CPSC 457: Operating Systems Principles
Fall 2014: What Are We Doing Here?

Michael E. Locasto

Department of Computer Science
UofC
CPSC 457

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Agenda

About Your Instructor
Course Outline (wiki)
Course Policies (wiki)
→ syllabus / topic list
→ concept map
Course Resources
→ previous HWs
→ Piazza
→ CPSC457 Virtual Machine + USB stick
(a) policies
(b) textbooks
(c) grading scheme
(d) I encourage interaction (both in class and on Piazza)
(e) I encourage bringing computers to class
(f) I encourage *listening* rather than writing notes
Principal research interest is systems security.


My research students work on:

- patching running software without a recompile, restart, or reboot
- modeling trust relationships in software
- active probing for mutual authentication of mobile devices
- sniffing system memory with Wireshark
- disabling CPU instruction decoding
- sprinkling traps throughout a running process
- writing a network security puzzle game with Scapy

Other cool projects available for 502/503 students!
Technical OS Question

\[ Xxxx xxxx xxxxxx xxxxxx xx XXX? \]
Will this class wreck my GPA?
### Previous Outcomes

#### Class: CPSC 457-01
- **LEC 11206**
- **Histogram:**
  - A+: 1
  - A-: 1
  - B+: 9
  - B: 7
  - C+: 2
  - C: 1
  - D+: 1
  - D: 3
  - F: 3
- **Enrolled:** 37
- **GPA:** 3.19

#### Class: CPSC 457-01
- **LEC 10534**
- **Histogram:**
  - A+: 5
  - A-: 7
  - B+: 8
  - B: 4
  - C+: 2
  - C: 1
  - D+: 2
  - D: 1
  - F: 8
- **Enrolled:** 44
- **GPA:** 3.35

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<th>GPA</th>
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Hints for Surviving This Class

(1) read textbook
(2) read wiki and links
(3) slides won’t get you far
(4) connect with classmates on Piazza
(5) start the homework assignments early
(6) recover your knowledge of x86
(7) I expect you be to able to debug.
(8) the homework assignments are puzzles
(9) Scribes (x3) get extra credit

This is an intensive course (we will look over the past ones for a “preview”). You may wish to withdraw if writing C, x86 assembly, and kernel hacking is not your thing.
To the wiki!

Let’s go peek at the wiki and Piazza.
(a) The Hacker Curriculum
(b) Why teach OS? (Isn’t this an obsolete topic?)
(c) What is an Operating System?
(d) ...