CMSI 387

OPERATING SYSTEMS

Spring 2007

Midterm Review Sheet

The midterm will take place as scheduled, on February 15. It will be open everything: book, notes, and handouts; open computer depends on whether or not everyone has access to a computer during class (which means that either we can have the test in the Keck lab, or everyone has a laptop that they can use). This guide should help you to prepare for the midterm properly.

Covered Material

The midterm covers the following areas, including all handouts and sample code that have been distributed in support of this content:

- SGG Chapters 1–5
- Working knowledge of how to configure and build a Linux kernel
- Working knowledge of C and the POSIX APIs (you *did* type and compile actual code for Assignment 0208, right?)

Sample Tasks and Questions

The following represent the types of questions or tasks that you may be asked to accomplish:

- Perform some analysis, critique, or evaluation of an operating system concept (design choices, operating system roles [process management, memory management, file systems, I/O], algorithms such as context switches and CPU scheduling)
- Describe a real-world computer issue or activity in more precise, operating system-specific terms (e.g., computer won't boot, computer is slow, "blue screen of death," device doesn't work with a computer, laptop power management, dual-boot computers, etc.)
- "Read" a given snapshot of processes and threads (e.g., what is a process's "lineage," how many threads is a process running, which process was the first one created upon boot-up, etc.)
- Given some code, provide the result
- Provide a Gantt chart and other relevant metrics for process execution based on some set of processes and one or more scheduling policies