ITSY 1342 088: Information Technology Security (Online)

Course Syllabus: Fall 2022 (16 Weeks)

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	9:00 – 9:30	9:00 – 11:00 1:30 – 2:00	9:00 – 9:30	9:00 – 11:00 1:30 – 2:00	None	By Appointment as needed (Microsoft Teams)

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Catalog Course Description: (3 Semester Credit Hours)
Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices.

Prerequisite(s): none

Student Learning Outcomes:
- Students will apply National Institute of Standards and Technology (NIST) guidelines and other best practices.
- Students will develop backup/recovery procedures to provide for data security.
- Students will use network operating system features to implement network security.
- Students will identify computer and network threats and vulnerabilities and methods to prevent their effects.
- Students will use tools to enhance network security.
- Students will use encryption techniques to protect network local and distributed systems data.

Evaluation/Grading Policy:
Chapter Quizzes: 30%
Midterm Exam: 15%
Final Exam: 15%
Lab Assignments: 25%
Review Questions: 15%

Chapter Quizzes
There will be a quiz over each chapter of the book covered in the course. These quizzes will consist of mostly multiple-choice questions with a few short answer questions as well. Students will be allowed to use the textbook for reference. Chapter quizzes can be taken at home.

Midterm Exam
The Midterm Exam will consist of multiple-choice questions taken from multiple chapters of the book. The textbook can be used for reference during the exam. **The Midterm Exam is a proctored exam that must be taken at an approved testing facility**. For most NTCC students, the best location is the college testing center located in the Student Services Building. For students at other college, an approved testing location must be discussed with the course instructor. Makeup exams will not be given unless arrangements have been made prior to the test time.

Final Exam
The Final Exam will consist of multiple-choice questions taken from multiple chapters of the book. The textbook can be used for reference during the exam. **The Final Exam is a proctored exam that must be taken at an approved testing facility**. For most NTCC students, the best location is the college testing center located in the Student Services Building. For students at other college, an approved testing location must be discussed with the course instructor. Makeup exams will not be given unless arrangements have been made prior to the test time.

Lab Assignments
There will be a series of lab assignments designed to provide hands-on experience of various security concepts. These lab assignments are extremely important and will greatly enhance understanding of chapter topics.

Review Questions
Review questions from the end of each chapter will reinforce comprehension of concepts. These review questions are primarily multiple-choice questions. Review questions must be completed using the Blackboard interface in the course shell.

Required Instructional Materials:

Required Textbook
Title: Security+ Guide to Network Security Fundamentals, 7th edition
Author: Mark Ciampa

Publisher: Cengage

ISBN Number:
Inclusive Access eBook (Already included in the course)
ISBN 9780357709597

Printed Copy of Book (If you don't want to use the eBook)
Note: This is the more expensive option
ISBN 9780357424384

Optional Instructional Materials:
Related Security+ YouTube Videos

Minimum Technology Requirements:
You will need to have a dependable personal computer to complete the work for this course. You may be required to install and use some security related software and utilities.

Required Computer Literacy Skills: Basic computer literacy skills and abilities such as typing, copy / paste, file management are required in order to be successful in this course.

Course Structure and Overview:
This course will be delivered through the online format using NTCC's Blackboard Learning Management System. The following general course information provides additional detail regarding expectations for the course.

Several elements are essential for your success in this course. You will need to be aware and understand these fully prior to starting the course.

- Online courses require extensive engagement (with other students, the instructor, and the course materials) as well as timely completion of assignments. Assignments are due by the posted due dates so keeping up with the schedule is essential to your success. Your personal schedule must allow you to keep up with the due dates for the readings, assignments, quizzes, and exams.

- You must have continuous access to a working and dependable computer and Internet provider.

- A USB flash drive for file storage and transport as well as headphones for listening to online lectures and other videos is recommended.

- Be prepared and read the appropriate material in the textbook as well as view the related course videos.

- You are expected to turn in completed assignments through Blackboard. Any assignments marked late by the interface may receive up to a 10% late penalty.

- No assignments will be accepted unreasonably late.

- Unless specifically indicated by the instructor, collaboration on assignments among students is not intended or allowed. Assignments are to be performed individually, and any material handed in by a student should represent that student's own work.

- If two students turn in assignments that are identical or very nearly identical, BOTH students will be given a 0 for that assignment. Don't copy another student's work, and don't let someone else copy yours.

Communications:
The best method for communication with the instructor is through email wmcwhorter@ntcc.edu Every effort will be made to respond within 24 hours to student emails. It might take up to 48 hours on weekends. Students can also communicate in person outside of class by visiting the instructor during official office hours. I am also available through Microsoft Teams for instant messaging or video conference.

Institutional / Course Policies:

Withdrawal
Students who wish to drop the course must do so by the deadline for student-initiated withdrawal. If circumstances cause you to stop attending classes, then you must still officially withdraw or expect to receive and F in the course. In addition, the instructor may withdraw a student from the course if the student fails to attend three consecutive class meetings.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements
In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (http://www.ntcc.edu/) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

NTCC Academic Honesty/Ethics Statement:
NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:
It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in

Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):
The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Tentative Course Timeline (NOTE: instructor reserves the right to make adjustments to this timeline at any point in the term): See attached schedule sheet.

ITSY 1342
Information
Technology Security

Tentative Schedule
Fall 2022

Instructor: McWhorter

Northeast Texas Community College and your instructor reserve the right to make modifications in content, schedule, and requirements as necessary to promote the best education possible within prevailing conditions affecting this course.

Week	Monday	Textbook Readings and Lecture
1	August 22	Chapter 1: Introduction to Security
2	August 29	Chapter 2: Threat Management and Cybersecurity Resources
3	September 5	Chapter 3: Threats and Attacks on Endpoints
4	September 12	Chapter 4: Endpoint and Application Development Security
5	September 19	Chapter 5: Mobile, Embedded, and Specialized Device Security
6	September 26	Chapter 6: Basic Cryptography
7	October 3	Chapter 7: Public Key Infrastructure and Cryptographic Protocols
8	October 10	**Midterm Exam**
9	October 17	Chapter 8: Networking Threats, Assessments, and Defenses Chapter 9: Network Security Appliances and Technologies
10	October 24	Chapter 10: Cloud and Virtualization Security
11	October 31	Chapter 11: Wireless Network Security
12	November 7	Chapter 12: Authentication
13	November 14	Chapter 13: Incident Preparation, Response, and Investigation
14	November 21	Chapter 14: Cybersecurity Resilience
15	November 28	Chapter 15: Risk Management and Data Privacy
16	December 5	**Final Exam**