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, Solaris
- 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/~claypool/courses/502-S00/
- Office hours by appointment
- Email
- Text Book

Course Breakdown
- 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!

Course Objectives

+ 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