

Date: Thursday, Mar 29
9:30am to 10:45am
Location: MCB 307 (usual classroom)

Format:

The midterm exam will consist of 3-5 questions.

It will be **closed book, closed notes, closed computer/without wireless access**. However, you are **allowed to bring one letter-sized sheet of paper with prepared notes** (you may use front and back of that sheet.)

You are responsible for the content of lectures 1 through 16 (up to including the Mar 15 lecture.) This includes, among others:

- Introduction to OS: general goals & principles of operating systems.
- Multiprogramming basics: protection, dual-mode operation, system calls and exceptions. Linking and loading.
- Threads & processes: context switching, mode switching, procedure switching, context management, threading & process APIs.
- Concurrency & Synchronization: critical section problem, race conditions, approaches for guaranteeing mutual exclusion, including locks, semaphores, monitors, spinlocks & disabling interrupts.
- Deadlock: conditions, detection & recovery.
- Scheduling: general goals & constraints, priority scheduling, FCFS, RR, SPN, MLFQS, Lottery Scheduling.

Our textbook covers this material in Chapters 1, 2, 3.1-3.5, 5, 6.1-6.8, and 7.

The midterm may also contain questions related to projects 0, 1, and 2.

There are sample midterms posted on the class website you may find useful.