

## Outline for November 25, 2008

1. Computer Security: What It Is
  - a. Confidentiality
  - b. Integrity
  - c. Availability
2. Threats
  - a. Snooping
  - b. Modification
  - c. Masquerading, spoofing; delegation
  - d. Repudiation of origin
  - e. Denial of receipt
  - f. Delay, denial of service
3. Policy and Mechanism
  - a. Policy vs. mechanisms
  - b. Some well-known policies: multilevel security, HIPAA, Privacy Act
4. Design Principles
  - a. Principle of Least Privilege
  - b. Principle of Fail-Safe Defaults
  - c. Principle of Economy of Mechanism
  - d. Principle of Separation of Privilege
  - e. Principle of Open Design
  - f. Principle of Complete Mediation
  - g. Principle of Least Common Mechanism
  - h. Principle of Psychological Acceptability
5. Attacks and Attackers
  - a. Security perimeter
  - b. Outside attackers
  - c. Inside attackers
  - d. Social engineering