

Spring '07

CMSC 687/487: Introduction to Network Security

MW: 4:00pm- 5:15pm, ACIV013

Course Faculty

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Course Objective

Study topics related to securing data in a networked environment.

Course Material

W. Stallings, *Cryptography and Network Security*, 4th Edition, Prentice Hall, 2006.
Research publications and Internet Drafts/RFCs

You Should Know

Networking concepts covered in, for example, A. Tanenbaum, *Computer Networks*, 4th Edition

Course Topics

Security concepts
Symmetric key encryptions
Public key encryptions
Network security protocols
System Security

Project Topics

Cryptanalysis
Operating systems security
Wireless and mobile security
Ad hoc networks security
Sensor networks security
Web security
Voting System Security
Multicast security
Security in web services frameworks
Distributed denial of service attacks
Intrusion detection and prevention
Security in banking transactions
SCADA protocols security
Steganography
Quantum cryptography

Grading Policy

Exam 1	25%
Exam 2	25%
Exam 3 (Final)	25%
Assignments and Projects	25%