

Course Prefix/Number/Title: CIS 141 Introduction to Cybersecurity

Number of Credits: 3 semester credits

Course 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.

Pre-/Co-requisites: None

Course Objectives:

- To teach the fundamentals of Microsoft Word
- Students will create and edit memos, letters, and reports of varying complexity
- Apply appropriate formatting elements and styles to a range of document types
- Add graphics and other visual elements to enhance written communication
- Plan, write, revise, and publish documents to meet specific information needs
- To develop an exercise-oriented approach that allows learning by doing
- To encourage independent study

Instructor: Trisha Haman

Office: Dakota College Downtown, 120 East Burdick Expressway - Minot

Office Hours: 2:00-4:30 MWF; 11:00-12:00 and 2:00-4:30 T, Th; Virtual appointments availably by appointment

Phone: 701-858-3313

Email: trisha.haman@dakotacollege.edu

Lecture/Lab Schedule: T 3:00-4:15

Textbook(s): Open Educational Resources - No Textbook Required

Course Requirements: Grades will be calculated by dividing total points earned by total points available. You will need access to a desktop or laptop computer to take this class. You cannot use a phone, tablet or Chromebook to take this class.

Tentative Course Outline: Week 1: Introduction and Threat Landscape Week 2: Understanding Current Threats and Securing Digital Information Week 3: Authentication, Passwords, Two-factor Authentication Week 4: Endpoint Security Week 5: Malware, Viruses and Protection Week 6: Networking and Communications Week 7: Privacy and Standards Week 8: Cryptography and Encryption Week 9: Digital Signatures and Certificates Week 10: Network Security, Firewalls, VPN and IDS Week 11: Cloud and Virtualization Security Week 12: When Your Defenses Fail and Incident Response Week 13: Laws and Computers Week 14: Managing security risks Week 15: Cybersecurity Resilience Week 16: Case Project and Final

Grading Scale: • A = 90-100% • B = 80-89% • C = 70-79% • D = 60-69% • F = 0-59%

General Education Competency/Learning Outcome(s) <u>OR</u> CTE Competency/Department Learning Outcome(s): Employ industry-specific skills in preparation for workplace readiness. Combine general education and vocational skills curriculum

Relationship to Campus Focus: The course focuses on knowledge and application of technology.

Classroom Policies:

- Students are required to complete all class activities.
- Attendance is vital to success. Absences and arrangements must be made with the instructor prior to class time.
- The instructor reserves the right to remove anyone causing disruptions or showing disrespect to others. The instructor will interpret and declare what is considered disruptive or disrespectful behavior.
- Students are to silence or turn cell phones off during class.

Student Email Policy:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the

College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.

AI Student Policy:

Unless otherwise indicated in the course syllabus, or in individual instructions for course assignments, or in the absence of the express consent of the course instructor, students are not allowed to utilize generative AI to help produce any of their academic work. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Dakota College Code of Student Life.

| Students | Responsible to follow the syllabus and assignment instructions regarding use of generative AI for all academic work. Obtain permission of the instructor prior to the use of generative AI that is outside of the syllabus or assignment instructions. Provide appropriate rationale for how the use of generative AI will enhance the learning experience for the assignment. In instances where generative AI is permissible, appropriately cite the generative AI program used and indicate where in the assignment it was used, in a brief submission statement. |
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| Faculty | Determine if the use of generative AI could enhance student learning in any assignment of project. Clearly indicate in all course syllabi if generative AI is allowable for any academic work. If allowable, give specific parameters for how and when generative AI may be used. If a violation of generative AI for the individual course/syllabus is suspected, discuss the concern with the student. If violation is still suspected, inform the appropriate semester coordinator/program director. |