

Course Syllabi

1. *Course number and name*
COSC 4327: UNIX Shell Programming
2. *Credits and contact hours*
3 Credit Hours
3. *Instructor's or course coordinator's name*
Instructor: Leonard Brown
4. *Textbook, title, author, and year*
 - *Linux Bible*, Christopher Negus, 9th Edition, 2015, John Wiley & Sons, ISBN 978-1-118-99987-5
 - a. *Other supplemental materials*
None
5. *Specific course information*
 - a. *A brief description of the content of the course (catalog description)*
Introduction to programming in the UNIX shell; directory structure and manipulating files, built-in functions, control structures, utilities, and sublanguages.
 - b. *Prerequisites or co-requisites*
COSC 1336
 - c. *Indicate whether a required, elective, or selected elective course in the program*
Elective course
6. *Specific goals of the course*
 - a. *Specific outcomes of instruction, The student will be able to:*
 - Understand the concepts and features that characterize UNIX
 - Understand general features of UNIX commands
 - Break up a command into arguments and options
 - Know how to use the man command and understand the organization of the documentation, especially the way the syntax is explained
 - Know general purpose utilities in UNIX systems (passwd, who, w, tty, stty, script, uname, date, cal, calendar, bc)
 - Be able to create and edit files using vi/vim or emacs

- Understand UNIX file system and know how file and directory manipulation commands (such as pwd, cd, mkdir, rmdir, cp, rm)
- Understand file attributes and know commands to list or change them (ls, chmod, umask, chown, chgrp, touch, find)
- Understand the concept of UNIX shell
- Understand the meaning of wild-card characters in UNIX commands
- Understand the difference between single, double, and back quotes in a UNIX command
- Understand streams and be able to redirect standard input/output/error stream to a file
- Be able to set up a pipeline for connecting two or more commands
- Use command substitution
- Understand the properties of shell and environmental variables and be able to use both types of variables
- Be able to use simple filters of the system
- Understand the concept of a process and its creation
- Be able to run jobs in the background
- Understand the general environment-related features of popular UNIX shells and be able to customize user environment in their favorite shell by configuring the startup files
- Be able to create and execute shell scripts
- Be able to describe general duties of UNIX system administrator

b. *Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course*

Course address ABET Student Outcome(s):

7. *Brief list of topics to be covered*

- Introduction to UNIX
- General purpose utilities
- UNIX editors
- UNIX file system and file attributes
- The shell
- Simple filters
- The process
- Filters using regular expressions
- Customizing the environment
- Shell programming
- System and network administration

COSC 4327 – UNIX Shell Programming – Fall 2019

General Information

Instructor	Leonard Brown
Office Location	Soules 315.03
Office Hours	MW 11:00 a.m. – 12:30 p.m. (or by appointment)
Phone	(903) 566-7403
Email	lbrown@uttyler.edu
Class Time/Location	MW 4:00 p.m. – 5:20 p.m. / Soules 211

Exams: There will be two midterm exams and one final exam given for this class. All exams will be held in the class lecture room. The midterm exams will be during the regular class time. The *tentative* dates of the exams are:

Exam I	October 9, 2019
Exam II	November 13, 2019
Final Exam	(See University Schedule)

You will be notified in advance of any change in the above dates.

Grading: There are several components to the course grade totaling 1000 points. The point distribution is as follows:

Exam I	150 points
Exam II	150 points
Homework Assignments/Quizzes	400 points
Final Examination	300 points

Course grades will be assigned based on the following scale.

900-1000	A
800-899	B
700-799	C
600-699	D
599 and below	F

Late Policies: All homework assignments are due at the beginning of class on the date specified in the assignment. Assignments will not be accepted after that time. In order to accommodate problems that may arise during the semester, you may turn in one (1) assignment late. That assignment will be accepted up to 48 hours after the initial due date, unless specified otherwise. It will not be accepted after that time.

Plagiarism: Unless otherwise specified, all work submitted for a grade must be completed by yourself. You are not to submit another person's work and claim it as your own. Plagiarism will result in disciplinary actions. To spare yourself accusations of plagiarism-

1. Do not show another student a copy of your work before it has been graded. The penalties for permitting your work to be copied are the same as the penalties for copying someone else's work.
2. Do not leave printouts of your work where other students may pick them up.

Additional Policies: <http://www.utt Tyler.edu/academicaffairs/files/syllabuspolicy.pdf>

Academic

Calendar: <https://www.utt Tyler.edu/schedule/files/academic-calendar-19-20.pdf>

Final Exam

Schedule: <https://www.utt Tyler.edu/schedule/files/final-exam-schedule.pdf>