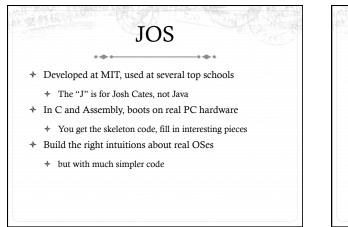


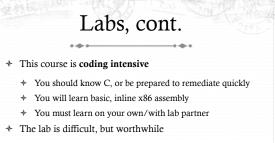
An example progression

- + Undergrad OS:
 - + High-level understanding of paging
 - + Theoretical issues like fragmentation
- + Grad OS (506): Build a pager
- ✤ Solid understanding of how paging SW + HW work
- * Advanced Grad OS (624): Read novel research papers
 - * Do creative things with paging: virtualization, security, etc

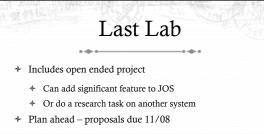
506: Learn by doing

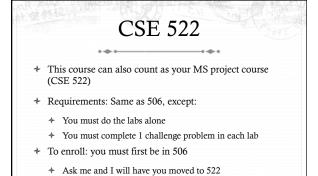
- You will write major chunks of your own OS
 - Memory management, context switching, scheduler, file system, IPC, network driver, shell, etc.
 - + Linux scheduler:
 - * Difficult to understand just by reading source
 - * Small modifications require first understanding the code
 - + Impossible to replace/reimplement
 - No substitute for building it yourself!





+ You will want to commemorate, with a T-shirt, tattoo, etc.





No Textbook

- + You're welcome
- ✤ Several recommended texts
 - * Several free on SBU safari online site
 - Others on reserve at library
 - * Required readings will mainly be papers you can print out

Lectures

- * Compare and contrast JOS with real-world OSes
 - * Mostly Linux, some Windows
- Supplement background on hardware programming
- * Common educational gap between OS and architecture

Precequisites Undergrad OS In some cases, industry experience is ok Worth brushing up if it has been a while In-class quiz, due before you leave I fyou can't answer 50% of these questions, consider ugrad OS C programming

- * Basic Unix command-line proficiency
- * See me if you have already done the JOS lab, or similar

Space in the class

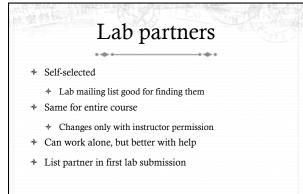
- * Wait list is currently full
- * Grad students often over-enroll
 - * Space likely to open up in first week
- * If you want in, keep showing up for a few lectures
- * Worst case: Prof. Zadok teaching 506 in spring
 - * Likely to be offered every semester going forward

Course email list

- ✤ Sign up at
- http://lists.cs.stonybrook.edu/mailman/listinfo/cse506
- * This is the primary announcement medium
- And for discussions about course work
 - * Do not post code here or other solutions
 - + Goal: Everyone can learn from general questions
- + Material discussed on the mailing list can be an exam question

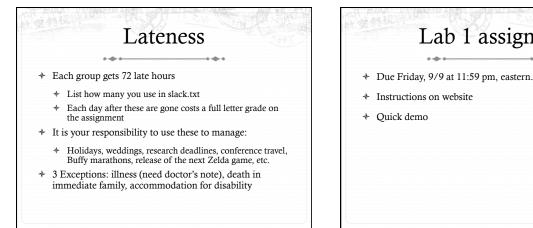
Other administrative notes

- Read syllabus completely
- ✤ Subscribe to the class mailing list
- + 2 exams cover: lectures, labs, mailing list
- * Every student will get a VM for lab work
- * You may use your own computer, staff can't support it
- All staff email goes to <u>cs506ta@cs.stonybrook.edu</u>
- Except private issues for instructor only

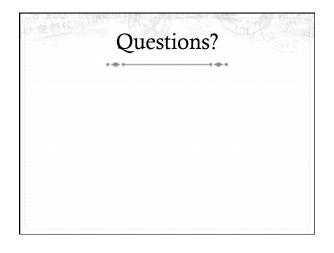


Academic Integrity

- • • • • •
- + I take cheating very seriously. It can end your career.
- ✤ In a gray area, it is your job to stay on right side of line
- Never show your code to anyone except your partner and course staff
- + Never look at anyone else's code (incl. other universities)
- * Do not discuss code; do not debug each other's code
- * Acknowledge students that give you good ideas



Getting help ... ✤ TA's (TBD) will keep office hours + Instructor keeps office hours + Note that "by appointment" means more time available on demand



Lab 1 assigned

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