Schedule and outline

Texts

Certified Ethical Hacker Version 9 Cert Guide - Denoted CHE for readings below

Week 1

- Topics:
  - Intro s1
  - Ethical Hacking s2
  - Information gathering s3
- Readings: CEH1-3
- Labs: p1

Week 2

- Topics:
  - Vagrant & Virtualbox
  - Authentication s4
  - MFA
  - BIOMETRICS
  - Rainbow tables
  - Passwords
  - Gaining Access
    - Local password attacks
    - Privilege escalation
  - Physical Security
  - Hacking windows or linux without knowing password.
    - Rescue cd
    - Hirens
    - Reset SAM
  - Bios security
- Readings: CEH4
- Labs:
  - p2
  - p3

Week 3

- Topics:
  - OS Security
  - Maintaining Access
    - Rootkit s5
    - Trojan and Backdoor
- Labs:
  - p4

Week 4

- Topics:
More OS Security
Armitage
zero day exploits
security updates and patches
Data Hiding: s6
Review here
Man in the middle project p5

Test 1
Presentation

Week 5

Topics:
  Network attacks with SCAPY
  replay
  DOS
Readings:
  Scapy slides 1
Projects:
  p6
  p7

Week 6

Topics:
  More scapy
  Malware
  Ransomware
Readings:
  CEH Chapter 5
  Ransomware
  Linux ransomware
Projects:
  p6
  p9

Week 7

Topics:
  firewalls/acls
  iptables ppt more
Readings:

Projects:
  p10
  p11

Week 8

Topics:
Readings:
  CEH Chapter 10
Week 9

- Topics:
- Readings:
- Projects:
- Test 2

Week 10 - 13

- Topics:
  - Application Security
  - spoofing (email)?
  - [https://sourceforge.net/projects/mutillidae/](https://sourceforge.net/projects/mutillidae/)
  - XSS, CSRF, injection
  - Phishing
  - Software Security
    - Buffer overflows
  - Database injections
  - Jails, Containers

- Readings:
- Test 3

Week 14 - 15

- Topics:
  - Monitoring and Intrusion Detection
  - Honeynets
  - snort (base, placid)
  - HIDS vs NIDS
  - Cloud security
  - Mobile?
  - Cryptography
  - Policies & Access control
  - Forensics
  - steganography
  - Fun random stuff?
  - [https://www.hackthis.co.uk/levels/main/4](https://www.hackthis.co.uk/levels/main/4)

- Readings:
- Test 4