UNIVERSITY OF CALIFORNIA AT BERKELEY
College of Engineering
Department of Electrical Engineering and Computer Sciences
Computer Science Division

CS 162
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Topic 20: Course Review

- Major class topics:
  - Processes: state, creation, dispatching.
  - Synchronization: races, inconsistency, semaphores, semaphore implementation, monitors, messages, test-and-set.
  - Networks: various levels of protocol.
  - Scheduling
  - Deadlock
  - Linking, static relocation.
  - Memory management: base and bounds, paging, segmentation, combined, TBs, demand paging, working sets.
  - File systems: seek problem, descriptor organization, disk scheduling, directories, protection, encryption.

- Major concepts:
  - Locality.
  - Scheduling: best algorithms know future, but we use past instead.
  - Layering: synchronization, network protocols, file systems, etc.
  - Caching: translation buffers, file system, etc.

- Sermons:

- Simplicity.
- Performance important, but only tune where necessary.
- Information as property.
- Programming is a craft.
- Stay broad.