Exam 1  
(CSE 422S)

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**Administrative**

- Closed Book
- You are allowed ONE 8.5” x 11” study guide
- Exams for some past semesters have been posted
  - But some problems are not on our exam
  - Some problems have been given as homework
- What is NOT covered
  - Sections 2.2 (threads), 2.5 (scheduling) and 2.6
  - Deadlock (Chapter 3)
  - Writing a complete C/C++ program or shell script
    - Concepts from programming assignments are fair game
    - Small code fragments are also fair game but not emphasized

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**Topics**

- Computer Architecture
  - CPU speed
  - Effective memory access time and caching
- Basic Unix concepts, commands and system calls
- Classic Processes
  - forking, execing, ...
- Concept of multiple threads of control and shared variables
- Synchronization
  - Software-only
  - Hardware (e.g., TestAndSet)
  - Semaphores