Schedule and outline

Texts

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

Week 1

- Topics:
  - Intro 1
  - Ethical Hacking 2
  - Authentication
  - MFA
  - BIOMETRICS
  - Rainbow tables
  - Passwords
- Readings: CEH1-2
- Labs:

Week 2

- Topics:
  - Vagrant & Virtualbox
  - Physical Security
  - Hacking windows or linux without knowing password.
    - Rescue cd
    - Hirens
    - Reset SAM
  - Bios security
- Readings:

Week 3

- Topics:
  - OS Security
  - Gaining Access
    - Local password attacks
    - Privilege escalation
  - Maintaining Access
    - Rootkit
    - Trojan and Backdoor
- Readings:

Week 4

- Topics:
  - More OS Security
  - Armitage
  - zero day exploits
  - security updates and patches
- Readings:
- Test 1
Week 5 - 9

- Topics:
  - Network Security
  - mitm
  - replay
  - DOS
  - brute force ssh
  - plain text ftp?
  - scapy
  - hydra
  - reconnaissance techniques
    - net mapping (netdisco)
    - vulnerability assessment
    - vulnerability scanners
    - sniffing
    - defenses
    - firewalls/acls
  - Wireless security?
- Readings:
- Test 2

Week 10 - 13

- Topics:
  - Application Security
  - spoofing (email)?
  - http://www.itsecgames.com/
  - 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
• Readings:
• Test 4