Operating Systems, Spring 2006
Study Guide for Exam 1
February 22, 2006

Coverage: Pages 1 through 170 and selected other pages, such as 799 (Win XP architecture), and 752 (less detailed than p. 78). Lecture notes are included, even material not mentioned in the textbook.

What not to know: • I didn't receive your Linux lab. It's not on this test. • You will not have to write any Java code. • You may omit all references in your reading to operating systems other than NT/2000/XP/Vista and Unix/Linux. E.g., Solaris, Mach. • You need not memorize long lists, like page 69. • You won't have to argue about the properties of cooperating processes on this exam. There will be a homework assignment on that later, where you can think more carefully. • Specific names like David Cutler for NT, Edsgar Dijkstra for solving many problems about parallelism, or Ken Thompson and Dennis Ritchie about Unix.

What you do need to know: • Definitions, • Alternative ways of doing things like LPC versus RPC. • And that reminds me, acronyms. • Big-picture ideas like virtual machines, parallelism, and answering questions at the level of abstraction appropriate for the question. • Reading Java syntax about threads and RMI correctly, including understanding which concepts of Java interrelate with operating systems concepts. • Process scheduling (p. 105) and thread scheduling (my modification of p. 162).

Promises: Occasionally I promise that there would be an exam question on something. I kept such a promise. No, I won't repeat it. Promises are a reward for the awake.

Format: There are 17 short answers (sentence completion, comparison or contrast, true/false, and so on). There is one essay.