

## **CISC 3320 Operating System Concept**

### **Review Sheet for Mid-Term II.**

#### **Process Synchronization (Chapter 6)**

- Requirements for a solution to the critical section problem;
- Peterson solution;
- Semaphores;
- Implementation of semaphores,
- Classic Problems of Synchronization.

#### **Deadlocks (Chapter 7)**

- System modeling
- Deadlock characterization
- Resource-allocation Graph
- Deadlock prevention
- Deadlock Avoidance
- Deadlock Detection

#### **Main Memory (Chapter 8)**

- Basic hardware
- Swapping.
- Logical v.s Physical Address space.
- Dynamic loading, dynamic linking and sharing
- Contiguous Memory Allocation
- Memory Allocation (first fit, best fit, worst fit)
- Fragmentation
- Paging (basing method and hardware support TLB)
- Segmentation