Outline for April 8, 2022

**Reading:** text, §25, 27

**Assignments:** Homework and Extra Credit 1, due Apr 11
Lab Exercise and Extra Credit 1, due Apr 18

1. Announcements
2. Interprocess Communication: what is the problem?
3. Precedence, process flow graphs
4. Bernstein conditions
5. Basic parallel programming constructs
   (a) *fork/join/quit*
   (b) *parbegin, parend*
   (c) Comparison
6. Producer-consumer problem
   (a) Race condition: *counter* can be 4, 5, or 6
7. Critical section problem
   (a) Solutions meet 3 criteria
      i. Mutual exclusion
      ii. Progress
      iii. Bounded wait
   (b) Analyze proposed software solutions