## **Lecture 1 Outline**

## September 21, 2016

## Reading: text, §1

- 1. Greetings and felicitations!
  - a. About the class
- 2. Basic components of computer security
  - a. Confidentiality
  - b. Integrity
  - c. Availability
- 3. Classes of threats
  - a. Disclosure
  - b. Deception
  - c. Disruption
  - d. Usurpation
- 4. Policy vs. mechanism
  - a. Policy
  - b. Mechanism
- 5. Goals of security
  - a. Prevention
  - b. Detection
  - c. Recovery
- 6. Trust and Assumptions
- 7. Types of mechanisms: secure, precise, broad
- 8. Assurance
  - a. Specification
  - b. Design
  - c. Implementation
  - d. Maintenance and operation
- 9. Human issues
  - a. Organizational problems
  - b. People problems