North Central State College
MASTER SYLLABUS
2019-2020

A. <u>Academic Division</u>: Business, Industry, and Technology

B. <u>Discipline</u>: Information Technology - Networking

C. <u>Course Number and Title</u>: ITEC1690 – Network Security (Security+)

D. <u>Course Coordinator</u>: Mohamed Ghonimy
    <u>Assistant Dean</u>: Toni Johnson, PhD

    <u>Instructor Information</u>:
    - Name: Click here to enter text.
    - Office Location: Click here to enter text.
    - Office Hours: Click here to enter text.
    - Phone Number: Click here to enter text.
    - E-Mail Address Click here to enter text.

E. <u>Credit Hours</u>: 3
    Lecture: 2 hours
    Laboratory: 2 hours

F. <u>Prerequisites</u>: ITEC1420 (minimum grade of C-) or ITEC1610 (minimum grade of C-)

G. <u>Syllabus Effective Date</u>: Fall, 2019

H. <u>Textbook(s) Title</u>:

    CompTIA Security+ SYO-401 Cert Guide
    - Author: Dulaney, Easttom
    - Copyright Year: 2017
    - Edition: 7th
    - ISBN: 9781119416876

    Security Pro
    - Author: Testout
    - ISBN: 9781935080442

I. <u>Workbook(s) and/or Lab Manual</u>:

J. <u>Course Description</u>: This course helps students acquire the knowledge and skills required to identify risk and to employ risk mitigation activities that ensure infrastructure and operational security with respect to network and data confidentiality, integrity, and availability. Students will use a variety of tools to capture, analyze, and generate network traffic. Students will also gain an awareness of applicable security policies, laws, and regulations. This course prepares students for the CompTIA Security+ certification exam.

K.   College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L.   Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Select the appropriate authentication, authorization, or access control for a given set of conditions.	Weeks 1-2 labs, practice questions, midterm weeks 7-8 and final exam weeks 15-16
2. Apply general cryptography concepts or principles for a given set of conditions.	Weeks 3-4 labs, practice questions, midterm weeks 7-8 and final exam weeks 15-16
3. Identify risk concepts with respect to networks, systems, and data.	Weeks 5-6 labs, practice questions, midterm weeks 7-8 and final exam weeks 15-16
4. List security issues inherent to wireless networking.	Weeks 7-8 labs, practice questions, midterm and final exam weeks 15-16
5. Summarize various types of network, systems, and data attacks.	Weeks 9-10 labs, practice questions, and final exam weeks 15-16
6. List security issues inherent to wireless networking.	Weeks 11-12 labs, practice questions, midterm and final exam
7. Describe application security controls and techniques.	Weeks 13-14 labs, practice questions, and final exam weeks 15-16
8. Install and configure account management security controls based on best practices.	Weeks 15-17 labs, practice questions, and final exam
9. Demonstrate the appropriate use of tools and techniques to discover security threats and vulnerabilities for a given set of conditions.	Weeks 15-17 labs, practice questions, and final exam

M.   Topical Timeline (Subject to Change):

Week 1, Section 1: Introduction
Week 2, Section 2: Access Control and Identity Management
Weeks 3 & 4, Section 3: Cryptography
Weeks 5-8, Section 4: Policies, Procedures, and Awareness
Week 9, Section 5: Physical Security
Week 10, Section 6: Perimeter Defenses
Weeks 11 &12, Section 7: Network Defenses
Week 13, Section 8: Host Defenses
Week 14, Section 9: Application Defenses
Week 15, Section 10: Data Defenses
Weeks 15-16, Section 11: Assessments and Audits

N.   Course Assignments:

1.   Labs

2. Practice Questions
3. Exams
4. Midterm Exam
5. Final Exam

O. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70-72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00-59	F	0.00	Failure

P. Grading and Testing Guidelines:

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Q. Examination Policy:

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R. Class Attendance and Homework Make-Up Policy:

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S. Classroom Expectations:

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T. College Procedures/Policies:

Important information regarding College Procedures and Policies can be found on the syllabus supplement located at https://sharept.ncstatecollege.edu/committees/1/curriculum/SiteAssets/SitePages/Home/SYLLABUS %20SUPPLEMENT.pdf

The information can also be found Choose an item.