Outline for October 23, 2008

1. Memory Management
   a. How programs interact with memory
   b. Compilers, assemblers, linkers, loaders
   c. Absolute addressing and the execution cycle

2. Hardware
   a. Bare machine
   b. Resident monitors and fence addresses
   c. Implementing fence addresses

3. Relocation
   a. When to bind program addresses to absolute addresses
   b. Loading process into memory
   c. Dynamic relocation
   d. Swapping
   e. Various optimizations

4. Simple memory management schemes
   a. Multiple partitions
   b. Multiple fixed regions
      i. Job scheduling
      ii. Memory allocation
   c. Multiple variable regions
      i. Job scheduling
      ii. Memory allocation schemes
      iii. Compaction
      iv. Memory fragmentation

5. Paging
   a. Pages, frames, page numbers and offsets
   b. Job scheduling
   c. Implementing paging: page table
   d. Caching