DF 561 Network Security
Fall 2007, Online Course

Instructor
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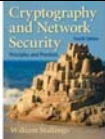TA: Mr. Rhitwik Narayan Patowary   Email: shsu.chen@gmail.com

Course Description
The rationale and necessity for securing computer systems and data networks, as well as methodologies for the design of security system, establishing security protocols and the identification of best practices in the administration, testing and response protocols for secure communications systems.

Course Outline
- Classical Encryption (Exam 1)
  - DES
  - AES
- Public-Key Cryptography (Exam 2)
  - RSA
  - Other public-key algorithms
  - Hash functions
  - Digital signatures
- Network security applications (Exam 3)
  - Authentication
  - Email and web security
  - IP security
  - Network management security
- System security (Exam 3)
  - Intruder management
  - Viruses and worms
  - Malicious software
  - Firewalls

Textbook

Title	Author(s)	ISBN	Edition	Publisher	Cover
Cryptography and Network Security	William Stallings	0131873164	Edit. 4 (Nov. 05)	Prentice Hall	

Grading
Your grades will be determined according to the following:

			Under normal circumstances, if your score is	Letter grade
Regular Assignments	240		>= 895	A
Research Assignments	260		>= 795	B
Programming Assignment(s)	100		>= 695	C
Exam 1	150		>= 595	D
Exam 2	150		< 595	F
Exam 3	150			

Regular Assignments
- Each of these assignments will contain a few questions that examine how well you have understood the textbook.
- Use your own word to answer the questions without copying from the textbook.
- Normally a regular assignment is due at the end of the Saturday that it is assigned.

Research Assignments
- A research assignment requires firstly a survey of the contemporary techniques on a certain topic. Then a report needs to be turned in to explain the characteristics, advantages and disadvantages of these techniques. Also in the report, express students' own thoughts on what can be done to improve these techniques.
- If a report has good quality and contains enough details to support a new idea, it can be extended to a research paper which is highly recommended to submit to a research conference or even a journal for publication.

Programming Assignment(s)
- Considering the various background of the students in this course, these assignments will be simple and straight forward.
- The purpose of these assignments is to give the students a practical view of how a security technique is implemented.

Late Policy
Penalty for late work is 20% of the project's worth per calendar day late, unless an extension (for a valid reason) has been granted in advance.

Online Course Resources
Online course resources can be obtained at (TBA)

Academic Dishonesty
All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Students should be aware, specifically, that the instructor reviews all programming assignments and exercises for evidence of collaborative work. While it is sometimes appropriate and encouraged for students to discuss concepts and ideas, it is never permissible to collaboratively work on coded examples, to share or swap completed or partially completed programming assignments. In addition it is not permitted for students to use code examples provided by the instructor without appropriate documentation/ citation of the use of that code.

Visitors in the Classroom
Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

Americans with Disabilities Act
Students with disabilities covered by the Americans with Disabilities Act should go to the Counseling Center and Services for Students with Disabilities (SSD) in a timely manner to obtain the documentation required. Students are responsible for initiating the process of documenting the need for an accommodation under the ADA act.

Religious Observance
University policy allows for student to observe religious holy days, including travel time associated with visiting a holy site, without penalty. If you intend to miss class as a result of the observance of a religious holy day or as a result of the necessary traveling time required for religious observance, such an absence will not be penalized so long as you have notified the instructor in writing of the dates and times of class sessions that are missed. The deadline for notification is the 12 class day. Students absent from class as a result of religious observance are required to submit any due assignments immediately on their return to the classroom. Makeup tests and quizzes will also be provided on return to the class.