

COMPUTER SCIENCE 965-INTRODUCTION TO COMPUTER NETWORKS COURSE OUTLINE

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| <u>Instructor:</u> | AS Chiang, MS in Computer Science Microsoft Certified System Engineer, CompTIA A+ Network+ Security+ |
| <u>Class Section:</u> | Fall 2014 section #8024 |
| <u>Class Schedule:</u> | On-Line, Sept 2-Dec 21, course syllabus can be accessed after Aug 27 Via ETUDES www.myetudes.org see page 2 for login instruction. |
| <u>Office Hour:</u> | M/T/W/TH 11:30-5:30 pm Sat afternoon-by appointment only (e-mail ChiangA@wlac.edu) |
| <u>Office/Phone:</u> | CE 229, 310-287-4253 |
| <u>E-Mail</u> | ChiangA@wlac.edu |

Important and useful information

On campus orientation for on-line students: Saturday, Aug 30 at 2 pm in CE105A

UC/CSU Transfer Honor Credit-<http://www.wlac.edu/transfer/index.html#honors>
Contact the instructor for honor credit project

LACCD Student's e-mail system-<http://www.wlac.edu> -> for student ->e-mail >click on "instruction" and "video".

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 www.wlac.edu/csit ->left menu

Division Web Site <http://www.wlac.edu/CSIT> with the following information:

- Division faculty contact information and computer lab open hour
- Requirement for degree and certificate programs
- Discount voucher for CompTIA A+Network+Security+Linux+
- Free software download request form (Microsoft OS & development tools and VMWare)

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

Please note that students must declare a major in order to become eligible for scholarship and internship opportunities. To declare a major, please obtain the form of change request from CS division website www.wlac.edu.csit click the link on the left menu.

Please make an appointment with the following division faculty advisor:

Ashok Patil –Degree, transfer, and certificate in Computer Science- PatilA@wlab.edu

Anna Chiang-Degree, transfer and certificate in Computer Information Science/Computer Network and Security Management- ChiangA@wlab.edu

Marcus Butler-Microsoft, CISCO, VMWare training ButlerM@wlab.edu

Manish Patel-Degree and certificate in Web development and Database Administration- PatelM@wlab.edu

Important date to remember

Important dates to remember:

Last day to drop class with a refund/no fee owed is Sept 12, 2014

Last day to drop class w/o a “W” is Sept 12, 2014

Last day to drop a class with a “W” is Nov 21, 2014

College closed on Labor Day Sept 1

Veterans on Nov 11

Thanksgiving Holiday Nov 27-30

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 entire semester course work 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 is designed to provide students with the background necessary to understand computer networking technology, the local area networks (LANs) and wide area networks (WANs). It covers networking hardware devices & cables, LAN and WAN protocols & services, wired and wireless networking protocols & standards, network security and troubleshooting. This course also covers network hardware topics in CompTIA A+ & Network+ certification exam.

Course objectives

1. Identify network type and host role.
2. Describe the specification of twisted pair, coaxial cable and fiber optic.
3. Describe the specification of network adapter, local area network connection devices.
4. Explain the functions and purposes of common networking protocols & standards.
5. Explain local area network architecture.
6. Explain wireless standards and protocols.
7. Identify the seven layers of OSI model.
8. Describe default IP address classes and subnet mask facts.
9. Identify the well-known ports that correspond to common Internet services.
10. Use troubleshooting tools and programs.

Student learning outcome

At the end of the course, the successful student will be able to :

1. Explain the functions and purposes of common networking protocols & standards.
2. Identify Open System Interconnection networking framework and layers.
3. Select appropriate tools to implement network troubleshooting methodology.

Prerequisites and CS992

knowledge of PC hardware and computer operating system.

The instructor suggests students to take CS934, CS965 and CS992 (A+ Network+ hardware) concurrently to build a solid foundation and get ready for CS972, CS980, and CS982 the following semester.

Please note that the hardware LAB exercises in chapter 2, 3, 4 are covered in CS992. To complete CompTIA A+ and Network+ hardware training, students should consider taking CS992 on Saturday afternoon. The instructor of CS992 will cover hands-on lab and hardware topics in CompTIA A+ and Network+ certification exam.

About CompTIA Network+ and Testout Network Pro

CS965 is designed to help students prepare CompTIA Network+ and Testout Network PRO certification.

The publisher Testout Corp offers Network Pro certification exam to students of CS965 at the end of semester free of charge. This certification exam is performance-based assessment and it must be scheduled and supervised by the instructor. Students who have completed lab/exam simulation for every chapter should schedule an on-campus exam with the instructor during the final week. This certificate should add value on your resume and for the job interview. Students who have passed Network Pro certification exam and also rank the top three in class will be awarded with CompTIA Network+ certification voucher. Contact the instructor during the final week. The final exam has two options either Network Pro certification exam or a comprehensive final exam.

If you plan to take CompTIA Network + exam at your own cost, please e-mail instructor for the discount voucher code.

Required course material and equipment

Required material: Testout LabSim Network Pro (N10-005, ISBN#978-1-935080-43-5)

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

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 LabSim.Testout.com.

How to purchase the course material on-line? (see “Resources” on ETUDES course shell)

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 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 the subject of Testout Network Pro, each student must add himself or herself to “West Los Angeles College” and “CS965 Fall 2014” before starting the course work (join a college and class after login). See instruction on the left menu “resources” of ETUDES course shell.

Product Activation Code

Once you place the order on-line, you will receive an e-mail confirmation and product activation code from Testout Corp. Please note that Testout no longer sends out DVD or LabSim manual, everything is online now. The course material can be accessed by logging into labsim.testout.com

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.

On-line course shell ETUDES login instruction

College official on-line course shell ETUDES login instruction :

If you are a first-time online student, please see the dates for orientation (on the top of page 1). 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. Click on course login.

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

(Login ID: first 2 letters of first name+ first 2 letters of last name+ last 5 number of student ID, password is birthday)

- User ID: just90210
- Password: 0704

After logging in, double click the course you are enrolled.

If you are a first-time on-line student, make sure your Browser settings are as follow:

Tools->Internet Option-general->security setting->add www.myetudes.org or www.wlac.edu/online as trusted site.

If you do not know your Student Identification Number you can look it up using the Student Information System (SIS) at <http://www.laccd.edu>.

Email Communication

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 course shell. You might want to update your email address under

MyWorkspace-> Account-> Modify to update your personal e-mail address.

Trouble login to ETUDES

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@wlac.edu.

Class rules & guideline on assignment and exam

By taking this class, you agree to follow 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 will result in “Failure”.
- 3) You have to purchase the required material the first day when semester starts, those who got the required material can start working on the course.
- 4) You will submit assignment and exam via college official on-line site **ETUDES**. You must log on to ETUDES on regular basis to check the following:

Announcement- Check announcement every time you login, important announcement will be posted.

Syllabus-Course syllabus is attached.

Assignment-follow step a b c d e

- a) copy the review questions to a Word document and save it as a file on your hard drive or flash drive,
 - b) click on "continue later",
 - c) when you finish the work, save it, go to ETUDES, open the assignment, browse and upload it, then click on "finish",
 - d) once you click on “finish”, you can’t open and view it until the instructor releases the grade.
 - e) you can e-mail the instructor (chianga@wlaac.edu) requesting for a re-submit if you need to.
- 5) follow the schedule to work on “Assignment” and “Test”. Do not wait until the last minute to work on assignment. **Assignment submitted after due day within one week will receive 20% deductions.** Assignment submitted after one week within 2 weeks will receive 30% points off. Late assignment will not be accepted after 2 weeks. The full credit for each assignment is 100 points.

Tests- You will take exam including final exam and submit it from here. Deadline is posted. No late exam is allowed.

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

(6). You should print every chapter and lesson’s “FACTS” from the Testout subject program. Each chapter has several lessons; each lesson has several text outline “FACTS” which help you answer the questions on the review-question-assignment and can be the study guide for exam too. For most of the review-question-assignment, you can find the answer key from the chapter and lesson “FACTS”.

(7). No make-up exam/test. Once you have viewed or taken the exam, you can't open or retake it. There are about 6 exams plus final. 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, 60 minutes for 33 questions (multiple choices). **THERE IS NO MAKE-UP or RE-TAKE EXAM**. If there is an emergency, e-mail the instructor to schedule an "on-campus" exam within 7 days after exam expires (with 20% points off). Each student has only one opportunity to do so throughout the entire semester.

(8). Official test is posted on ETUDES, the study guide is the material on Testout LabSim subject course, including lecture, outlines, and exam simulation.

Testout exam simulation weigh 30% of semester grade, you can practice over and over again. Exam simulation has answers and explanations which help build your knowledge base. This is for practice and for study guide before taking the **Official Test in ETUDES** as described earlier. Answer key can be reviewed after one week from the test due date.

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

(9). Based on students' experiences, you should take ETUDES 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.

(10).CE101 computer lab is open to CS students, please check division website www.wlac.edu/csit for lab open hour.

(11). Being a member of Microsoft & VMWare Academic Alliance, the enrolled students can download VMWare, Microsoft operating system (Windows, server operating system and development tools like Microsoft ACCESS, Visual Studio) for free. You can visit division website www.wlac.edu/csit and click on the left menu to make request or contact IA Laurent Phung via PhungL@wlab.edu.

(12).CS dept. is member of CompTIA education alliance, students can take A+, Network+,Security+ with discount voucher, please contact Laurent Phung via PhungL@wlab.edu or the instructor for detail.

(13). All other school/class rules will be enforced.

CS965 Grading scale

ETUDES Exams 30% ETUDES Assignment 30% ETUDES Final or Network PRO 15%
Testout Lab simulation 25%

The following table is a preliminary schedule, the updated version of schedule of Assignments and Exams are posted on WLAC official on-line ETUDES site.

Deadline of each assignment and test is posted on ETUDES

| Testout Labsim Network Pro Chapter | ETUDES Review Question-Assignment and Testout Lab Simulation | ETUDES Exam due |
|--|--|--|
| Chapter # 0 & 1 Networking Basics | Assignment due 9/14 Lab 0.2.2 0.2.4 1.44 | |
| Chapter #2 Cable and connectors | Assignment due 9/20 Lab 2.1.3 2.2.3 2.3.3 2.3.4 2.4.6 2.4.7 | Exam#1 (C#1 & 2) 9/21 |
| Chapter #3 Network Devices | Assignment due 9/28 Lab 3.1.3 3.1.4 3.2.3 3.2.4 3.3.3 | |
| Chapter #4 Ethernet | Assignment due 10/4 Lab 4.2.3 4.2.4 4.3.3 4.3.4 | Exam#2 (C#3 & 4) 10/5 |
| Chapter 5.1-5.2 Chapter 5.7-5.9 Skip 5.3-5.6 Network Implementation | Assignment due 10/18 Lab 5.1.5 5.2.7 5.2.5 5.8.3 5.8.4 5.8.5 | Exam#3 Chapter 5.1-5.2 Chapter 5.7-5.9 10/19 |
| Chapter #6 Wireless Networking | Assignment due 10/25 Lab 6.4.4 | |
| Chapter #7 Wide Area Networks | Assignment due 11/1 Lab 7.2.5 | Exam#4 (C#6+7) 11/2 |
| Chapter #8 Network Security | Assignment due 11/8 Lab 8.2.5 8.3.4 8.4.4 8.7.3 | Exam#5 (C#8) 11/9 |
| Chapter #9 Skip 9.2/9.4/9.5 Network Management | Assignment due 11/16 Lab 9.3.3 9.5.3 | Exam#6 (C#9) 11/16 |
| Chapter 5.3-5.6 | Testout Exam Simulation due 11/23 | |
| Chapter 8.4-8.6 | Testout Exam Simulation due 11/30 | |
| Chapter 9.2-9.5 | Tstout Exam Simulation due 12/7 | |
| Final Exam Comprehensive or Network PRO certification exam | Lab chapter 10 due 12/14 10.2.4 10.3.9 10.3.10 10.3.11 10.3.12 10.3.13 | Final exam 12/21 |

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.

- **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

