Computer Security  CPS 3498-01 Fall 2015

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Class Room:  GLAB 407
Class Hours: Tuesday 04:30 – 07:15PM
Office Hours: Monday – Thursday. Details provided on my Web site.
Instruction Method: Lecture & Lab.

Textbook:
Computer Security – Principles and Practice, 2nd Ed. Prentice Hall, W. Stallings and L. Brown, 2015; PowerPoint slides will be used in class.

Grading:  
Homework (9+1) 20%  Midterm 25%  
Final 25%  Lab. (6 reports) 30%

Course Description & Objectives:
This course is a study of computer security. Topics covered are: computer security technologies and principles, software security, management issues, cryptographic algorithms, internet security, and operating system security.

Upon completion of the course, we will have a fully understanding of the up-to-date developments in computer security. We will also be capable of performing analysis of central problems in computer security that confront security designers and security administrators, including defining the threats to computer and network systems, evaluating the relative risks of these threats, and developing cost-effective and user-friendly countermeasures.

Homework Assignments (HAs) and Lab. Report (LRs) submission policy:
- Students are expected to submit paper format HA and/or LR in the following week of the session, unless is mentioned otherwise.
- Late submission is allowed for up to a week delay, with a 10% deduction in grade.

HAs/LRs and Exams Integrity policy: You must submit your own works. Your answers/program will be considered as plagiary, if:
- You copy/receive idea(s) or piece(s) of answer/program from someone without instructor’s permission.
- Your answers/programs are exactly the same as or very close in structure to others.
and cannot provide a reasonable explanation.

**Important University Academic Information:**
The Kean Academic Calendar is online at [http://kean.edu/offices/registrar/academic-calendar](http://kean.edu/offices/registrar/academic-calendar)
Student Code of Conduct: [http://www.kean.edu/policies/code-of-conduct](http://www.kean.edu/policies/code-of-conduct)
Tutoring and learning Support services: [http://www.kean.edu/content/tutoring-services](http://www.kean.edu/content/tutoring-services)

**Schedule:**
9/1: Chapter 1: Overview.
9/8: Chapter 2/19/20: Cryptographic Tools and Algorithms
9/15: Chapter 3/4: User Authentication and Access Control
Lab 1: Identity and security
9/22: Chapter 5: Database and Software Security
Lab 2: Network Configuration and Connectivity
9/29: Chapter 6/7: Malicious Software and Denial of Service
Lab 3: Network Transport and Applications
10/20: Course review
10/27: **Midterm Exam**
11/10: Midterm Review
11/17: Chapter 16/17: Security Management (I)
Lab 4: Port Scanning and System Vulnerability
11/24: Chapter 14/18: Security Management (II)
Lab 5: Password Cracking
12/1: Chapter 22/23: Internet Security
Lab 6: Steganograph
Course review
12/15: **Final Exam**