Syllabus
CST 334: Operating Systems
California State University, Monterey Bay   Fall 2013

Course Information

Credits: 4.0
Prerequisites: CST 221 or CST 231 or Instructor's consent
Lectures: MW, 2:00P – 3:50P, Building 18 (Media Learning Center), Room 104

Course Description

This course provides students with major functions and principles of operating systems using Linux as a sample operating system. Main topics include the overview of operating systems, process management, memory management, storage management, essential Linux utilities and commands, shell scripting, and system programming.

Instructor

Name: Jose C. Coria, M.S.
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Phone: TBA
Office: Bldg 18, Room 188

Office Hours

Monday   4:00P – 5:00P
Wednesday   4:00P – 5:00P
Or by appointment

Course Web Site

http://ilearn.csumb.edu/
Additional course information and announcements will be available on this site. It is student's responsibility to check this site frequently.

Recommended References

Author: Mark G. Sobell
Title: A Practical Guide to Linux Commands, Editors, and Shell Programming (2nd Ed.)
Publisher: Prentice Hall, 2010
ISBN: 0131367366

Author: Abraham Silberschatz, Peter B. Galvin and Greg Gagne
Title: Operating System Concepts (8th edition)
Publisher: Wiley, 2008
ISBN: 0470128720

Course Objectives

The main objective of this course is to provide students with major functions and principles of operating systems through practical usage and experience in Linux and UNIX environments. In the course, students will learn the operating system basics, process management, memory management, storage management, Linux file and directory systems, essential Linux utilities and commands, shell scripting (bash), and text utilities such as vim, grep, awk, and sed. Moreover, students will have basic Linux system programming skill.

Course Outcomes

Upon successful completion of this course, student will be able to

- describe major functions and components of operating systems.
- use essential commands and utilities of the Linux system.
- identify internal behavior of process creation and control.
- describe basic operation of memory management in an operating system.
- manage file and directory system of the Linux system.
- write a shell script using the vi text editor.
- develop a system program in the C program language.

Main Topics

- Operating systems overview and principles
- Introduction to UNIX and Linux
- Essential Linux commands and utilities
- Memory management
- Linux files and directories manipulation
- Processes and threads
- Concurrency and synchronization
- Shell script (bash)
- Introduction to C and system programming
- Text utilities such as vi, grep, sed, and awk
- Advanced topics, if time permitted

Exams

- First midterm: October 7, 2013 (Monday) in class.
- Second midterm: November 13, 2013 (Wednesday) in class.
- Final: December 16, 2013 (Monday) in class.
- All exams are closed book.
- Final exam will be comprehensive.
- A calculator is not necessary for the exam.
- No re-grading will be accepted one week after the graded assignment is returned to the students.
- No makeup exam will be allowed, except in extreme emergency cases. Students are advised to let the instructor know beforehand, if possible.

Quizzes

- Quizzes will irregularly be held in class.
- Quiz date will be announced in advance a few days before the quiz.
- No re-grading will be accepted one week after the graded assignment is returned to the students.
- No makeup for a quiz.

Homework

- Programming and problem solving assignments will be given throughout the semester.
- Late submission will be penalized 15% after the due date. Assignments handed in more than 48 hours later will not be accepted.
- No re-grading will be accepted one week after the graded assignment is returned to the students.

Labs

- A handout of each lab will be given before the lab.

Grading Policy

Midterm – I	15%
Midterm – II	15%
Final Exam	20%
Homework	35%
Quiz	5%
Lab	10%

Grade		
A	100	$93 \geq$
A–	$93 <$	$90 \geq$
B+	$90 <$	$87 \geq$
B	$87 <$	$83 \geq$
B–	$83 <$	$80 \geq$
C+	$80 <$	$76 \geq$
C	$76 <$	$70 \geq$
F	$70 <$	0

Attendance

Students are expected to be regular and punctual in class attendance. Students are responsible for all materials covered in lectures and labs. Lab attendance is mandatory. So, if you miss a lab, you will get zero point for the lab.

Note to Students with Disabilities

Students with disabilities who may need accommodations please see the instructor as soon as possible during office hours or make an appointment by email. Also, contact:

Student_Disability_Resources@csumb.edu
Building 47, Student Services, First Floor
Phone: 831/582-3672 voice, or 582-4024 fax/TTY
http://sdr.csumb.edu/

Academic Integrity Policy in This Class

Cheating of any kind will not be tolerated at all in this class. You are responsible for your own original work on all assignments, labs, homework, exams, and all programming code. Two or more students submitting extremely similar code will receive the zero point on the assignment and be reported to the academic dishonesty board. There are continual checks of the assignments to be sure that everyone is handing in original code.

For more detailed information, refer to http://csumb.edu/site/x2161.xml