

Outline for April 4, 2000

1. Greetings and Felicitations
 - a. Review general information
2. Basic components
 - a. Confidentiality
 - b. Integrity
 - c. Availability
3. Threats
 - a. snooping
 - b. modification
 - c. masquerading; contrast with delegation
 - d. repudiation of origin
 - e. denial of receipt
 - f. delay
 - g. denial of service
4. Role of policy
 - a. example of student copying files from another
 - b. emphasize: policy *defines* security
 - c. distinguish between policy and mechanism
5. Goals of security
 - a. prevention
 - b. detection
 - c. recovery
6. Trust
 - a. hammer this home: all security rests on trust
 - b. first problem: security mechanisms correctly implement security policy; walk through example of a program that logs you in; point out what is trusted
 - c. second problem: policy does what you want; define secure, precise
7. Operational issues; change over time
 - a. cost-benefit analysis
 - b. risk analysis (comes into play in cost-benefit too)
 - c. laws and customs
8. Human Factors
 - a. organizational problems
 - b. people problems (include social engineering)