

## Lecture 18 Outline

**Reading:** *text*, §19, 23.1-23.2

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1. Justifying design meets requirements
  - a. Reviews
2. Implementation assurance
  - a. Programming language
  - b. Modularity
  - c. Security features (bounds checking, strong typing, etc.)
  - d. Implementation management such as configuration management
3. Security testing
  - a. Functional testing (black box testing)
  - b. Structural testing (white box testing)
4. Penetration Studies
  - a. Why? Why not direct analysis?
  - b. Effectiveness
  - c. Interpretation
5. Flaw Hypothesis Methodology
  - a. System analysis
  - b. Hypothesis generation
  - c. Hypothesis testing
  - d. Generalization