Schedule and outline

Texts

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

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**Week 1**

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

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**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

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**Week 3**

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

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**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:
- Malware conclusion
- Social Engineering Toolkit
Readings:
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