS 129.

**ASSESSMENT TOOLS:** Quizzes, Chapter Questions @ 10-30 pts each  
Labs @ 10-40 pts each  
Chapter Exams @ 40-50 pts each  
Final Exam @ 100 pts

**ATTENDANCE:** Students will be required to attend each class and stay for the duration. Please be courteous and be **ON TIME** for class. If the student is absent from class, that student is responsible for letting the instructor know that they will not be attending class and need to complete the assignments that were assigned while they were gone. **If the student is absent for more than 4 class periods, they will be withdrawn from class (this is not consecutive absences).**

**ASSIGNMENTS:** Assignments are due on the date that is listed on Blackboard, unless changed by the instructor. I will accept assignments up to one week late for ½ points. Any assignments submitted over one week late will not be accepted.

**TESTS:** Quizzes and /or Exams **CANNOT** be made up if they are missed.

**CELL PHONE USAGE:** You may have your cell phone in class, but you **MUST** turn it to vibrate. If you need to answer a call, please leave the room quietly to answer. **ALL** cell phones **MUST** be turned **OFF** during a test.

**LISTENING DEVICES:** **NO** listening devices (iPods, MP3 players, headphones, etc.) will be allowed in my classes while class is in session.

**DIVISION MISSION STATEMENT:**

The Career and Technical Education Division offers various specialized programs. The division frequently assesses industry trends and standards and alters curricula to ensure the quality of its programs. It is the mission of the Trade and Technical Division to provide students with current knowledge and training necessary for immediate entry into various specialties within the job market.