SYLLABUS

Course Title: Computer Network Security (3 hours lecture, 0 hours lab)


Instructor: Prof. John A. Copeland

Content: Fundamental concepts of network information security, including encryption, secure access methods, and vulnerabilities in network protocols, operating systems, and network applications.

Course outline:

Introduction
  Web security.
  Security standards - SSL/TLS and SET.
  Intruders and viruses.
PGP and S/MIME for electronic mail security.
Firewalls.
Secret Key and Public/Private Key Cryptography
Cryptographic Hashes and Message Digests
Authentication Systems (Kerberos)
Digital signatures and certificates.
Kerberos and X.509v3 digital certificates.
Current Network Security Publications and Web Sites


How students are to be graded: Quizzes (2 x 25%) 50%, Exam 40%, HW 10%.

Sponsoring TIG - Telecommunications.

Supplementary reading:
  Other publications as assigned.