34 Course Review

Major class topics:

- Processes: state, creation, dispatching.
- Synchronization: races, inconsistency, semaphores, semaphore implementation, monitors, messages, test-and-set.
- Scheduling
- Deadlock
- Linking, static relocation.
- Memory management: base and bounds, paging, segmentation, combined, TLBs, demand paging, working sets.
- File systems: seek problem, descriptor organization, disk scheduling, naming, concurrency, reliability, transactions.
- Protection, security, encryption.
- Networks: various levels of protocol.

Major concepts:

- Locality.
- Caching: translation buffers, file system, etc.
- Virtualization.
- Scheduling: best algorithms know future, but we use past instead.
- Layering: synchronization, network protocols, file systems, etc.
- Replication: building reliable services from unreliable components.

Sermons:

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