

Operating Systems CSCI-4210

Fall 2006

Course: CSCI-4210
Lectures: Tue, Fri 10:00-11:50AM DCC 337
Home Page: <http://www.cs.rpi.edu/~hollingd/opsys>

Instructor: Dave Hollinger
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Office Hours: Mon 6-8pm, Thu 3-5pm (or by appt.)

TAs: Jiao Tao taoj@rpi.edu
Onur Tekdas tekdao@cs.rpi.edu
Office hours will be listed on the course home page.

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

Grading: 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. You may not use or look at code written by Opsys students in previous semesters. 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 Dave or the TAs. 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 6th**, **Nov 3rd** and **Dec 8th**. Each test will cover roughly 1/3rd of the course material (the last test is **not** a comprehensive final exam), there is no 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	Ch. 1.1-1.5,1.7
September 5	Systems Programming Concepts Processes Unix and Windows programming	Ch. 1.6 Ch. 2.1 10.1-10.3, 11.1-11.2
12	Threads	Ch. 2.2
19	IPC, Scheduling	Ch. 2
26	Deadlock	Ch. 3.1-3.2
October 3	Test #1 (Oct 6th)	Ch. 3
*10	Memory Management	Ch. 4
17	Memory Management, I/O	Ch. 4,5
24	Filesystems	Ch. 6
31	Filesystems, Test #2 (Nov 3rd)	Ch. 6
November 7	Security	Ch. 9
14	Multimedia, Multiple Processors	Ch. 7,8
*21	OS Design	Ch. 12
28	Case Studies: Windows, Linux, FreeBSD	Ch.10,11
December 5	Test #3 (Dec 8th)	

* is short week (one meeting)