

**COMPUTER SCIENCE 980-INTRODUCTION TO
COMPUTER SECURITY -COURSE OUTLINE
Fall 2015 Section #8025**

<u>Instructor:</u>	Anna S Chiang, MS in Computer Science Microsoft Certified System Engineer, CompTIA A+ and Security+
<u>Class Section</u>	Fall 2015 section # 8025
<u>Class Schedule:</u>	On-Line, Aug 31-Dec 20, course syllabus can be accessed through ETUDES www.myetudes.org , see next page for login instruction.
<u>Office Hour:</u>	Mon/Tues/Wed/Thurs 12 pm-7:00 pm (in CE229) Saturday afternoon by appointment only
<u>Office/e-mail :</u>	CE 229, 310-287-4253 ChiangA@wlac.edu

Important and useful information

On Campus Orientation for on-line students: Aug 22 and Aug 29 at 2 pm in CE105A plus Aug 25 campus-wide orientation at 10 am in CE105A

UC/CSU Transfer Program /Honor Credit <http://www.wlac.edu/Transfer-Programs/Transfer-Honors-Program.aspx>-Contact the instructor for honor credit project

LACCD Student's e-mail system-<http://www.wlac.edu> -> current student->e-mail >student can forward LACCD e-mail to another personal e-mail.

Disabled Students Service-<http://www.wlac.edu/DSPS>-student with disability must contact DSPS office who will send "accommodation request" to the instructor.

CSU Dominguez Hills Transfer-see division web site <http://csit.wlacwebs.com/CSUDH.pdf>

Division Web Site <http://www.wlac.edu/computer-science> ->student resource and support like tutoring, lab open hour, software download, etc.

Requirement for AA/AS degree and Certificate of Achievement in the following tracks:

Degree and Certificate in Computer Science (10 major courses)

Degree and Certificate in Computer Network and Security Management (10 major courses) Degree and Certificate in Computer Web Support and Database Adm. (10 major courses) Certificate of Achievement in Computer Network Management (6 courses)

Certificate of Achievement in Information System Security (6 courses)

Certificate of Achievement in Business Application and Database Management (6 courses)

Certificate of Achievement in Web Support and Administration (6 courses)

Faculty advisor and major declaration

By default, your instructor can be the faculty advisor; please see the instructor during the posted office hour or you can make an appointment with the following fulltime faculty advisor:

Ashok Patil –Degree, transfer, and certificate in Computer Science- PatilA@wlac.edu
 Anna Chiang-Degree, transfer and certificate in Computer Information Science/Computer Network & Security Management, A+Network+Security+ - ChiangA@wlac.edu
 Marcus Butler-Microsoft, CISCO, VMWare training ButlerM@wlac.edu
 Manish Patel-Degree and certificate in Web development and Database Administration- PatelM@wlac.edu

Important date to remember

Important dates to remember:

Last day to drop class with a refund/no fee owed is Sept 11, 2015

Last day to drop class w/o a “W” is Sept 11, 2015

Last day to drop a class with a “W” is Nov 20, 2015

College closed on the following holidays:

Labor Day	Sept 7
Veterans Day	Nov 11
Thanksgiving	Nov 26-29

Exclusion policy

Students who are inactive in the class may result in **exclusion**. **However it is a student’s responsibility** to drop the class. Failure to drop the class in a timely manner will result in “Failure” on the transcript.

Incomplete policy

A Student who has successfully completed more than 80% of the semester course work except the final exam at the end of semester and has communicated with the instructor with a justifiable explanation may be considered for an incomplete grade

Course description

This course introduces the basic concepts of computer security. Students will learn a full range of security concepts & techniques and apply them to the most popular operating systems used today. The topics include: Vulnerabilities and Attacks, Cryptography, Network Infrastructure, Network Security, System Security and Application Security. This course plus CS985 are also designed to help candidates preparing to take CompTIA Security+ certification exam. It is one of the courses leading to AA/AS degree/Certificate in Network and Security management.

Course objectives

1. Identify Threats
2. Identify Attacks and Malicious Code
3. Establish Security Baselines
4. Understand Access Control Models
5. Understand Authentication Methods
6. Understand Cryptographic algorithms
7. Use Cryptography on Files & Disks
8. Manage Digital Certificate
9. Understand Public Key Cryptographic standards
10. Understand Web, VPN and Mail Transport Protocol
11. Audit Privilege & Use Monitoring Tools
12. Protect Communication-Based Attacks
13. Harden Operating System
14. Harden Web Browser & Web Server
15. Apply Intrusion Detection System

Student learning outcome

At end of the course, the successful student will be able to explain the concepts of confidentiality, integrity, and availability.

The successful student will be able to explain the fundamental concepts and best practices related to authentication, authorization and access control.

The successful student will be able to identify common threats, vulnerabilities and mitigation techniques.

Certification exam and required course material

About Certification Exam

CS980 and CS985 are designed to help students prepare for CompTIA Security+ and Testout Security PRO certification exam.

The publisher Testout Corp offers **Security Pro** certification exam to students who have subscribed the course material Security PRO (see next page about purchasing the required course material) at the end of semester. This certification exam is a performance-based assessment; it must be scheduled and supervised by the instructor. Security Pro certification exam can be an option of final exam. Students should schedule an on-campus exam with the instructor during the final week.

Students who plan to take CompTIA Security+ at their own cost can contact instructor or IA Laurent Phung via PhungL@wla.edu for a discount exam voucher.

Required Equipment: This class is offered 100% on-line, student must have computer with Internet connection in order to access college official course shell (ETUDES) and Testout LabSim site.

Required material: Testout Security Pro (which includes Security+ SY0-004 and Security pro. **DO NOT purchase Securiry+ which is different from Security PRO**).

A multimedia web based E- Learning including course simulation, demo, chapter & lesson notes, lab simulation and exam simulation.

How to purchase the course material on-line?

To access the student discount pricing (\$89) students need to go to www.testout.com and enter the promotional code **14-346ta**. This will take students to a page designed for West Los Angeles' students. Here students will need to enter the school name **West Los Angeles College**. This will check with Testout's database to verify if the school is authorized to purchase at this price. Because of this, it needs to be entered EXACTLY as above (including capitalizations). The student will also need to enter the instructor's name Anna Chiang. **The course material is now browser based**, it works on Apple computer too. You can access the course material via LabSim.Testout.com without downloading client program. The program may prompt you to download Microsoft Silverlight to enhance multimedia effects.

If for any reason students need to purchase the required material from WLAC bookstore, please order it via the web site of WLAC's bookstore <http://store450.collegestoreonline.com> or contact Nilhson Zelaya in bookstore (310-287-4381).

In order for the instructor to keep track of students' performance on lab simulation, each student must add himself or herself to "**West Los Angeles College**" and "**class of CS980**

Fall15” the first time logging into the labsim.testout.com. See instruction on the left menu “resource” of ETUDES course shell.

Publisher Information

TestOut Corporation 1-800-877-4889 or e-mail the representative Kelly Jorgensen via KJorgensen@testout.com if you have any questions about your account.

Testout LabSim account

If the student has an account with Testout previously set up, the same account will be used for this class.

On-line course shell ETUDES login instruction

To log on to on-line class, go to <http://www.myetudes.org> or www.wlac.edu/online where you will find links to on-line tutorial, login instructions and technical requirements.

Example: Juan Straub, 88-459-0210,
birthday is July 4.

The Login ID will be the first 2 letters of first name plus the first 2 letters of last name plus the last 5 digit of student ID, password is birthday.

- User ID: just90210
- Password: 0704

Student Information System and e-mail notification

You can view your transcript and update your personal information via Student Information System. <http://www.wlac.edu>->register class->enter student ID and pin number. To be eligible for scholarship and internship, students must have a major declared in Student Information System, You can declare a major (e.g. Computer Network and Security Management major code 0708) through Student Information System. If you have a valid personal email address in ETUDES, the instructor’s announcement will be sent to your personal email. Otherwise, you should check the instructor’s announcement every time you log on to ETUDES course shell. You might want to update your email address after logon to ETUDES-> Account-> update your personal e-mail address.

If you have trouble accessing the course on, or after, the start date visit the Online Student Help Desk at <http://www.wlac.edu/online/helpdesk.asp> . Click on Helpdesk Rules where your issue is likely addressed in the Frequently Asked Questions section. If not, post a message explaining the problem or contact the WLAC Distance Learning Program Office at (310)287-4305 or via email: shemwer@wlab.edu.

Class rules & guideline on assignment and test

By taking this class, you agree to follow the Class Rules listed below:

- 1) Students who are inactive in the class may result in exclusion, however it is your responsibility to drop the class; failure to drop the class in a timely manner will result in “F” on your record.
- 2) Cheating (or plagiarism) on assignment/exam/project will result in “Failure”.
- 3) You have to purchase the required course material when semester starts, students must log on to ETUDES on regular basis to check the following:

Announcement- Check announcement each time after you log in, important announcement are posted.

Syllabus-Course syllabus is attached.

Discussion and Private Message- You can send messages to the instructor, for urgent issues, please send e- mail to Chianga@wlaac.edu. The instructor checks this e-mail on regular basis.

Assignment & Test are posted with the open and closed dates.

- 4) Follow the schedule to work on “Assignment” and “Test”. **Do not wait until the last minute** to work on assignments. **Assignments submitted after the due day will receive 20-50% reductions** (within one week 20% off, within two weeks 30% off, etc.). **Assignment will not be accepted after 2 weeks late.**

5) No make-up exam/test. Once you have viewed or taken the exam, you can't re-open or re-take it. There is an exam for each chapter plus final exam. Follow the exam “open and close” schedule. You have **one week** to take the exam. **Do not wait until the last minute to start the exam**, use a clock when you start the exam. The exam is a timed exam. **THERE IS NO MAKE-UP or RE-TAKE EXAM.** If there is any emergency, e-mail the instructor and schedule an “on-campus” exam within 7 days after exam expires, each student has **only one** opportunity to do so throughout the entire semester.

6) Lab and Exam simulation for each lesson are part of the assignment; you can practice the lab and exam simulation over and over again. The highest score will be recorded if you practice multiple times. Exam simulation has answers and explanations which help build up your knowledge base.

The step-by-step explanation to complete the lab simulation can be viewed by starting the lab and clicking on “done”. Lab simulation and exam simulation must reach 80% and above to earn the full credit of assignment.

7) Based on students' experiences, you should take exam as soon as you complete the assignment and exam simulation, since you have gone through all the material completing the assignment, the memory is still fresh.

8) CE101 is open to CSIT students; please check the division web site www.wlac.edu/computer-science -> below the menu->click student resources & support for lab open hour.

9) Being a member of Microsoft & VMware academic alliance, the enrolled students can download VMWare, Microsoft operating system and development tool for free, please visit division website www.wlac.edu/computer-science -> below the menu->click student resources & support or contact IA Laurent Phung via PhungL@wlab.edu.

11).CS dept. is member of CompTIA education alliance, students can take A+ Network+ Security+ with discount voucher, please contact the instructor or visit division website www.wlac.edu/computer-science or IA Laurent Phung via PhungL@wlab.edu.

12). College policies on page 7 and all other school & class rules will be enforced.

Grading: Exams -40%
Assignment (Lab & Exam simulation)-45%
Final exam-15%

Preliminary Schedule of Assignments/Labs and Exams

The deadline of assignments and exams may change and will be posted via ETUDES, please pay attention to the deadline of Assignments and Tests posted on **WLAC ETUDES**.

Testout Module#	Testout Lab & Exam Simulation due	Test due
Chapter #1-Introduction	Assignment C#1 due Sept 12	
Chapter #2-Access Control & Identity Management	Assignment C#1 & 2.1-2.6 due Sept 19	Exam C#1 & 2.1-2.6 due Sept 20
Chapter#2.7-2.15	Assignment 2.7-2.15 due Sept 26	Exam 2.5-2.12 Sept 27
Chapter #3-Cryptography	Assignment C#3 due Sept Oct 3	Exam C#3 due Oct 4

Chapter #4-Policy & Procedures Organizational Security 4.1-4.5	Skip covered in CS985	
Chapter #4-Policy & Procedures Organizational Security 4.6-4.10	Skip covered in CS985	
Chapter 5-Physical Security	Assignment C#5 due Oct 10	Exam C#5 due Oct 11
Chapter 6-Perimeter Defense 6.1-6.7	Assignment C#6A due Oct 17	
Chapter 6-Perimeter Defense 6.8-6.14	Assignment C#6B due Oct 24	Exam C#6 due Oct 25
Chapter #7-Network Defenses	Assignment C#7 due Oct 31	Exam C#7 Due Nov 1
Chapter #8-Host Defense	Assignment C#8 due Nov 7	Exam C#8 due Nov 8
Chapter #9-Application defense	Assignment C#9 due Nov 14	Exam C#9 due Nov 15
Chapter #10-Data Defense	Assignment C#10 due Nov 21	Exam C#10 due Nov 22
Chapter #11-Assessment and Audit	Assignment C#11 due Nov 28	Exam C#11 due Nov 29
NetLab Security+ Lab 1-Lab 5	Due on Dec 5	
NetLab Security+ Lab 6-10	Due on Dec 12	Exam on NetLab on Dec 13
Final Exam-Comprehensive or Security PRO certification exam		Dec 20

College policies

Academic Integrity (Plagiarism)

In accordance with code 9803.28, **academic dishonesty is prohibited and will not be tolerated in this class.** Violations of academic integrity include, but are not limited to, the following actions: cheating on an exam, plagiarism, working together on an assignment, paper or project when the instructor has specifically stated students should not do so, submitting the same term paper to more than one instructor, or allowing another individual to assume one's identity for the purpose of enhancing one's grade. Academic dishonesty of any type, such as cheating or knowingly furnishing false information, by a student provides grounds for disciplinary action by the instructor or college. In written work, no material may be copied from another without proper quotation marks, footnotes, or appropriate documentation.

- o **Plagiarism will result in a zero for the assignment, possible dismissal from the class and disciplinary action from the college.**

Student Conduct

According to code 9803.15, disruption of classes or college activities is prohibited and will not be tolerated. Refer to the catalog and the Standards of Student Conduct in the Schedule of Classes for more information.

Recording Devices

State law in California prohibits the use of any electronic listening or recording device in a classroom without prior consent of the instructor and college administration. Any student who needs to use electronic aids must secure the consent of the instructor. If the instructor agrees to the request, a notice of consent must be forwarded to the Vice President of Academic Affairs for approval.

For more information refer to the attached link:

http://www.wlac.edu/academics/pdf/WLAC_10-12Catalog_Policies.pdf

Campus resources:

As stated earlier in this syllabus, **if you are having problems, don't let them snowball.** Come and talk with me and check out some of the campus resources available to you.

Office of Disabled Student Programs and Services (DSP&S)

Heldman Learning Resources Center (HLRC), Room 119 | (310) 287-4450.

West Los Angeles College recognizes and welcomes its responsibility to provide an equal educational opportunity to all disabled individuals. The Office of Disabled Students Programs and Services (DSP&S) has been established to provide support services for all verified disabled students pursuing a college education. DSP&S students may qualify for: priority registration, registration assistance, special parking permits, sign language interpreters and assistive technology.

Instructional Support (Tutoring) & Learning Skills Center

Heldman Learning Resources Center (HLRC) | (310) 287-4486

Improve your reading, language, vocabulary, spelling, math fundamentals and chemistry knowledge with convenient, self-paced computer-aided courses in the Learning Skills Center. Increase your knowledge and learning success: sign up for tutoring in various college subjects.

Library Services

Heldman Learning Resources Center (HLRC) | (310) 287-4269 & (310) 287-4486

The WLAC Library provides instruction on how to use the online catalog, periodical and research databases. In addition to a large collection of books, periodicals and videos the WLAC Library has course textbooks which students may use while in the Library. Web access is available in LIRL as well as meeting rooms. The upper floors provide a beautiful view ideal for study.

for more information refer to attached link:

http://www.wlac.edu/academics/pdf/WLAC_10-12Catalog_Services.pdf