

CS 470 - Operating Systems

Spring 2008 - Final Exam Review Sheet

The Final Exam is **optional**. Your preliminary final grade for the course, based on all work submitted except the final exam, will be emailed to you by the evening of Wednesday, April 30 (Reading/Study Day). The instructor will send individual email to each student when the preliminary final grades have been computed. If you are happy with your preliminary final grade, you may accept it as your actual final grade and skip the final exam.

If you would like a chance to improve your final grade, you may take the final exam. The final exam score will be substituted for the lower of the two in-class exam scores to compute your final grade. Your actual final grade will be the higher of your preliminary final grade and your final grade after the final exam, thus taking the final exam cannot lower your final grade. You must inform the instructor whether or not you will be taking the final exam by noon on Thursday, May 1.

The optional final exam may be taken at the regularly scheduled time for this class period on Tuesday, May 6, 2:45pm-4:45pm. Alternately, you may take the exam on Friday, May 2, 12:30-2:30pm in KC-267. You may bring one 8.5in by 11in sheet of paper with notes on both sides (or two pages on single sides) to the exam. You may print out the sheet(s), but it must be in a 9-point font or larger. E.g., please do not photoreduce or print 4 pages on a side. If you handwrite your notes, they may be as small as you like. You may handwrite notes in the margins of a printout.

The exam will be cumulative and comprehensive. However, it will consist primarily of short answer questions and only a few "plug and chug" questions (i.e., questions that require the application of an algorithm to produce an analytical result). There will be 5-6 questions on the exam. Previous review sheets should be consulted for previous topics. New topics since Exam 2 include the following. I/O systems will not be on the exam

- File systems - API and implementation
- Disk systems - including disk scheduling algorithms
- Protection and Security - difference between the two, examples of each
- Case studies - general features of each operating system, compare and contrast design decisions among operating systems. Anything stated in the written reports or presentations is fair game, though there will not be any specific questions on hardware or exact configuration. Concentrate on the operating system design. For example, you should be able to identify which OS's are single-user or single-task systems, or which ones have preemptive multi-tasking process scheduling.