CIS 365: OFFENSIVE SECURITY

Class Tuesday, Thursday 2pm to 3:50pm

Schedule:

Instructor: Chad Johnson

Office: SCI B231

Phone: 715-346-2021

Email: Chad.Johnson@uwsp.edu

Office hours: Mondays and Wednesdays, 11am to 1:50pm

COURSE DESCRIPTION

Present and apply network penetration techniques such as reconnaissance, vulnerability assessment, exploitation, and related aspects of offensive-focused security.

COURSE OBJECTIVES

- Perform basic penetration testing.
- Reverse engineer code to locate vulnerabilities.
- Provide ethical penetration testing services.
- Produce effective reports of offensive security efforts.

TEXTBOOK

- Gray Hat Hacking: The Ethical Hacker's Handbook, 5th ed. ISBN-13: 978-1260108415 from McGraw-Hill Education
- We will be using open-source texts, posted to Canvas.

LECTURES

- Lecture notes will be posted in Canvas. I make every effort to make my notes available, but I may decline to include them at my discretion.
- Students are strongly encouraged to attend each class and actively participate in class discussions.
- In general, I do not believe in taking attendance. However, class attendance may be taken in any class without notification in advance.

Note: Schedule / Syllabus is tentative and subject to change.

GRADING

• 4 Labs: 36% (9% each)

• 4 Practicals: 64% (16% each)

Final grades will be assigned according to the following scale:

A: score >= 90	A-: 87 <= score < 90	
B+: 83 <= score < 87	B: 80 <= score < 83	B-: 77 <= score < 80
C+: 73 <= score < 77	C: 70 <= score < 73	C-: 65 <= score < 70
D: 60 <= score < 65		
F: score < 60		

Scale may be adjusted, depending on the overall performance of the class.

ASSIGNMENTS AND DEADLINES

- This course will involve testing your skills in CTF rooms on HacktheBox.eu. UWSP
 has a team. You will need to create an account here if you don't already have one,
 and request to join the UWSP team. Your work in this course must be done
 through the team to receive any credit for the assignments.
- The simulated pen test assignments are intended to be followed as closely to a real-world pen-test as possible. That means you must follow the rules and conduct yourself as a professional. You should produce a report that would be aimed at non-security IT and executives, being detailed and with solid recommendations.

OFFICE HOURS POLICY

- I prefer that you contact me via email.
- However, you are still welcome to my office to ask me any questions at any other times.
- I fear the phone.
- Virtual office hours will be posted to Canvas or you can just make an appointment with me through Bookings.

REGRADING

Grades will be posted in Canvas. After the scores are announced, you have 7 days to request regrading by contacting the instructor (office hours or email). Your grade will be final after 7 days.

Note: Schedule / Syllabus is tentative and subject to change.

Note: Schedule / Syllabus is tentative and subject to change.

ACADEMIC INTEGRITY

The university cannot and will not tolerate any form of academic dishonesty by its students. This includes, but is not limited to cheating on examinations, plagiarism, or collusion. **Any form of academic dishonesty may lead to F grade for this course.**

STUDENTS WITH DISABILITIES

If you require accommodation based on disability, please let me know. I am willing to provide any reasonable accommodations you require. The sooner you inform me the better.

TENTATIVE SCHEDULE

Week	Lecture Topics	Due
1	Professionalism, Bug Bounties, and Work Products	
2	Cracking Passwords	
3	Passive Discovery and Footprinting	Lab 1
4	Physical Pen Testing	Practical 1
5	Malicious Files	
6	Local Attacks	Lab 2
7	Vulnerability Scanning	
8	Locating Exploits	Practical 2
9	Patch Exploits and Diffing	
10	Enumeration	Lab 3
11	Wireless Attacks	
12	Network Attacks	Practical 3
13	Web App Scanning	
14	Web App Penetration 1	Lab 4
15	Web App Penetration 2	
16	Finals Week	Practical 4

Note: Schedule / Syllabus is tentative and subject to change.