

15-410

“...Arguably less wrong...”

Synchronization #3
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Road Map

Two Fundamental operations

✓ Atomic instruction sequence

⇒ Voluntary de-scheduling

Outline

Synch 1

- Two building blocks
- Three requirements for mutual exclusion
- Algorithms people *don't* use for mutual exclusion

Synch 2

- How mutual exclusion is really implemented

Synch 2

- Condition variables
 - Under the hood
 - The atomic-sleep problem
- Semaphores, monitors – overview