Computer Science Technology Department

Houston Community College-*Central*

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Houston Community College

ITSC 1307 Unix Operating Systems I (22643)
Course Syllabus

Instructor	**H. M. LE** **Microsoft Certified Professional (MCP)** **RedHat Certified Technician (RHCT)** **Cisco Certified Instructor** **Cell: 832-766-0486** **Email hung.le8@hccs.edu** http://eagle.hccs.edu/faculty/le_h/index.html
Course Reference Number (CRN)	22643
Course Description:	A study of the UNIX operating system including multi-user concepts, terminal emulation, use of system editor, basic UNIX commands, and writing script files. Topics include introductory systems management concepts.
Course Prerequisite(s)	**PREREQUISITE(S):** Prerequisite or concurrent enrollment in COSC 1436 or ITSE 1302
Course Semester Credit Hours (SCH) (Lecture, Lab) if applicable	3 (2 Lecture, 4 Lab) ; **Web Enhanced:** 4 hours in class and 2 hours online

Course Location/Times	Spring Branch Campus (rm# 708) 6:00PM-10:00PM Fri	**Total Course Contact Hours**	48

Instructional Materials	• Access to a PC running Windows 7/Windows 10/Linux/Unix with internet access. • PC should have speakers (microphone optional). • PC should have access to the SSH shell (download from ce.uml.edu/ssh.htm) • Textbook

Instructional Methods	Face-to-Face	**Type of Instruction**	Lecture/Lab

Course Length (number of weeks)	12

Course Requirements and Expectations	▪ You are expected to study course materials timely and successfully work on projects and submit your work on due date. All projects involve hands on shell scripting of Unix/Linux commands, so that you acquire a working knowledge of the subjects and develop problem solving skills. If nothing else, you must try all projects and assignments. ▪ If you have any concern about the class, you are highly encouraged to bring the matter to the instructor attention immediately. ▪ There are two tests including final, **NO MAKEUP TEST!!** ▪ There are two projects and seven highest-score quizzes ▪ All projects are due on due date as specified by the projects and after cut-off date a project may not be accepted.
Make-up Exam Policy	No makeup test
Other Required Materials	USB flash disk, USB hard drive, blank CD, …
Academy Dishonesty	Academic dishonest is not a substitute for a successful completion of this course in any manner. Your independent work is accepted and credited accordingly and you must not engage in an activity that will jeopardize this.
Use of Personal Communication devices in class	▪ Cell phone use in class is not permitted. All cell phones or similar devices must be turned off. ▪ Internet access for the course purpose
Instructor Grade Criteria	

Course Grading	
Quizzes	35%
Mid-term exam	15%
Final Exam	20%
Projects	30%

Course Calendar

Session	WK	Topics	Reading
	WK1	Introduction & Orientation ▪ Computers: An Overview	Chapter 1 (9/28/2018)
	WK2	The Unix/Linux Operating System (install a Linux VM)	Chapter 2 (10/5/2018)
		Basic Unix commands (some additional materials)	Chapter 3
	WK3	Quiz #1 Basic Unix commands *(cont'd)*	Chapter 3 (10/12/2018)
		The vi editor	Chapter 4
	WK4	Quiz #2 The UNIX file system Project #1 assignment	Chapter 5 (10/19/2018)
	WK5	Quiz #3 The UNIX file system *(cont'd)*	Chapter 8 (10/26/2018)
	WK6	Quiz #4 Exploring Graphical Desktop Exploring the shell	Additional materials Chapter 9
	WK7	**Project #I due** **Mid-term exam**	(11/2/2018)
	WK8	Quiz #5	(11/9/2018)
		Exploring the shell *(cont'd)* UNIX process management ▪ Background process ▪ Foreground process ▪ Parent/child process relationship	Chapter 9
		Program Development Project #2 assignment (A Simple C++ Program)	Chapter 11 (11/9/2018)
		Shell programming	Chapter 12
		Shell scripts: writing application	Chapter 13 (11/16/2018)
	WK9	Quiz #6 (take home)	Chapter 10

		UNIX communication - skipped (NO CLASS – DAY AFTER THANKSGIVING)	(11/23/2018)
	WK10	Maintaining & Administering a UNIX/Linux system Review of past materials	Chapter 14 & more materials (11/30/2018)
	WK11	**Project #II due** **Open**	(12/7/2018)
	WK12	Final Exam	(12/14/2018)

Learning Objective, Students Learning Outcome, and Program Spec

Note: This section of the syllabus provides the general course learning objectives, the expected students learning outcome, the course scope in terms of the department program, and the instrument used to evaluate the course. If you have any question, contact the instructor or the department for answers.

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<td>HCC Grading Scale</td>
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Grade	GPA Points
A = 100- 90	4 points per semester hour
B = 89 - 80:	3 points per semester hour
C = 79 - 70:	2 points per semester hour
D = 69 - 60:	1 points per semester hour
59 and below = F	0 points per semester hour
IP (In Progress)	0 points per semester hour
W(Withdrawn)	0 points per semester hour
I (Incomplete)	0 points per semester hour
AUD (Audit)	0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

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<td>Course Student Learning Outcomes (SLO):</td>
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1. Explain the UNIX/Linux operating system – history and usage
2. Explain/describe the difference amongst different flavors of UNIX/Linux OS's
3. Log on to a UNIX/Linux system and run basic commands
4. Create a shell script based on specification
5. Run various programs from a desktop viewpoint
6. Describe and use utilities in various system directories
7. Perform basic UNIX/Linux administration tasks

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<td>Learning Objectives</td>
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<td>Student Assignments</td>
<td>Refer to the Course Calendar</td>
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<td>Student Assessment(s)</td>
<td>1. Explain the use and purpose of UNIX/Linux operating system</td>
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	Assessment criteria under development **2. Identify and explain/describe the difference amongst difference flavors of UNIX/Linux OS's** Assessment criteria under development **3. Log on to a UNIX/Linux system and run some basic commands** Assessment criteria under development **4. Create a shell script based on specification** Assessment criteria under development **5. Run various programs from a desktop viewpoint** Assessment criteria under development **6. Describe and use utilities in various system directories** Assessment criteria under development **7. Perform basic UNIX/Linux administration tasks** Assessment criteria under development
Program/Discipline Requirements:	Instructors will use syllabus that will satisfy CurricuUNET requirements and improve on-going assessment of student-centered learning and teaching.
Academic Discipline/CTE Program Learning Outcomes	1. Feel comfortable in a UNIX/Linux environment and how to get help from different resources 2. Design and write simple shell scripts that are correct, clear, efficient, well organized, and well documented 3. Understand the hardware aspect of computer systems that support UNIX/Linux operating system installation 4. Development an understanding of advantages/disadvantages of each flavor of UNIX/Linux
SCANS and/or Core Curriculum	SCANS 1. C1: Allocates Time Students will learn to allocate time to perform each task (online course will emphasize this task more). 2. C5: Acquires and Evaluates Information Student will be able to identify need for data, obtain it from existing sources or create them, and evaluate information. 3. C6: Organizes and Maintains Information Students will learn to organize their assignments and manage to complete them with specific deadline. 4. C18: Selects Technology Students will select appropriate open source software to perform certain task 5. C20: Maintains and Troubleshoots Technology Student will be able to prevent, identify or solve problems in machines, computers, and other technologies. 6. F9: Problem Solving Students will learn problem-solving methodology Every semester, calendar based weekly learning material (reading, hands exercises for in-class, web enhanced, or online assignments, and scheduled quiz/test/exam) will be posted as part of the syllabus.

HCC Policy Statement	
Access Student Services Policies on their Web site:	http://hccs.edu/student-rights
Distance Education and/or Continuing Education Policies	
Access DE Policies on their Web site:	http://de.hccs.edu/de/de-student-handbook
Access CE Policies on their Web site for non-credit classes:	http://hccs.edu/CE-student-guidelines