

- Chapter 8 - Main Memory (315)
 - Swapping (8.2 p 322)
 - Backing Store (p 322)
 - Contiguous Memory allocation (8.3 324)
 - _ Table of Memory/ List of holes
 - _ Dynamic Storage allocation Problem
 - first fit (p326)
 - best fit (p327)
 - worst fit (p327)
 - _ External Fragmentation (p327)
 - _ Internal Fragmentation (p327)
 - _ 50-percent rule (p327)
 - _ Compaction (p327)
 - Paging (8.4 328)
 - _ vocab: pages, frames, logical memory, physical memory
 - _ understand issues involving:
 - size
 - shared pages (p 336)
 - OS view vs user view
 - hardware support *p332)

- Chapter 9 - Virtual Memory (315)
 - Demand Paging (9.2 322)
 - _ pure demand paging (p364)
 - _ locality of reference (p364)
 - _ “fast” fork - copy-on-write (9.3 p367)
 - Page Replacement (9.4 p369)
 - _ over-allocated memory (better CPU utilization and throughput)
 - I/O memory requirements (compete or fixed in OS?) (395 – 9.7.3 memory mapped I/O)
 - Options on page-fault (with no free frames)
 - _ terminate process - but ?
 - _ swap out process and frames
 - _ replace single page
 - page-fault service (without dirty bit) (363)
 - _ Find page on disk
 - _ Find free frame
 - use it if found
 - if not select a victim
 - write victim to disk (update tables)
 - _ read page into free frame (update tables)
 - _ restart (wake-up) user process
 - Use dirty bits to avoid some writes (p371)
 - small gains in demand paging give great gains
 - Page replacement algorithms (369)
 - _ FIFO (p373), optimal (p374), LRU (p376), LFU/MFU (p380)

- _ Belady's anomaly (p374)
- Thrashing (9.6 p 386)