* Schedule and outline

* Texts

  - Certified Ethical Hacker (CEH) Version 10 Cert Guide, 3rd Edition (Available at safarionline) - 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:
  • p8
  • p9

Week 7

Topics:
  • firewalls/acls
  • iptables ppt more
Readings:

Projects:
  • p10
  • p11

Week 8

Topics:
  • Malware conclusion
  • Social Engineering Toolkit
Readings:
• CEH Chapter 10
• final malware slides
• Projects:

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**Week 9**

- Review
- Test 2
- Topics:
  - Application security
- Readings:
  - Read the section “Finding and Exploiting XSS Vulnerabilities” to the “Summary” at the end of XSS.
  - [this book](http://thisbook)
  - Slides
- Projects:
- Presentations?

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**Week 10**

- Topics:
  - Application security
  - [https://sourceforge.net/projects/mutillidae/](https://sourceforge.net/projects/mutillidae/)
- Readings:
  - Not required but good overview of web security [here](https://here)
  - injection slides
- Projects:
  - p12
- Presentations?

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**Week 11**

- Topics:
- Projects:
  - p13
  - ctf
- Topics:
  - Application Security
  - Software Security
    - Buffer overflows
    - demo
  - Database injections
  - Jails, Containers
- Readings:
  - Buffer overflows
  - Overflows slides
- Presentations?

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Sometime in here we will have a 3 hour evening workshop!
Week 12

- Topics:
  - honeypots
  - honeynets
  - wireless and mobile security
- Projects:
  - p14
- Readings:
  - CEH Chapter 8
  - CEH Chapter 9

Week 13

- Topics:
  - Cryptography
  - CTF work
  - Forensics
- Projects:
  - p15
- Readings:
  - [encryption](#)
  - CEH Chapter 12

Week 14

- Topics:
  - CTF presentations

Week 15

- Topics:
  - More CTF
  - Fun random stuff?
  - [https://www.hackthis.co.uk/levels/main/4](https://www.hackthis.co.uk/levels/main/4)
- Test 3