Course Introduction

CS239
Advanced Operating Systems
September 30, 1999
Dr. Richard Guy

Things to remember

- rguy@cs.ucla.edu
- http://www.cs.ucla.edu
- 3564 Boelter (adjacent to NW elevator)

Course Context

Three OS-related CS239 courses last year:

- Fall98: Advanced Operating Systems
- Winter99: Agents/Active Networks Seminar
- Spring99: Distributed Operating Systems

Three OS-related CS239 courses this year:

- Fall99: Advanced Operating Systems
- Winter99: Active Networks Seminar
- Spring99: Security

Course Overview

CS111 is prerequisite

Lecture-oriented; advance notes on the web

Text: "**Advanced Concepts in Operating Systems**", by Singhal & Shivaratri, 1994.

Exams: take-home, open book, essays

Grades: 25% midterm, 25% paper, 50% final

Office hours: following the lectures + virtual

Reading Materials

Textbook - **Advanced Concepts in Operating Systems**, by Singhal et al

Supplemental papers assigned weekly

- Most papers will be posted on WWW
- Others on reserve in SEL

Background books - Introductory OS texts by Tanenbaum and Silberschatz & Galvin

Paper/Project

Paper describing important recent research on some operating system topic (12-15 pages)

OR

Project designing/implementing new OS idea

One-paragraph paper/project proposals due at the end of "Week 3" (Oct. 22); e-mail OK.

Course Outline

- OS architecture
- Distributed operating systems
- Advanced file systems
- Fault tolerance and failure recovery
- Performance and measurement issues
- Security
- OS's for multiprocessors
- *Topic schedule is approximate; it will slip!*

Course Schedule

- Thursday, Sep. 30 - First day of class
- Friday, Oct. 22 - Paper/project proposal due
- Thursday, Nov. 4 - Midterm available
- Tuesday, Nov. 9 - Midterm due (@2pm)
- Friday, Dec. 3 (5pm)- Papers due
- Thursday, Dec. 9 - Final exam available
- Tuesday, Dec. 14 (5pm) - Final exam due

Study Tips

- Prepare before class
  - Breadth-first scan
  - Then, breadth-first careful read
  - This applies to both papers and textbook
- Go back and study issues raised in lecture
  - think about them; discuss them
- Anything that excites you is good topic for paper/project/thesis, even after "deadline"