

Operating Systems

CS 502

Topics

- **→** Background
- **→** Admin Stuff
- **→** Motivation
- **→** Objectives
- ◆ Operating Systems!



Professor Background

- ◆ Dr. Mark Claypool (Professor, "Mark")
- **♦** Systems guy
 - operating systems
 - distributed systems
 - collaborative systems
- (multimedia performance)
- → TRS-DOS, MS-DOS, Windows, Sol
- ◆ WindowsNT and Linux



Student Background

- ◆ Who are you?
 - Name, Major, Class
 - Undergrad degree in ...?
- **→** Experience?
 - Programming (C, C++, Java)
- ◆ Operating Systems?
 - Unix
 - Windows
- **→** Other
 - What do you want out of the course?



Syllabus Stuff

- **→** Online
 - $-\ http://www.cs.wpi.edu/\sim claypool/courses/502-S00/$
- ◆ Office hours by appointment
- **→** Email
- **→** Text Book
 - Operating Systems Concepts. Fifth Edition by Silberschatz and P.B. Galvin.
 - Was: Addison-Wesley, Mass, 1998.



- **→** Prerequisites
 - C programming (must)
 - Machine organization (recommended)
 - Unix (recommended), but other may be ok
- ◆ Grading
 - Exams
 - Projects
 - Homework
 - Attendance (kidding)



Exams

- + 2 exams
- **→** Non-cumulative
- ◆ Closed
 - Closed-note
 - Closed-book
 - Closed-friend
 - Cheat-sheet?
- + 25% of your grade, each



Projects

- → 4 projects
- **→** Can be done in groups of 2
- → Implementation using OS concepts
 - − not of
- ♦ C, Unix
 - C++ Ok
 - Windows Ok
- → 30% of grade
- ◆ Project 1 out today
 - turn in via email



Homework

- ♦ 4 homework assignments
- ◆ Apply theory from class
- ◆ Prepare for exam
- → 20% of grade



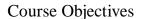
Slides

- **→** On the Web
- ◆ PPT and PDF
- ◆ Typically, after class but may have "Today's Slides" or hard copies
 - Say, Wednesday afternoon
 - Will send email



Why This Class?

- ♦ WPI CS requirements
 - "core course" for M.S. degree
- → Combines CS concepts
 - algorithms, languages, data-structures, hardware
 - system design w/tradeoffs
- ◆ Better use of the computer
- ◆ Programming skills and systems concepts
 - Networks, Advanced Operating Systems
- + Fun!



- ◆ Theory of Operating Systems
 - problem solving homework
- **◆** Implementation of systems issues
 - hands-on projects
- → Latest OS concepts
 - Windows NT and Linux as examples
 - Supplementary research papers

