

CSC300 – Topics in Computer Science: Offensive Security

Syllabus

The class syllabus can be found [here](#)

Office Hours

Office hours are posted [here](#)

Textbook

[Penetration Testing](#)

[Nmap 6 Cookbook: The Fat-Free Guide to Network Scanning](#)

Your own bootable Kali LiveUSB stick

Labs

All labs exercises are available [here](#)

Class Schedule – (*tentative*)

Lectures:

MW 11:30 am – 12:45 pm

Week	Monday	Wednesday
1	Lecture: Introduction & Lab Setup Lab 1: Getting Familiar With The Lab Environment	
2	Lecture: Penetration Testing Overview Lab 2: Warming Up	
3	Lecture: Pre-Engagement Interactions Lab 3: Pre-Engagement Activities	

4	Lecture: Intelligence Gathering Lab 4: Intelligence Gathering
5	Lecture: Threat Modeling (<i>Read on your own</i>) Lab 5: First Hacking Challenge
6	Lecture: Vulnerability Analysis Lab 6: Vulnerability Analysis
7	Mid Semester Red Team Challenge Starts
8	Mid Semester Red Team Challenge Reports Due!
9	Spring Break
10	Lecture: Exploitation Lab 7: Exploitation
11	Lecture: Post Exploitation Lab 8: Post Exploitation
12	Lecture: Reporting – Executive Summary
13	Lecture: Reporting – Technical Report
14	Final Red Team Challenge Begins
15	Continue Working on Final Red Team Challenge
16	Final Exam Week – Final Reports Due!

Labs

Students will engage in hands-on lab exercises that will provide them with invaluable red teaming and penetration testing experience. All students will be required to submit individual lab write-ups detailing the work performed in each exercise. Drop boxes will be provided in [Engage](#) with corresponding due dates. Late submissions will not be accepted!

All lab write-ups must consist of the following:

- Cover page
- Abstract
- Introduction

- Processes involved in completing the lab
- Screenshots of major steps to provide proof of lab completion
- Identification of any issues or delays as well as resolutions
- Conclusion
- References

Plagiarism & Cheating

Plagiarism and cheating are not tolerated in any of my courses. If you are caught performing any form of academic misconduct in this class appropriate action will be taken and you will be removed from the course as well as receive an 'F for cheating' grade on your transcript.

Links

- [Utica College Computer Science Department Website](#)
- [Utica College Computer Science Department Virtualized Lab Environment](#)
- [Making Persistent Kali Sticks](#)
- [Accessing Computer Science Department Resources](#)
- [Pentesting Standard](#)
- [Central New York Hackathon](#)
- [W3 Schools – Learn Web Development](#)
- [National Vulnerability Database](#)
- [Common Vulnerabilities and Exposures](#)