

## Lecture 22 Outline

**Reading:** *text*, §10.6, 11.3, 11.4.1

**Assignments due:** Homework 4, due May 23, 2011

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1. Greetings and Felicitations!
  - a. Homework #4 now on SmartSite
2. Digital Signatures
  - a. Judge can confirm, to the limits of technology, that claimed signer did sign message
  - b. RSA digital signatures: sign, then encipher
3. Networks and ciphers
  - a. Where to put the encryption
  - b. Link vs. end-to-end
4. PEM, PGP
  - a. Goals: confidentiality, authentication, integrity, non-repudiation (maybe)
  - b. Design goals: drop in (not change), works with any RFC 821-conformant MTA and any UA, and exchange messages without prior interaction
  - c. Use of Data Exchange Key, Interchange Key
  - d. Review of how to do confidentiality, authentication, integrity with public key IKS