



**Division: Computer Science and information Technology**  
**Course name: Introduction to Linux Operating System**  
**Section: 8510 / Semester Fall 2013**

<b>Instructor Name: Larry Wang</b>	<b>School Website: <a href="http://www.wlac.edu">http://www.wlac.edu</a></b>
<b>Class Hours: Saturday</b>	<b>Address: 9000 Overland Ave., Culver City, CA 90230</b>
<b>9:00am – 12:00pm (CE104), 1 hour online (Etudes)</b>	
<b>Office Hours: Saturday</b>	<b>Instructor E-mail: <a href="mailto:wangl2@wlab.edu">wangl2@wlab.edu</a></b>
<b>12:00PM – 13:00PM (CE104),</b>	<b>CS Division Web Site: <a href="http://www.wlab.edu/csit">http://www.wlab.edu/csit</a></b>

**New student email system:**

<http://www.wlab.edu>-> For student -> middle of page -> Instructions and vidéo for student email system

## Welcome

This semester, you will learn to install, understand and use the Linux Operating System, one of the most popular computer operating system in the world. You will learn and practice the Linux shells and various applications come installed with the operating system. The goal is for you to understand the fundamental operations of the Linux operating system, user administration, understand permissions, software configurations, and more confident using it by the end of this course. The skills you learn here will help you succeed both in and out of class

## Course Description:

This course gives students a solid foundation in the fundamentals of the Linux operating system, which plays a crucial role in academic and corporate computing world. In fact, Unix/Linux powers more Internet server and corporate networks than Microsoft. The topics include Linux Overview and Architecture, The Kernel and Shell, File System, Users and Groups Management, Permission and Ownership Management, Services and Processes Management. Students gain system-level experience through problem solving hands-on lab exercises at the command line and in the graphical user interface.

## Required Materials:

**LabSim, Linux+ Powered by LPI (Exam LX0-101 and LX0-102), ISBN#978-1-935080-38-1.**

**Note: this is a new version for CompTIA Linux+ certificate exam.**

A multimedia web based training subscription with video lecture, chapter & lesson notes, lab simulation and exam simulation.

**Do not purchase the older version (xk0-002).**

### **How to subscribe the required course material on-line?**

To access the student pricing (\$89 valid for 3 years), students need to go to [www.testout.com](http://www.testout.com) or [labsim.testout.com](http://labsim.testout.com) and enter the promotional code **14-346TA (not 14-233TA)**. Here students will need to enter the school name **West Los Angeles College**. This will check with the publisher's database to verify 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 **Larry Wang**. Then proceed as normal. Student can call TestOut Corporation at 1-800-877-4889 ext. 221 or e-mail Jeff Hanks via [JHanks@testout.com](mailto:JHanks@testout.com) with any questions about the subscription and student account.

### **Lab Simulation Progress Report:**

In order for the instructor to keep track of students' performance on Lab Simulation assignments, each student must add himself or herself to the class of **"CO 935 INTRO LINUX FALL 2013"** before starting the course work.

### **Testout Product Activation Code**

Once you subscribe the subject on-line, you will receive e-mail confirmation for product activation code in a few minutes. Please note that Testout no longer sends out DVD or LabSim manual, everything is online now. To Access the subject course, go to <http://labsim.testout.com>

If for any reason students need to subscribe the required material from WLAC bookstore, please order it via WLAC's bookstore <http://store450.collegestoreonline.com> or contact Nelson Zelaya in the bookstore.

### **Trouble login to ETUDES:**

If you have trouble accessing the online course shell after semester starts, 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 or contact the WLAC Distance Learning Program Office at (310)287-4305 or via email: [shemwer@wlab.edu](mailto:shemwer@wlab.edu)

### **Advised Prerequisites:**

CS934 or Operating System basics.

### **Special Notes:**

**The instructor suggests student to enroll in CS967 (LAMP, Virtualization and Cloud computing), after completing the CS935. CS967 is an intermediate to advance Linux class covering the last few**

sections from CS935, several advanced Linux subjects, such as LAMP (Linux, Apache, MySQL and PHP), virtualization and open source cloud computing.

### Student Objectives:

Upon successful completion of this course, students will be able to . . .

- Demonstrate ability to use Linux operating system.
- Demonstrate ability to set up Linux operating system on a PC.
- Understand the startup and shutdown process of a Linux operating system.
- Demonstrate ability to maneuver a Linux using its graphic user interface desktop system.
- Demonstrate ability to install and maintain the software.
- Understand and demonstrate knowledge about Linux disk and file system management
- Understand the File Hierarchical System and the hardware installation of Linux operating system
- Demonstrate ability to maintain underlying hardware used by Linux operating system
- Understand Linux processes and system services.

### Institutional Learning Outcomes (ILOs)

This course will also facilitate the following Institutional Learning Outcomes:

- Critical Thinking: Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences
- Technical Competence: Utilize the appropriate technology effectively for informational, academic, personal, and professional needs. Use competent technique in a musical performance.

### Course assignment guidelines and method of evaluation

Course assignments have divided into TWO parts:

1. Writing assignments, midterm and final exams, which are administered by **WLAC online course shell ETUDES**.
    - You have **ONE** week to subscribe the required material after semester starts.
    - You will submit assignments, midterms and final exams via **WLAC online course shell ETUDES**.
    - You must log on to [WLAC ETUDE](#) on regular basis to check the following:
      1. **Announcements** – You should check announcement every time you login, important announcement from the instructor will be posted here.
      2. **Syllabus** – Course syllabus and class rules is attached here.
      3. **Modules** – Will show each week’s subjects, you will download the assignment answer template from here.
      4. **Assignment & Test** – You will work on assignment and submit it from here. Deadline is posted.
- 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, or you can download each assignment from the corresponding modules.

- b) click on “continue later”,
  - c) when you finish the “review question assignment” -> 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 ([wangl2@wlaac.edu](mailto:wangl2@wlaac.edu)) requesting for the re-submit in case you need to.
5. Follow the schedule to work on “Assignments” and “Tests”. **Do not wait until the last minute** to work on the assignments.
  6. Assignments will be graded base on the concept, keywords and accuracy.
  7. **Assignments submitted after the due day will receive 10%-90% deductions** (one week late 10%, two weeks late 20% ...etc). The full credit for each assignment is 100 points.
  8. **Midterms and final exams** - You will take exam including final exam and submit it from here , they will be graded by Etudes automatically, I’ll also take the highest value by the due date/time. Deadline is posted
  9. **Discussion and Private Message** - You can communicate with the instructor here, however, for urgent issues, please send e-mail to the instructor via [wangl2@wlaac.edu](mailto:wangl2@wlaac.edu).
  10. You should print the “notes/facts” from every lesson and chapter which help you answer questions on the review question assignment and can be the study guide for exam too. For most of the questions in the assignment, you can find the answer from the lesson notes/facts. You will get full credit for assignment as long as your answer contains the KEY WORDS.
  11. No **make up** exam. Once you have viewed or taken the exam, you can’t open or retake it. There are 3 midterms plus final exam, these exams will be held while in class, check the syllabus for exact dates. Use a clock when you start the exam. All exams are **timed exam!** **THERE IS NO MAKE-UP or RE-TAKE EXAM.**
2. LabSim sectional simulation labs and sectional quizzes, which are administered by LabSim online courseware program.
    - “Testout” **Lab Simulations & Video demonstrations** are very important to help building your skill set. If you don’t succeed in lab simulation, click on “explanation” which will list the correct steps to complete the lab.
    - The instructor has admin tool to keep track of the performance of a student’s lab simulation works, students can repeat it over and over until reaching 80% +.
    - The LabSim sectional quizzes (exam simulation) weighs 20% of semester grade, I’ll take the highest value by the due date/time.
    - The LabSim’s lab simulation works weighs 10% of semester grade. The deadline is provided in the syllabus.
    - Based on students’ past experience, you should take the sectional quizzes as soon as you complete the assignments, since you memory is still fresh.

Exam study guide will be the lesson notes/facts, lab simulation and exam simulation.

If there is any emergency, e-mail the instructor and schedule a “makeup” exam.

CE101 computer lab is open weekdays and Saturday, for details, please consult our CSIT division website: <http://www.wlac.edu/csit>

Being a member of Microsoft, VMWare, EMC, Cisco and Oracle Academic Alliance, our students can download free OS and development tools for free, please visit our CSIT division web site: <http://www.wlac.edu/csit>-> left menu -> click on free software download or contact Laurent Phung via email: PhungL@wlab.edu.

### Linux operating system installation

To practice Linux commands on a real system, the instructor will walk students through installing VMWare Workstation on the Windows PCs in the lab; then install Scientific Linux 6.x Operating System as virtual machine in the VMWare Workstation.

If you are interesting in doing same with your home personal computer, both VMWare Workstation, VMWareFusion and Scientific Linux Operating System installation DVD can be obtained (\$1 each) via Instructional Assistant – Laurent Phung in CE101, please make appointment via [PhungL@wlab.edu](mailto:PhungL@wlab.edu) or call lab at 310-287-4268. The instructor will have Scientific Linux 6.x installation DVD available on first class session.

### Grading

Assignment Category	Total Points	% of Total Grade
LabSim Sectional Quizzes	100	20%
LabSim Sectional Simulation	100	10%
Assignments	100	20%
Mid-Term	100	30%
Final	100	15%
Attendance, ...	100	5%
<b>Grand Total</b>	<b>1000</b>	<b>100%</b>
900 - 1000 = <b>A</b>	600 - 699 = <b>D</b>	599 and below = <b>F</b>

### Class Policies

#### Attendance

Because class discussions and group work are an integral part of this course, attendance is mandatory. Up to 3 absences are allowed. After that, you could be dropped. Students are expected to attend every class meeting, to arrive on time and stay throughout the class period. **Excessive absenteeism will lower your grade, as well as walking in and out of class.** 3 tardies = 1 absence. Students may be dropped from class for excessive tardiness, or for failure to attend class the first day or during the entire first week of the class.

#### Walking In and Out of Class

When you arrive to class, make sure you have used the restroom, had a chance to eat, check your messages, etc. Walking in and out is rude and disruptive. If you need to leave early, or have some other problems, you should notify instructor in advance. **Any student who makes a habit of walking in and out of class may be asked to leave.**

### **Cell Phones, iPods, etc,...**

Turn them off and put them away when class begins! Although it may not seem possible, you can survive without talking and texting on your cell phone, or listening to your iPod, for a little over an hour. Talking and texting on cell phones not only distract you, but they are a distraction for instructor and your peers. Distractions interrupt/disrupt the class and **you will be asked to leave if this occurs.**

### **Contacting instructor**

E-mail is the best and quickest way to contact me and I do read my email. Therefore, excuses such as, "I tried to contact you but ....." will not work. **If you have a problem, do not let it snowball.**

### **Contact instructor immediately.**

Students are expected to ask questions and obtain help from instructor via email and/or during office hours.

**For more information refer to the attached link:**

[http://www.wlac.edu/academics/pdf/WLAC\\_10-12Catalog\\_Policies.pdf](http://www.wlac.edu/academics/pdf/WLAC_10-12Catalog_Policies.pdf)

### **Departmental Resources:**

**CS Division Web Site:** <http://www.wlac.edu/csit>, with the following information:

Division announcements - Scholarship and Internship opportunities

CS Instructor Office Hour and Computer Lab Open Hours

Petition for Degree and Certificate

Petition for Prerequisite Challenge

Declaration for a Major - to be eligible for scholarship and internship

Discount Voucher for CompTIA A+, Network+, Security+, Linux+

Free Software Download(Windows 7, Windows Server 2008, VMWare, Microsoft ACCESS and Visio Studio)

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

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 Administration (10 major courses)

Certificate of Achievement in Computer Network Management ( requires 6 courses)

Certificate of Achievement in Information System Security (requires 6 courses)

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

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

**New student email system :**

**<http://www.wlac.edu> -> For student -> middle of page -> Instructions and vidéo for student email system**

**Faculty advisor and major declaration**

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

By default, your instructor can be the faculty advisor; please see your 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@wlab.edu](mailto:PatilA@wlab.edu)

**Anna Chiang** - Degree, transfer and certificate in Computer Information Science/Computer Network and Security Management- [ChiangA@wlab.edu](mailto:ChiangA@wlab.edu)

**Marcus Butler** - Microsoft, CISCO, VMWare training, [ButlerM@wlab.edu](mailto:ButlerM@wlab.edu)

**Manish Patel** - Degree and certificate in Web development and Database Administration- [PatelM@wlab.edu](mailto:PatelM@wlab.edu)

**Bill Vega (H1B coordinator)** – Job placement assistance for students in the advanced classes such as CISCO network, Security, Web & Mobile development, Database & Computer Science, [VegaWM@wlab.edu](mailto:VegaWM@wlab.edu)

**Transfer Honors Program** - <http://wlab.edu/transfer/index.html> - honors, This course is part of Transfer Honors Program, student need to go to the transfer center located in the Student Services Building-3<sup>rd</sup> floor (SSB 340), fill out the application form, submit application along with documents as indicated to the Transfer Honors Director, after you're notified of acceptance, then come back to ask instructor for extra credit works.

**Exclusion Policy:**

**One or more** missing class sessions/assignments before **Sept 6** will result in being **excluded** unless you have permission from the instructor. **It is your responsibility** to drop the class. Failure to drop the class in a timely manner will result in a "W" or "F" on your transcript.

**Incomplete Policy:**

A Student who has successfully completed more than 75% of the course work and has communicated with the instructor with a justifiable explanation may be considered for an incomplete grade. With "incomplete" grade, the student must complete all missing assignments/exams/projects and notify the instructors to change grade within 1 year grace period.

## 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. You will not receive credit for any essay missing previous drafts, citations and/or a Works Cited page.**

### 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 (WLAC College Catalog).

For more information refer to the attached link:

[http://www.wlac.edu/academics/pdf/WLAC\\_10-12Catalog\\_Policies.pdf](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 (WLAC College Catalog).

### 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 (WLAC College Catalog).

### 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 (WLAC College Catalog).

**for more information refer to attached link:**

[http://www.wlac.edu/academics/pdf/WLAC\\_10-12Catalog\\_Services.pdf](http://www.wlac.edu/academics/pdf/WLAC_10-12Catalog_Services.pdf)

### Important Dates:

Activity	Date
Last date to Add/Audit traditional classes via web	Aug 25/Sun
Last date to Add/Audit traditional classes in person	Sep 06/Fri
Last date to Drop classes with a refund/no fees owed	Sep 06/Fri
Last date to Drop classes without a "W"	Sep 06/Fri
Last date to Drop classes with a "W"	Nov 15/Fri
Last date to File for Pass/No Pass	Sep 06/Fri
Final Exam	Dec 14/Sat

**CS935 Fall 2013**

**09:00 a.m. – 11:55 a.m.**

**NOTE: This syllabus and class schedule is subject to change if circumstances warrant it (e.g. student performance, etc.). Expect revisions and divergences.**

Week	Date	Course Topics	Modules & Assignment	Labsim Quizzes	Notes
1	08/31/2013	Introduction, work environment	Chapter #1.1 – 1.5	All assignment and quizzes due by noon of the day	DVD Distribution
2	09/07/2013	Linux shells, help, environment variables, alias, editors	Chapter #1.1 – 1.5	N/A	Labsim sectional quizzes will be checked via LabSim Administrator interface
3	09/14/2013	Redirect, piping, directories, files, links, FHS, locate, search	Chapter #1.6 – 1.11	Due 1.1.9, 1.2.7, 1.3.5, 1.4.4, 1.5.6, Assignment #1-1	
4	09/21/2013	Linux installation, design,	Chapter #2	Due 1.6.7, 1.7.9, 1.8.9,	

		localization		1.9.6, 1.10.3, 1.11.7, Assignment #1-2	
5	09/28/2013	Exam		Due 2.1.3, 2.2.4, 2.3.4, Assignment #2	Close book, timed
6	10/05/2013	boot process, bootloaders, run levels, init scripts, system shutdown	Chapter #3		1 <sup>st</sup> Exam review
7	10/12/2013	X Window system, display managers, accessibility	Chapter #4	Due 3.1.3, 3.2.9, 3.3.9, 3.4.10, 3.5.7, Assignment #3	
8	10/19/2013	RPM, DPKG, shared lib	Chapter #5	Due 4.1.7, 4.2.7, 4.3.4, Assignment #4	
9	10/26/2013	Exam		Due 5.1.8, 5.2.4, 5.3.4, Assignment #5	Close book, timed
10	11/02/2013	user & group management	Chapter #6		2 <sup>nd</sup> Exam review
11	11/09/2013	Disk partition, file systems, mounting, filesystem maintenance	Chapter #7.1 – 7.4	Due 6.1.6, 6.2.12, 6.3.10, Chapter #6	
12	11/16/2013	Quotas, ownership, permissions, archive & backup	Chapter #7.5 – 7.8	Due 7.1.10, 7.2.8, 7.3.7, 7.4.6, Assignment #7-1	
13	11/23/2013	Exam		Due 7.5.10, 7.6.8, 7.7.17, 7.8.9, Assignment #7-2	Close book, timed
14	11/30/2013	Device drivers, kernel module management, hotplug & coldplug devices	Chapter #8		3 <sup>rd</sup> Exam review
15	12/07/2013	Review	Review	Due 8.1.5, 8.2.6, 8.3.4, Assignment #8	
16	12/14/2013	Final exam			Close book, timed

## Student Acknowledgment

(Please return this sheet to the instructor)

"I \_\_\_\_\_, have completely read this syllabus and understand and agree to the course requirements."

Please indicate below, any special needs or circumstances that may have some impact on your work in this class, and for which you may require special accommodations, including but not limited to physical or mental disabilities, inability to arrive in class on time or need to leave class early, observance of religious holidays, etc.

Special needs or circumstances:

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