## Outline for February 1, 2006

## **Reading**: text, §2, 3.1–3.2, 4.1–4.3

- 1. Greetings and felicitations!
  - a. Puzzle of the day
- 2. Access Control Matrix
  - a. Commands and conditions: create-file, various flavors of grant-right to show conditions and nested commands
  - b. Copy flag
  - c. Attenuation of privileges
- 3. HRU Result
  - a. Notion of leakage in terms of ACM
  - b. Determining security of a generic system with generic rights and monooperational commands is decidable
  - c. Determining security of a generic system with generic rights is undecidable
  - d. Meaning: can't derive a generic algorithm; must look at (sets of) individual case
- 4. Policy
  - a. Sets of authorized, unauthorized states
  - b. Secure systems in terms of states
  - c. Mechanism vs. policy
- 5. Types of Policies
  - a. Military/government vs. confidentiality
  - b. Commercial vs. integrity