COE 449: Network and Information Security (3-0-3)
Term 102 (Spring 2011)

Syllabus

Section: 02  Time: SMW 13:10-14:00  Place: 24-149

Instructor: Dr. Ahmad Almulhem  Office: Bldg 22/ Room 407-2
Email: ahmadsa@kfupm  Office Hours: TBA
Phone: 860-7554  Web site: http://faculty.kfupm.edu.sa/COE/ahmadsa

Course Description:

Introduction to computer security (concepts, threats, attacks, assets, scope, trends), Cryptographic Tools (symmetric, public key, hash functions), User Authentication, Access Control, Database security, Intrusion detection, Malicious software, DOS attacks, Firewalls, Trusted computing and multilevel security,

Course Prerequisite: COE 341 or Consent of Instructor

Course Material: Course materials are posted on WebCT

Tentative Topics:

- Computer Security Overview (Ch 1)
- Cryptography (Ch 2, 19, 20)
- User Authentication (Ch 3)
- Access Control (Ch 4, 10)
- Database Security (Ch 5)
- Intrusion Detection (Ch 6)
- Malicious Software (Ch 7)
- Denial of service (Ch 8)
- Firewalls and Intrusion Prevention Systems (Ch 9)
- Security Management Issues (Selected topics from Part 3)

Grading:

- Attendance (-1 per absence) 5%
- Quizzes 15%
- Project 10%
- Exam 1 15% (Week 6 – March 21, 2011)
- Exam 2 20% (Week 11 – May 2, 2011)
- Final Exam 30% (Comprehensive)

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Policies:

- Attendance is checked in each class. DN grade is automatically given after 6 absences (20%).
- No makeup quizzes or exams.
- No tolerance for cheating and plagiarism. KFUPM regulations will be enforced in such cases.