## February 15, 2019 Outline

**Reading:** *text*, §8; paper [WB04]

Assignments: Project Progress Report, due February 15, 2019 Homework 3, due February 22, 2019

- 1. Clinical Information System Security model
  - a. Intended for medical records; goals are confidentiality, authentication of annotators, and integrity
  - b. Patients, personal health information, clinician
  - c. Assumptions and origin of principles
  - d. Access principles
  - e. Creation principle
  - f. Deletion principle
  - g. Confinement principle
  - h. Aggregation principle
  - i. Enforcement principle
  - j. Comparison to Bell-LaPadula: lattice structure but different focus
  - k. Comparison to Clark-Wilson: specialization
- 2. ORCON
  - a. Originator controls distribution
  - b. DAC, MAC inadequate
  - c. Solution is combination
- 3. Role-based Access Control (RBAC)
  - a. Definition of role
  - b. Partitioning as job function
  - c. Axioms
  - d. Containment and other uses
  - e. RBAC<sub>0</sub>, RBAC<sub>1</sub>, RBAC<sub>2</sub>, RBAC<sub>3</sub>