CIS 108 (CRN: 21722) PERSONAL COMPUTER SECURITY BASICS

CIS-108-62Z

Instructor: Mark Sherby FALL '15 4.5 Units

De Anza College Distance Learning Center • Phone: 408-864-8969 • FAX: 408-864-8245 • http://deanza.edu/distance

COURSE DESCRIPTION

This course uses pre-recorded lectures that will introduce you to computer security issues that affect small office or home users. We will learn how to stop hackers, worms, viruses, spyware, web bugs and identity theft. We will explore vulnerabilities found in web browsers, email and Windows operating systems. Furthermore, you will be able to protect against online purchase dangers, install firewalls, manage cookies, restrict ports, evaluate wireless networks and examine encryption.

ADVISORY: Hands-on experience with Microsoft Windows.

INSTRUCTOR INFORMATION: MARK SHERBY



Office Hours Held: From Monday, September 21 to Thursday, December 3

Office hours: Monday, Wednesday 5:00-5:50PM --- Tuesday, Thursday 2:30-3:20PM

Phone/Voicemail: (408) 864-5471 **Office Location:** F-51D

E-mail address: Sherbymark@deanza.edu

Website: Sherbyffark@deanza.edu

Catalyst.deanza.edu

DROP POLICY

- 1. Those who have not viewed course video lectures in Catalyst and completed the first assignment by the end of the first week will be dropped from the course. Students who have not completed at least 2 assignments by the end of week 2 will also be dropped. Students who have not completed more than two assignments in a row by the due date without contacting instructor to discuss an extension will be dropped. Students who have not completed the midterm by the deadline will be dropped. For the schedule of drop dates and calendar, see Catalyst.deanza.edu.
- 2. Students who want to be dropped from the class MUST take the initiative to follow the De Anza College drop procedures. Drop calendar deadlines can be found at https://www.deanza.edu/calendar. Do not assume you will be automatically dropped from this course. If you intend to drop the course, you must drop yourself!

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Below is a summary of the tasks you will perform as you complete this course:

- a. View assigned video lectures.
- b. Download PowerPoint slides. View speaker notes.
- c. Read posted web articles.
- d. Complete lab/homework assignments.
- e. Pass online midterms.
- f. Pass the online final exam.

COURSE OBJECTIVES

After completing the course readings, viewing video lectures and completing homework/lab assignments, you should be able to:

- 1. Recognize computer security fundamentals.
- 2. Define hacker terminology and attack methods.
- 3. Detect and protect against virus, worms and Trojan horse attacks.
- 4. Implement password security.
- 5. Evaluate online shopping safety.
- 6. Evaluate and implement Internet browser security.
- 7. Evaluate and implement Email security.
- 8. Implement firewall security.
- 9. Explore data backup strategies.
- 10. Evaluate security vulnerabilities found in the Windows operating system.
- 11. Recognize physical access security vulnerabilities.
- 12. Explore and protect data with Windows encryption.
- 13. Explore and prevent identity theft.
- 14. Explore Windows security features.

Student Learning Outcome for this course:

Determine the best plan of action to stop malware based on security breach scenarios.

COURSE MATERIALS

This is a GREEN course:

No textbook is required for this class!

It is recommended for those new in the security field (but not required) to print PowerPoint slides and speaker notes (instructions provided in the course orientation video).

CATALYST INSTRUCTIONS

You will be using the Catalyst web site to turn in your homework, complete the online exams, view PowerPoint slides, read online articles and view video streaming lectures. Please note that you will <u>not</u> be able to log into your course until the first day of instruction. You must use the Mozilla Firefox browser when accessing the Catalyst web website.

To log on to Catalyst go to https://catalyst.deanza.edu/ and then follow the instructions provided.

VIDEO STREAMING INSTRUCTIONS (COURSE LECTURES)

All of the course's lectures are available for viewing in Catalyst using Mozilla Firefox. It is highly recommended to view the video lectures multiple times (or rewind) if you are unclear about the material presented. A high speed Internet connection is needed to view the course's video streams (Video lectures). If you are connecting from home, this means you will need a cable modem or DSL connection. **To access the video streams you must first** login to Catalyst as described above.

The quality of the video stream can be affected by Internet congestion on the De Anza Campus or network congestion with your Internet Service Provider. Please do not share your Catalyst account with anyone who is not registered in the course. Unauthorized access to the video streams will contribute to network congestion and violates our license agreements.

COMPUTER COMPONENTS AND AVAILABILITY

Computers in the CIS Computer Lab: (AT203)

Although all the lab homework assignments can be completed on a home computer, I recommend that you use our CIS computer lab to complete your assignments. **The CIS computer lab** contains Windows Vista installed using VMware. This VMware approach will allow you to install software onto our CIS lab computers. When you log out, the changes you have made are erased! Be sure to save any homework assignments to your USB Flash drive because the data files will be erased from Windows Vista once you log out. You can submit your homework into Catalyst from these computers after completing the assignments.

You may practice on the Windows computers any time that the CIS computer lab is open: For CIS computer lab hours access http://www.deanza.edu/buscs/lab/hours.html

Instructions to complete lab assignments (Use AT203 CIS lab computers):

- 1. Create your student user account by following the hello system login instructions on the CIS lab computers. These instructions can be obtained at the front desk of the CIS lab.
- 2. Once you have created your user account, log onto the computer assigned for this course.
- 3. From the "Start" button, select "All Programs", select VMware and then choose "Windows Vista Vmplayer." This will start a Windows Vista virtual operating system session.
- 4. Windows Vista will take about 3 minutes to fully load all of its components. Please be patient. Move the mouse pointer if the pointer is not visible.
- 5. At the Vista logon screen, click on "student" and then type the password which is also "student". The password is case sensitive.
- 6. After you have finished your assignments and have uploaded them into Catalyst, quit out of Windows Vista by clicking the "Close" button on the VMware player toolbar located at the top of the monitor (see below).



7. Next, log off your Windows 7 system.

Warning to Home Computer Users:

If you are installing lab software on your home computer, you risk accidentally corrupting your computer's configuration. Always back up your data before installing any lab assignment software. Software installed on your home computer must be performed at your own risk. De Anza College is not responsible for any issues caused by installing software on your home computer (We provide lab computers for this purpose). Our lab computers will allow you to successfully perform all course assignments with no risk to your home computer.

Class and Lab Support Tutor:

The following table provides times when our course tutor is available to help you with lab homework assignments:

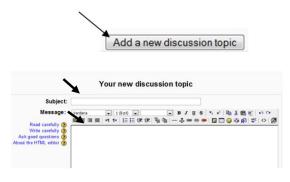
Tutor Schedule (Located in AT203)				
	Monday	Tuesday	Wednesday	Thursday
Joseph Lam	6:00-8:00PM			
MCP, MCSA, A+ and Network+				

Occasionally we add additional tutors or shift hours to the tutor schedule. For an updated schedule and picture of our tutor, please access www.windows.deanza.edu/tutor

DISCUSSION FORUM

The Discussion Forum provides you a way to communicate with others in the class. Using this forum, you will be discussing homework assignments and may post questions that you have about our course. To participate in these discussions, you will first click on the Discussion Forum icon in Catalyst. You will then be presented with the dialog box shown below. Simply click the button "Add a new discussion topic" and type in your subject and

message (as you would in an email). When you post



the message, class members will be able to read your message in both an email and within the Discussion Forum. You can also respond to other student's posted messages by logging into Catalyst and posting responses in the Discussion Forum. This is a very simple tool that will allow us to communicate with each other during the quarter!

POWERPOINT OVERHEADS

PowerPoint overheads that are presented in the class video lectures are available for download directly within Catalyst. You may view these PowerPoint overheads before or after viewing the video lectures. Many of the overheads include speaker notes which should be printed or viewed. In the Orientation video, I show you how to view and print these PowerPoint overheads and speaker notes. If you do not own PowerPoint, you may download a FREE PowerPoint viewer from Microsoft.com's website. Also, you can download the FREE OpenOffice Impress software at http://www.openoffice.org. This software can be used to open, view and print our course's PowerPoint overheads.

TESTING AND GRADING

Lab/Homework Assignments:

Corresponding to most weekly assigned video lectures, you will complete lab/homework assignments. The lab/homework assignments can be downloaded to your computer by accessing them within Catalyst.

Each assignment will receive a maximum of 4 points. Late lab/homework assignments will receive two points subtracted from the assignment score. Assignments will not be accepted one week beyond their due date found in catalyst. All assignments must be submitted through Catalyst. See Catalyst home page for Lab/homework due dates. No assignments will be graded once the final exam has been released.

Practice Test:

To help you prepare for the online midterms & final, a practice test has been created for you. This Pre-Exam Practice Test provides you with the opportunity to practice completing online exams and will ensure that your computer browser is compatible with our Catalyst testing software. Please complete the practice test as soon as possible. You may repeat the practice test as many times as you need. The practice test can be found on the Catalyst home page in the Exams section. There are only 5 questions on the Practice Test.

Online Midterm Exams

The multiple choice midterm exams must be completed by logging into Catalyst. You will have two hours to complete each open book, open notes exams. If you have a schedule conflict with the exam dates, please contact me **prior** to the exam to re-schedule. The first midterm exam covers lessons 1-5 and the second midterm exam covers lessons 5-7 (content overlaps with first midterm). To prepare for the midterm exam, you will need to study the lesson's video lectures, PowerPoint overheads, speaker notes, lab assignments and web articles. Your score will be available within a week after the exam closing date. See the last page of this syllabus for specific midterm exam dates and times. Please do not ask for help from others during the exams. Catalyst exam features do not support the Internet Explorer browser therefore please access the exams using Mozilla Firefox. You may review the questions you missed on the midterm exams until the final exam start date. You must complete the midterm exams in one session within two hours. You cannot quit or logout during the middle of the midterm exams.

Scheduled Online Final Exam

The multiple-choice final exam must be completed by logging into Catalyst and clicking on the "Final Examination." You will be provided with clear instructions on the Catalyst final exam page. You will have two hours to complete the open book, open notes final exam. See the last page of this syllabus for the final exam schedule. If you have a schedule conflict with the exam dates, please contact me **prior** to the exam to re-schedule. The final exam is comprehensive covering lessons 1-12. This multiple choice final exam will include questions based on the lesson's video lectures, PowerPoint overheads, speaker notes, lab assignments and web articles. Please do not ask for help from others during this exam. Unlike the midterm, you will not receive feedback on the questions you have missed on the final exam. To review your final exam in the following quarter, you will need to meet me to review the questions you have missed. The final exam answers will not be provided online. See the catalyst home page for final exam dates and times. Catalyst exam features do not support the Internet Explorer browser therefore please access the exam using Mozilla Firefox. Your final exam score will be posted to Catalyst within one week of the closing date of the final exam.

Exam Grading Scale:

- A+ 100%+
- A 93% 99.9%
- A- 90%-92%
- B+ 87%-89%
- B 83%-86%
- B- 80%-82%
- C+ 77%-79%
- C 73%-76%
- D+ 67%-69%
- D 63%-66%

Final Grade Mix:

The following percentages reflect how the final grade will be determined:

Lab/homework assignments 30%

Online Midterm Exams 30% (15% each midterm)

Online Final Exam 40%

Extra Credit:

Any extra credit assignments will be shown in the assignment section of Catalyst.

Policy on Academic Integrity:

If a student is found to have cheated or plagiarized on any particular assignment or examination, the student will receive a failing grade for that assignment or examination, and they will be reported to college authorities.

ONLINE WEB ARTICLES

You will find web articles discussing lesson related topics. These articles can be accessed through Catalyst. Each week, read the articles corresponding to each lesson. Exam questions will be partially based on these articles. Articles marked as optional are recommended reading.

NOTE TO STUDENTS WITH DISABILITIES

If you have a disability-related need for reasonable academic accommodations or services in this course, provide *Mark Sherby* with a Test Accommodation Verification Form (also known as a TAV form) from Disability Support Services (DSS) or the Educational Diagnostic Center (EDC). Students are expected to give five days notice of the need for accommodations. Students with disabilities can obtain a TAV form from their DSS counselor (864-8753 DSS main number) or EDC advisor (864-8839 EDC main number).

All due dates for all assignments can be found in Catalyst.deanza.edu