Outline for May 22, 2006

Reading: *text*, §17.3.3—17.3.2.1

1. Greetings and felicitations!
   a. Office hours today from 2:00PM to 3:00PM
2. Information flow analysis
   a. Exceptions and synchronization/IPC operations
   b. Identifying flows in the kernel
   c. Finding relevant variables
   d. Analysis
   e. Example: Secure Xenix
3. Covert flow trees
   a. What it is
   b. Node types
   c. Example for construction
   d. Construction
      i. Determine what attributes primitive operations reference, modify, return
      ii. Locate covert storage channel that uses some attribute
      iii. Construct lists: sequences of operations that modify, recognize modifications
   e. Analysis
4. Analysis
5. Capacity and noninterference
   a. When is bandwidth of covert channel 0?
   b. Noninterference sufficient
   c. Noninterference not necessary
   d. Analysis