# 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
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**Office Hours:** TBA
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**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

**Textbook:** William Stallings and Lawrie Brown, Computer Security: Principles and Practice, Pearson 2008.
**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)

| **Letter Grade** | ***A+*** | ***A*** | ***B+*** | ***B*** | ***C+*** | ***C*** | ***D+*** | ***D*** | ***F*** |
|---|---|---|---|---|---|---|---|---|---|
| **Range** | ***95-100*** | ***90-94*** | ***85-89*** | ***80-84*** | ***75-79*** | ***70-74*** | ***65-69*** | ***60-64*** | ***0-59*** |

**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.