Outline for October 28, 2008

1. Paging
   a. Pages, frames, page numbers and offsets
   b. Job scheduling
   c. Implementing paging: page table
   d. Caching
   e. Sharing pages
   f. Protection bits
   g. Trapping illegal addresses
2. Views of memory
3. Segmentation
   a. Segments, segment numbers and offsets
   b. Implementing segmentation: segment table
   c. Protection, protection bits
   d. Sharing segments
   e. Fragmentation
4. Segmented paging
5. Paged segmentation
6. Virtual memory
7. Overlays and dynamic loading
8. Implementing virtual memory
   a. Demand paging, pure demand paging
   b. Implementing segmentation: segment table
   c. Servicing page fault traps
9. Page replacement algorithms
   a. FIFO, OPT, LRU, others
   b. Stack algorithms
   c. Optimizations
10. Page allocation algorithms
    a. How many frames to allocate
    b. Global vs. local allocation
11. Thrashing
12. Applying locality
    a. Principle of locality
    b. Working set model
    c. Approximations to working set algorithm
13. Other considerations
    a. Prepaging
    b. I/O interlock
    c. Page size
    d. Program structure