

University of North Texas at Dallas
Spring 2016
SYLLABUS

CSCE 4550.030: Introduction to Computer Security		3 Hrs	
Department of	Mathematics & Information Sciences	School of	Liberal Arts & Sciences
Instructor Name:	<i>Dr. Gerard Rambally</i>		
Office Location:	<i>DAL2-229</i>		
Office Phone:	<i>972-780-3093</i>		
Email Address:	gerard.rambally@untdallas.edu		
Office Hours:	10:00 AM – 1:00 PM on Mondays and Wednesdays or by appointment.		
Virtual Office Hours:	9:00 AM – 10:00 AM on Tuesdays and Thursdays or communicate with me by e-mail 7 days each week.		
Classroom Location:	Online		
Class Meeting Days & Times:	This is an online course , except for the three times that you must be present on campus to take the three exams.		
Course Catalog Description:	Security goals, threats, and vulnerabilities. Cryptography, program security, and operating system security issues. Basic network security. Planning, policies, and risk analysis.		
Prerequisites:	CSCE 2610D - Assembly Language and Computer Organization or CSCE 3600D - Principles of Systems Programming.		
Co-requisites:			
Required Text:	Goodrich, M. and Tamassia, R. <i>Introduction to Computer Security</i> . Addison Wesley, 2011. ISBN: 0-321-51294-4		
Recommended Text and References:			
Access to Learning Resources:	UNT Dallas Library: phone: (972) 338-1616; web: http://www.untdallas.edu/our-campus/library UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fhcg.follett.com		
Course Goals or Overview:			
	The goal of this course is to provide an introduction to general principles of computer security from an applied viewpoint.		
Student Learning Outcomes:	Upon successful completion of this course, the student will be able to		
1	Demonstrate an understanding of common cyber attacks.		
2	Demonstrate an understanding of techniques for identifying and defending against vulnerabilities in machines and networks, as well as methods for detecting and repairing infected systems.		
3	Demonstrate an understanding of the fundamental building blocks of secure systems such as encryption, digital signatures, cryptographic protocols, and access control models.		
4	Demonstrate an understanding of the human, social, and economic aspects of computer security.		

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in BlackBoard.

TOPICS	TIMELINE
1. Fundamental Concepts	Weeks of 1/18/16 and 1/25/16
2. Physical Security	Week of 2/1/16
3. Operating Systems Security	Weeks of 2/8/16 and 2/15/16
Exam 1	5:30 pm on 2/24/16 in Bld 1, Room 274 on the Dallas Campus
4. Malware	Weeks of 2/29/16 and 3/7/16
SPRING BREAK	Week of 3/14/16
5. Cryptography	Weeks of 3/21/16 and 3/28/16
Exam 2	5:30 pm on 4/6/16 in Bld 1, Room 274 on the Dallas Campus
6. Network Security	Weeks of 4/11/16, 4/18/16, and 4/25/16
Exam 3	5:30 pm on 5/4/16 in Bld 1, Room 274 on the Dallas Campus

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Grading Matrix:

Instrument	Value (points or percentages)	Total
Assignments	Assignments on each topic with variable weights. There will be a total of 9 assignments. These assignments will involve short answer questions and solving problems to apply the concepts discussed in each topic.	25%
Exam 1 (on campus)	25%	25%
Exam 2 (on campus)	25%	25%
Exam 3 (on campus)	25%	25%
Total:		100%

Grade Determination:

- A = 90% or better
- B = 80 – 89 %
- C = 70 – 79 %
- D = 60 – 69 %
- F = less than 60%

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Any student requesting academic accommodations based on a disability is required to register with Disability Services each semester. A letter of verification for approved accommodations can be obtained from this office. Please be sure the letter is delivered to me as early in the semester as possible. Grades assigned before an accommodation is requested will not be changed as accommodations are not retroactive. Disability Services is located in the Student Life Office in DAL2, Suite 200 and is open 8:30a.m. – 5:00 p.m., Monday through Friday. The phone number is (972) 338-1775.

Blackboard Learn Accessibility Statement:

University of North Texas at Dallas is committed to ensuring its online and hybrid courses are usable by all students and faculty including those with disabilities. If you encounter any difficulties with technologies, please contact our ITSS Department. To better assist them, you would want to have the operating system, web browser and information on any assistive technology being used. Blackboard Learn course management system's accessibility statement is also provided: <http://www.blackboard.com/Platforms/Learn/Resources/Accessibility.aspx>

NOTE: Additional instructional technology tools, such as Turnitin, Respondus, Panopto, and publisher cartridge content (i.e. MyLab, Pearson, etc.) may NOT be fully ADA compliant. Please contact our Disability Office should you require additional assistance utilizing any of these tools.

Student Evaluation of Teaching Effectiveness Policy:

The students' evaluation of teaching effectiveness is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider students' evaluations to be an important part of your participation in this class.

Assignment Policy:

All assignments must be submitted in Blackboard by the due dates and times stated on the assignments. No late assignments will be accepted. All assignments are to be done individually unless stated otherwise on the assignment.

Exam Policy:

Exams must be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at <http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic%20Integrity.pdf> for complete provisions of this code.

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

Web-based Plagiarism Detection: Please be aware in some online or hybrid courses, students may be required to submit written assignments to Turnitin, a web-based plagiarism detection service, or another method. If submitting to Turnitin, please remove your title page and other personal information.

Classroom Policies and Procedures

Online Attendance and Participation:

The University attendance policy is in effect for this course. Class attendance in the Blackboard classroom and participation is expected because the class is designed as a shared learning experience, and because essential information not in the textbook will be discussed in the discussion board. Online presence and participation in all class discussions is essential to the integration of course material and your ability to demonstrate proficiency.

Attendance for this online or hybrid course is considered when you are logged in and active in Blackboard, i.e., posting assignments, taking quizzes, or completing Discussion Boards. To maintain financial aid award eligibility, activity must occur before the census date of the session or term of the course. Refer to <http://www.untDallas.edu/registrar> for specific dates. If you are absent/not active in the course shell, it is YOUR responsibility to let the instructor know immediately, upon your return, the reason for your absence if it is to be excused. All instructors must follow university policy 7.005 covering excused absences; however, it is the instructor's discretion, as outlined in the course syllabus, of how unexcused absences may or may not count against successful completion of the course.

Successfully completing this class is a function of many factors. Two such factors are class attendance and assignment completion.

Inclement Weather and Online Classes:

Online classes may or may not be affected by campus closures due to inclement weather. Unless otherwise notified by your instructor via e-mail, online messaging, or online announcement, students should assume that assignments are due as scheduled.

Online Netiquette:

In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. Emails, Discussion Board messages and/or any other forms of written communication in the online environment should use proper "netiquette" (i.e., no writing in all caps (usually denotes yelling), no curse words, and no "flaming" messages (angry, personal attacks).

Racial, ethnic, or gender slurs will not be tolerated, nor will pornography of any kind.

Any violation of online netiquette may result in a loss of points or removal from the course and referral to the Dean of Students, including warnings and other sanctions in accordance with the University's policies and procedures. Refer to the Student Code of Student Rights Responsibilities and Conduct at <http://www.untDallas.edu/osa/policies>. Respect is a given principle in all online communication. Therefore, please be sure to proofread all of your written communication prior to submission.

Diversity/Tolerance:

Students are encouraged to contribute their perspectives and insights to class discussions in the online environment. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.

Technology Requirements:

In order to successfully access the materials in an online or hybrid course, UNT Dallas advises that your computer be equipped with the minimum system requirements.

Blackboard Learn 9.1 is the platform software for this course. Blackboard Learn supports major web browsers such as Windows Internet Explorer, Apple Safari, Mozilla Firefox, and Google Chrome. However, since the latter two are updated continually, some recent versions may not be compatible. If you experience difficulty accessing or using components of the course, try using Internet Explorer. Also, no matter what browser you use, always enable pop-ups. For more information see:

- <http://www.untDallas.edu/dlit/ecampus/requirements>
- https://help.blackboard.com/en-us/Learn/9.1_SP_12_and_SP_13/Student/040_Browser_Support_for_SP_13
- https://learn.unt.edu/bbcswebdav/institution/BrowserCheck/check_full.html