**TOPICS TO STUDY FOR THEORY QUIZ #9**

**Text Book - Process Synchronization and Chapter Deadlocks**

6.1 Background

6.2 Critical Section Problem

6.4. Hardware Support for Synchronization

6.4.2 Hardware Instructions

6.4.3 Atomic Variables

6.5 Mutex Locks

6.6 Semaphores

6.6.1 Semaphore Usage

6.6.2 Semaphore Implementation

6.8.1 Deadlock

7.2.1 Synchronization in Windows

7.2.2 Synchronization in Linux

7.3 POSIX Synchronization

7.3.2 POSIX Semaphores

8.1 System Model

8.2 Deadlock in Multithreaded Applications

8.3 Deadlock Characterization (Necessary Conditions)

8.4 Methods for Handling Deadlocks

8.5 Deadlock Prevention