North Central State College

MASTER SYLLABUS	2026-2027

A. Academic Division: Engineering Technology, Business & Criminal Justice Division

B. Discipline: Information Technology – Cyber Security

C. Course Number and Title: ITEC1430 – Certified Ethical Hacker (CEH)

D. Assistant Dean: Brooke Miller, M.B.A.

E. Credit Hours: 3
Lecture: 2 hours
Laboratory: 3 hours

F. Prerequisites: ITEC1640 (minimum grade of C-), ITEC1650 (minimum grade of C-), ITEC1840 (minimum grade of C-), ITEC2420c (minimum grade of C-)

G. Last Course/Curriculum Revision Date: Fall 2026 Origin date: 02/02/2016

H. Textbook(s) Title:

LabSim for TestOut Ethical Hacker Pro

- Publisher: Test Out
- Copyright Year: 2019
- ISBN: 9781935080695

I. Workbook(s) and/or Lab Manual: None

J. Course Description: This ethical hacking and countermeasures course prepares students for EC-Council's Certified Ethical Hacker (CEH) exam. The course focuses on hacking techniques and technology from an offensive perspective. The student will learn to scan, test, hack and secure systems. Students will learn the five phases of ethical hacking: reconnaissance; gaining access; enumeration; maintaining access; and covering their tracks. Throughout the course, students will be immersed in a hacker's mindset, evaluating not just logical, but physical security exploring every possible point of entry to find the weakest link in an organization.

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. Describe security issues affecting networks and network security	Weeks 1-2 labs, midterm/final exam
2. List the various types of Foot printing and Foot printing tools	Weeks 3-4 labs, midterm/final exam
3. Compare and contrast network scanning and sniffing techniques and associated countermeasures	Weeks 5-6 labs, midterm/final exam
4. Explain social engineering, identity theft, and associated social engineering techniques	Weeks 7-8 labs, midterm/final exam
5. Demonstrate DOS/DDOS, botnets, DDOS attacks and DOS/DDOS countermeasures for a given set of conditions	Weeks 9-10 labs, final exam
6. Demonstrate wireless hacking methodologies using a variety of tools for a given set of conditions	Weeks 11-12 labs, final exam
7. Explain Public Key Infrastructure, cryptography attacks, and cryptanalysis tools	Weeks 13-14 labs, final exam
8. Demonstrate various types of penetration testing for a given set of conditions	Weeks 15-16 labs, final exam

M. 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	Average
67–69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Below Average
00-59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

Important information regarding College Procedures and Policies can be found on the syllabus supplement located at https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/14-081b.pdf

North Central State College

SYLLABUS ADDENDUM

Academic Division:	Engineering Technology, Business & Criminal Justice Division	**Discipline:**	Information Technology – Cyber Security
Course Coordinator:	Dr. Mohamed Ghonimy		
Course Number:	ITEC1430	**Course Title:**	Certified Ethical Hacker (CEH)
Semester / Session:	Fall 2026 / Session B	**Start / End Date:**	10/19/2026 thru 12/11/2026

Instructor Information

Name:	Dr. Mohamed Ghonimy	**Credentials:**	PhD
Phone Number:	4197554528	**E-Mail Address:**	mghonimy@ncstatecollege.edu
Office Location:	ATC-136	**Office Hours:**	M 1-4 pm, W 4:7 PM

I. Topical Timeline / Course Calendar (Subject to Change):

Weeks	Topics	Assignment	Due Date
1	Introduction to Ethical Hacking Introduction to Penetration Testing	Chapter 2 Quizzes	Sunday 10-26- 2026
2	Social Engineering and Physical Security Reconnaissance	Chapter 3 Labs Chapter 3 Quizzes Chapter 4 Labs Chapter 4 Quizzes	Sunday 11-2- 2026
3	Scanning Enumeration	Chapter 5 Labs Chapter 5 Quizzes Chapter 6 Labs Chapter 6 Quizzes	Sunday 11-9- 2026
4	Analyze Vulnerabilities System Hacking	Chapter 7 Labs Chapter 7 Quizzes Chapter 8 Labs Chapter 8 Quizzes	Sunday 11-16- 2026
5	Malware Sniffing, Session hijacking and Denial of Service	Chapter 9 Labs Chapter 9 Quizzes Chapter 10 Labs Chapter 10 Quizzes	Sunday 11-23- 2026
6	IDS, Firewalls, and Honeypots Web Servers, Web applications, and SQL Injections	Chapter 11 Labs Chapter 11 Quizzes Chapter 12 Labs Chapter 12 Quizzes	Sunday 11-30- 2026
7	Wi-Fi, Bluetooth, and Mobile Devices. Cloud Computing and Internet of things. Cryptography.	Chapter 13 Labs Chapter 13 Quizzes Chapter 14 Labs Chapter 14 Quizzes Chapter 15 Labs Chapter 15 Quizzes	Sunday 12-7- 2026
8	Final Exam		Sunday 12-8- 2025

II. Grading and Testing Guidelines:

Final Grade Calculation

Activity	Qty	Points	Percentage
Quizzes	15	100	30
Labs	15	100	20
Project	1	100	30
Final Exam	1	100	20
Total			100

III. Examination Policy:

1. The reasons for which a student will be excused from taking an examination.
   a. Hospitalization (with documented verification)
   b. Death in the immediate family (with documented verification)
   c. Personal illness or illness in immediate family - (doctor's excuse required).
2. A student who misses an examination for any reason is responsible for fulfilling all course requirements during this time
   a. Studying all the material that was covered during this time
   b. Contact the instructor to discuss rescheduling options if the provided documents were accepted.

3. No makeup opportunity will be given for absences of unscheduled quizzes.

IV. Class Attendance and Homework Make-Up Policy:

1. Class attendance is necessary to acquire the knowledge required to be successful in this course.
2. Assignments submitted late without prior communication and approval may receive a **penalty 10% per day**, or may not be accepted for credit. This will be handled on a case-by-case basis

3. Students are responsible for _____
   a. Study the course material every week as instructed in the syllabus.
   b. Submitting homework by the due dates.

V. Classroom Expectations:

1. All homework assignments, quizzes and labs are expected to be submitted by their due dates as indicated in Canvas.
2. communicate proactively with your instructor if you need assistance.
3. If you anticipate or experience an issue that prevents you from submitting an assignment on time, you **must contact me via email** at mghonimy@ncstatecollege.edu **as soon as possible**, preferably before the deadline.