# Outline for May 22, 2003

1.  What is assurance?
    a.  Trustworthy, trust
    b.  Security assurance
    c.  Trusted system
2.  Need for assurance
3.  Requirements
4.  Assurance and the life cycle
    a.  Policy assurance
    b.  Design assurance
    c.  Implementation assurance
    d.  Operational assurance
5.  Building trusted systems
    a.  Stage 1: conception
    b.  Stage 2: manufacture
    c.  Deployment
    d.  Maintenance
6.  Life cycle: Waterfall Model
    a.  Requirements definition and analysis
    b.  System and software design (system design, program design)
    c.  Implementation and unit testing
    d.  Integration and system testing
    e.  Operation and maintenance
7.  Other life cycle models
    a.  Exploratory programming
    b.  Prototyping
    c.  Formal transformation
    d.  System assembly from reusable components
    e.  Extreme programming