

CpS 250
Unix Programming
Spring 2024

Instructor: Jordan Jueckstock
Office: AL 76 (3rd floor, east hall)
Office Hours: MWF 3pm / TTh 10am (others by appt. only)
Email: jjuecks@bju.edu

Course Information:

Catalog Description: An introduction to tools and languages used to develop software for Unix-based operating systems. Presents a spectrum of techniques ranging from shell scripting to systems programming in C, with an emphasis on secure programming practices. *Second semester, three hours. Prerequisite: CpS 230.*

Overview: This course provides a comprehensive introduction to the Unix family of operating systems from a programmer's perspective. We discuss Unix text processing commands, shell scripting, and systems programming with C and Python. The goal is for you to gain an appreciation for "alternative" operating systems and programming tools, and to obtain hands-on experience with an important and popular Unix incarnation, Linux.

Language Proficiency: Students are expected to have basic familiarity with C (*from CpS 230*) and be reasonably proficient in Python (*from CpS 110*). See the instructor for resources to help you prepare if you do not have prior experience with these languages.

Course Resources:

Textbook: There is no textbook for this class. A variety of online readings will be assigned per the published course schedule.

Canvas LMS: Grades and any necessary announcements will be posted via the Canvas learning management system (LMS).

Schedule: The official schedule (including lecture topics/notes, assigned readings, and assignment due dates) will be maintained on the course website at <https://protect.bju.edu/cps/courses/cps250>.

Assessment:

Grading			
#	Category	Pts.	Total
5	Quizzes	10	50
5	Labs	10	50
5	Exercises	50	250
2	Projects	100	200
2	Lab Tests	75	150
3	Written Tests	100	300
	Total		1000

Scale	
A	900+
B	800-899
C	700-799
D	600-699
F	0-599

Grading:

Grades are computed on a simple 10-point scale (see above) based on points earned out of 1000. Grades are not rounded up (or down—which probably should go without saying). Instead, all students are allotted 5 bonus “grace points” (which have the effect of rounding up, e.g., 695 to 700). The instructor reserves the right to confiscate these grace points, at his sole discretion and at any time, for repeated (or egregious) displays of disrespect to either the instructor or fellow students. (*Students who lose their grace points will be informed as soon as possible.*)

Course Policies:

- *Attendance:* Absence/tardiness are reported per University policy. Assessment of University vs. personal absences, and official penalties for too many personal absences, are handled by the registrar’s office.
- *Department:* Students and instructor will address each other with professional respect and courtesy, no matter how much fun we are (or are not) having. Students shall refrain from talking (or whispering, or texting, or tapping messages in Morse code, or...) during lectures, presentations, etc. unless otherwise indicated by the instructor.
- *Technology:* personal computers (which, let’s be honest here, includes phones and smart watches) will not be used in class unless called for by the instructor (e.g., during lab sessions). Phones, smart watches, and other communication doodads should be kept silent and passive except for high-priority communications previously discussed with the instructor (e.g., waiting for word about a sick family member).
- *Due dates:* See the department late policy <https://cs.bju.edu/academics/policies/late-work-policy/>. Unless otherwise specified, submissions must be received by 11:59pm on the day they are due.
- *Academic Integrity:* See the department policy: <https://cs.bju.edu/academics/policies/academic-integrity-policy/>. Note that *both Exercises and Projects* are considered “programs” (i.e., individual assignments).

Copyright Policy:

Copyright 2021-2024 Jordan Jueckstock as to this syllabus and all lectures. Students are prohibited from selling (or being paid for taking) notes during the course to, or by any person, or commercial firm without the express written permission of the professor teaching the course.