March 8, 2021 Outline

Reading: *text*, §18.2–18.3 **Assignments:** Homework #5, due March 12 Completed Project, due March 12

Module 50

- 1. Isolation: program modification
 - (a) Compiling
 - (b) Loading

Module 51

- 2. Covert channels
 - (a) Storage vs. timing
 - (b) Noise vs. noiseless
 - (c) Existence
 - (d) Bandwidth

Module 52

- 3. Covert channel detection
 - (a) Shared Resource Matrix Model
 - (b) Information flow analysis
 - (c) Covert flow trees
- 4. Shared resource matrix methodology
 - (a) Identify shared resources, attributes
 - (b) Operations accessing those attributes
 - (c) Building the matrix
 - (d) Issues about the methodology
- 5. Information flow analysis
 - (a) Direct, indirect flows