

Operating Systems CSCI-4210

Fall 2005

Course: CSCI-4210
Lectures: Tue, Fri 10:00-11:50AM DCC 324
Home Page: <http://www.cs.rpi.edu/~hollingd/opsys>
Email: opsys@cs.rpi.edu

Instructor: Dave Hollinger
Office: Amos Eaton 110
Phone: 276-6722
Email: hollingd@cs.rpi.edu
Office Hours: Mon 1-3, Thu 2-4 (or by appt.)

TAs: Mohammad Al Hasan alhasan@cs.rpi.edu
Hilmi Yildirim yildih2@cs.rpi.edu

Texts: Modern Operating System, 2nd Ed.
Andrew S. Tanenbaum
ISBN: 0-13-031358-0

Grading: Midterm Tests (3): 45%
Homework/Projects: 55%

Course Home Page: The course home page will include homework assignments, lecture notes, references, handouts and announcements. Hardcopy of any class handouts will be provided only on request.

Homework: All homework must be done individually. Once assignments are made, the course home page will contain information on what is expected for homework submission. Some assignments will be submitted electronically. There will be significant programming projects to be done using C or C++ in a Unix environment.

Homework and Test Grading: Adjustments to homework and test grades will take place only during the week after grades have been returned to students. This means that you must bring any problems to our attention within one week of receiving a grade.

Cheating will not be tolerated. Any duplicate or near duplicate submissions will result in a minimum of a 2 letter grade drop for the final course grade for all students involved and may result in a failure for the entire course. For programming projects, you may *discuss* homework with other students (this includes WebCT discussion boards) but sharing of code in any form is not acceptable. Looking at another student's code or showing your code to another student is **not** permitted. If you need help with a project - send mail to opsys@cs.rpi.edu. Please contact the instructor if there is any part of this policy you do not understand.

Tests: The three tests will be given in class: Oct 4th, Nov 8th and Dec 9th. Each test will cover roughly 1/3rd of the course material (the last test is **not** a comprehensive final exam).

Tentative Lecture Topic and Reading Schedule

Week of	Topics	Readings
August 29	History and Structure of Operating Systems C Programming, libraries, system calls	Chapter 1.1-1.5,1.7
September 5	Systems Programming Concepts Processes Unix and Windows programming	Chapter 1.6 Chapter 2.1 10.1-10.3, 11.1-11.2
12	Threads	Chapter 2.2
19	IPC, Scheduling	Chapter 2
26	Deadlock	Chapter 3.1-3.2
October 3	Deadlock, Test #1 (Oct 4)	Chapter 3
*10	Memory Management	Chapter 4
17	I/O	Chapter 5
24	Filesystems	Chapter 6
31	Filesystems	Chapter 6
November 7	Security, Test #2 (Nov 8)	Chapter 9.1-9.3
14	Security	Chapter 9
*21	Multimedia, Multiple Processors	Chapter 7,8
28	OS Design	Chapter 12
Dec 5	Case Studies: Windows, Linux, FreeBSD Test #3 (Dec 9)	Chapters 10,11

* is short week (one meeting)