

CSCI 451 Computer Security

Department of Engineering and Computer Science
College of Engineering and Technology
Virginia State University, Petersburg, Virginia

Fall 2016

Instructor	Hui Chen, Ph.D.	Office Phone	(804)524-5428
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Office Hours	08:00 – 10:00 Monday 11:00 – 12:00 Friday and by appointment	08:00 – 09:00 Wednesday	08:00 – 10:00 Friday

Class Meeting and Location

10:00 – 10:50AM MWF, Aug 15, 2016 – Dec 05, 2016 Hunter-McDaniel Building 201S

Catalog Description

This course focuses on communication security in computer systems and networks. It is intended to provide students with a comprehensive introduction to the field of network security. The course covers critical network security services such as authentication and access control, integrity, and confidentiality of data, routing, firewalls, virtual private networks, and web security. Where appropriate, we examine threats and vulnerabilities to specific architecture and protocols.

Prerequisites: CSCI 358 Introduction to Information Assurance or approval of the instructor

Textbook

[1] M. Bishop, *Introduction to Computer Security*. Addison-Wesley Professional, 2004.

Prerequisites by Topic

- Simple algorithms and data structures
- Programming in a high-level programming language
- Fundamental networking concepts
- Fundamental concepts of operating systems

Class Participation

Students attendance and active class participation are expected and required. Students are also expected to maintain appropriate affect and demeanor.

Classwork and Exams

- *In-Class Exercises* are exercises that are completed in class. Discussion with the instructor and among students is permitted and encouraged. However, each student must submit her/his own work. The instructor typically assigns one or more in-class exercises in each class.
- *Labs* are exercises that include programming component. Typically, a lab has two components, an in-class portion and a take-home portion.
- *Reading Assignments* are those for which students are reading research papers, web pages, or technical documents. The instructor may require students to submit written reports, and present the papers orally.
- *Projects* are those for which students conduct research-oriented tasks leading to an oral presentation and written report.
- *Midterm Exam* and *Final Exam* are to be given according to the University Schedule. No make up is allowed unless a pre-arrangement is made with the instructor.

Oral and Written Communications

Every student is expected to submit written reports (not including exams, tests, quizzes, or commented programs) of typically 2 pages and make formal presentations.

Social and Ethical Issues

Students are exposed to the following topic: Security and privacy in electronic communication

Disability Services

The Americans with Disability Act (ADA) is intended to insure that students have equal access to the campus and course materials. The instructor will work with the students with Disabilities program to provide reasonable accommodation to students with disabilities. Please contact the Office of Disable Students Services at 524-5061.

Oral Presentation and Project Demonstration

Every student is expected to make oral presentation and demonstrate her or his project to the fellow students and the instructor. student must submit the presentation slides to the instructor at least one day before the presentation in Blackboard.

Technology Assisting Teaching

The instructor maintains a class web site and posts lecture notes and all assignments on the web site. The URL to the web site is

- <http://huichen-cs.github.io/course/CSCI451/>

The instructor posts grades of assignments and copyrighted material on Blackboard at

- <http://blackboard.vsu.edu>

The University uses the *Banner* system to post midterm and final grades. The access to the Banner system is at

- <http://www.vsu.edu/trojanlink/index.php>

Grading

The evaluation is based a few components listed as follows,

Component	Percentage	Percentage	Grade
Attendance	5%	90-100%	A
In-Class Exercise	15%	80-89%	B
Reading and Presentations	5%	70-79%	C
Lab	15%	60-69%	D
Projects	20%	0-59%	F
Midterm Exam	20%		
Final Exam	20%		
Total	100%		

Your final letter grade will be given according to the percentage you earn.

Important Dates

	Monday, Aug. 15	University classes begin
	Friday, Aug. 19	Last Day to Add/Drop classes
	Monday, Sep. 5	Labor Day Holiday
	Monday Sep. 26 – Friday Sep. 30	Midterm Exam
	Monday Oct. 3 – Tuesday Oct. 4	Fall Break
	Friday, Nov. 21	Last Day to Withdraw from classes
	Wednesday, Nov. 23 – Sunday, Nov. 27	Thanksgiving Holiday
	Monday, Nov. 28	Last day of classes
	Tuesday, Nov. 29	Reading day
	Friday, Nov. 30 – Monday, Dec. 5	Final Exam

Disclaimer

The instructor reserves the right to revise this syllabus.