

Cosumnes River College
CISN 302
Intermediate Network Systems Administration - Linux
A Hybrid-Online Course
Fall 2008

Instructor: Buddy Spisak

Office Hours: Tues. 6:30-7:40 p.m. (Aug. 26th to Dec. 9th)

Office Location: BS-143

Voice Mail: (916) 568-3100 ext. 14162 or (800) 486-8156 ext. 14162

E-mail: spisakj@crc.losrios.edu The turnaround time for responding to most E-mails is about one to two days. Be sure to include your name and the course number in each E-mail so I can identify who you are and what the E-mail is about.

Course Web page: <http://d2l.losrios.edu/>

Instructor Web page: <http://crc.losrios.edu/spisakj/>

Microsoft Messenger: You can also add me to your contact list for Windows Messenger. You can use my E-mail address to find me.

Prerequisites: CISN 300

Advisory:

Lecture: Online

Lab: W 6:00 to 9:10 p.m.

Accepted for Credit: CSU

Class Credits: 3 units

Required Textbooks:

Title: Advanced SUSE Linux Enterprise Server Administration

Author: Jason Eckert

Publishing Info: Thompson Course Technology, 2007

ISBN10: 1-4188-3732-6

ISBN13: 978-1-4188-3732-7

Optional Materials:

3-1/2" floppies, a flash drive, or RW-DVD's to store your work for the class

Course Description:

This course covers advanced administrative tasks of a server in a client/server network. Topics include configuring the server environment, implementing system policies, implementing and managing fault-tolerant disk volumes, managing applications, installing and managing connectivity for different network and client operating systems, managing remote servers, implementing directory replication and file synchronization, and troubleshooting advanced network problems.

Student Learning Outcomes and Course Objectives:

As a result of completing this course, you will be able to:

- SLO #01: EXAMINE NETWORK SERVICES
 - Measure the purpose of the Dynamic Host Configuration Protocol (DHCP) and how it streamlines network administration
 - Evaluate the process of name resolution (DNS) and why it is important to an organization
 - Set up a File Server

- SLO #02: DESIGN NETWORK SECURITY
 - Rate the network security protocols used for authorization
 - Research the basics of a security model
 - Examine user rights and understand the difference between a user right and a permission
 - Compile server security using security baseline settings and audit security settings
- SLO #03: MAKE BACKUP AND RECOVERY PLANS
 - Recommend a backup strategy
 - Compile Backup Files
 - Investigate the primary methods and devices used to back up critical data
 - Research methods for creating a high-availability network
 - Determine key server management and disaster recovery strategies for preserving system uptime
- SLO #04: SUPPORT THE NETWORK INFRASTRUCTURE
 - Evaluate network traffic
 - Resolve issues related to service dependency
 - Diagnose network connectivity issues
 - Evaluate routing protocols, routing tables, and routing ports

Methods of Measuring Student Learning Outcomes:

- You will demonstrate knowledge of network and Internet security applications and standards through class discussions and achievement on quizzes and final examination.
- You will demonstrate competence in the coursework by completing lab work and participating in the discussion board during the semester.

Student Obligations:

- **Attendance:** Since this course is online, only attendance at the On-Campus Orientation on Oct. 22, 2008 and the Final on Dec. 17, 2008 is necessary. There will be weekly lab time on campus, and it is up to you to complete the lab assignments during the lab time or at home.
- **Late Work:** Unless noted all assignments are due on Tuesday by midnight each week. Late work will be accepted ONLY if you have contacted me prior to the due date either by E-mail or voice mail. In general, late work is due the next week, and no late assignments may be turned in after one week from the original due date regardless of the reason. For every day an assignment is late, you will lose 10% of its grade.
- **Due Dates:** Unless noted all assignments will be submitted in Desire2Learn under the "Weekly Assignments" link. If, for any reason, you cannot access Desire2Learn or are unable to submit the assignment on time, please E-mail it to me instead so that you are not penalized for being late. Quizzes and the discussion board items cannot be taken past their due date. If you miss a quiz and you want to make up points you can take advantage of the extra credit assignments posted in Desire2Learn. Everyone is welcome to work on the extra credit assignments. Typically, they are five to ten points each, depending on the difficulty of the assignment.
- **Labs:** There will be six labs credited for homework for the class. The due dates are located in the **SCHEDULE** portion of this handout. We will spend a lot of time working on lab activities. Each lab has a set of review questions that you will need to answer in Desire2Learn in order to receive points for that assignment. If you do the lab work at the college during the regularly scheduled lab time, you will not have to submit your results in Desire2Learn. Instead, I will visually confirm your work and assign your points in class.
- **Discussions:** I want everyone to take a pro-active approach to learning this material. This includes using the discussion board to ask questions and also answer other students' questions. I will also post questions each week that you can answer to further your understanding of the material. I expect two postings each week unless otherwise noted.

- **Final Exam:** The final exam will consist of two parts. One part of the exam will be a hands-on practical demonstration of assigned tasks and the other part will be an exam taken in Desire2Learn.
- **Plagiarism Policy:** It is inappropriate, and a violation of academic policy, to copy information from any source (including, but not limited to, textbooks, magazine articles, newspaper articles and Internet articles) without giving proper credit to the author by using standard quotation procedures such as in-line quotes, footnotes, endnotes, etc. Quotes may not exceed 25% of the assignment's total length. You will receive no credit (0 points) for any assignment that copies any material from any other source without giving proper credit to the author(s). Repeat offenders of this policy are subject to academic discipline as outlined in the policies published by the college.
- **Cheating:** Students who cheat will receive a failing grade for the course. (See CRC 2008-09 College Catalog, p. 37.)
- **E-mail:** Every student will be required to have an E-mail account.
- **E-mail etiquette:** I will not tolerate rude and demeaning comments or e-mails to anyone in this class. Please keep your comments and e-mails topic-related. If I determine that a comment or e-mail to anyone else in the class is rude or demeaning, I will warn you once. If your behavior continues to be unacceptable, I will refer you to the administration of the college for disciplinary action.
- **Personal belongings:** No food or drinks are allowed in the classroom. All cell phones, beepers, pagers, etc. should be turned off or set to vibrate.
- **Disabilities:** If you have a documented disability and wish to discuss academic accommodations, please contact me after class or contact the Office of Disabled Student Programs and Services at 691-7275 as soon as possible.
- **Campus Police:** You can call 691-7777 to request a safety escort.
- **Desire2Learn:** This class utilizes a product called "Desire2Learn." It is highly recommended that you check the website frequently for scheduling updates and homework assignments. Most of the homework assignments and quizzes will be done on Desire2Learn.
- **Online Course Responsibilities:** This course requires significant self-motivation. You must not get behind. Labs and weekly assignments can take up to eight hours to finish. Please don't try to finish them in one day. Not all activities are created equal. Some may take a bit longer than others. You would normally spend 4 hours per week in class for this course: total of 54 hours. Allow yourself at least 8 hours per week to complete the activities online, including the time spent writing for the postings to the class discussion board. You should plan additional time to read the textbook and study for the quizzes. Some people believe this is a much easier way to study this subject than an on-campus framework because they love to read and avoid the parking problems. Others feel very intimidated at first. Be patient as you work your way through the activities.

Grading:

Course Topic	Points	Total	Approximate % the of Grade
Labs (8)	50	400	49
Orientation Quiz (1)	10	10	1
Quizzes (4)	30	120	15
Discussions (4)	20	80	10
Final Exam (1)	200	200	25

Point System:

There are 810 total assigned points.

Grade Ranges: A= 729-810, B=648-728, C=567-647, D=486-566, F=0-485

Schedule: It is tentative and can change during the course of the term. All changes will be located under the "News" section in Desire2Learn for the course.

	Day:		Lecture/Lab Schedule:	Assignment Due:	Due Date (By Midnight):
Week 1	Wed.	10/22	Orientation and Introductions	Orientation Discussion Orientation Quiz	Tues., Oct. 28
			Ch 1: Install SLES 9 Lab #1:	View the Online Orientation	
Week 2	Wed.	10/29	Ch 2: Configure the Network Manually Lab #2:	Discussion #1(Ch 1-2) Quiz#1(Ch 1-2) Lab #1	Tues., Nov. 4
Week 3	Wed.	11/5	Ch 3: Configure Network Services Lab #3:	Lab #2	Tues., Nov. 11
Week 4	Wed.	11/12	Ch 4: Secure a SLES 9 Service Lab #4:	Discussion #2(Ch 3-4) Quiz#2(Ch 3-4) Lab #3	Tues., Nov. 18
Week 5	Wed.	11/19	Ch 5: Manage Backup and Recovery Lab #5:	Quiz#2(Ch 3-4) Lab #4	Tues., Nov. 25
Week 6	Wed.	11/26	Ch 6: Create Shell Scripts Lab #6:	Discussion #3(Ch 5-6) Quiz#3(Ch5-6) Lab #5	Tues., Dec. 2
Week 7	Wed.	12/3	Ch 7: Compile Software from Source Lab #7:	Quiz#4(Ch10-11) Lab #6	Tues., Dec. 9
Week 8	Wed.	12/10	Ch 8: Perform a Health Check and Performance Tuning Lab #8:	Discussion #4(Ch 7-8) Quiz#4(Ch7-8) Lab #7:	Wed., Dec. 17
Week 9	Wed.	12/17	Final Exam	Lab #8:	All work needs to be turned in.