

# CS 2230 – System Software

## Course Syllabus      Fall 2025

**Instructor** Bruce Bolden      JEB 232

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### Text

*LINUX for Programmers and Users*, Graham Glass & King Ables, Prentice-Hall, 2006  
*The C Programming Language*, Kernighan & Ritchie, Prentice-Hall, 1988

### Schedule

Week	Day		Topic	Text/Ref
1	August	26	T Introduction, orientation, history	Chap 1
			T History, C executable concepts	Chap 1
2	September	2	T C compilation process	Notes
			T <b>Quiz</b> C compilation - multimodule compilation	Notes
3	September	9	T C Programming Tools - make	Notes
			T Basic UNIX Commands	Chap 2
			T <b>Quiz</b> Basic UNIX Commands	Chap 2
4	September	16	T The UNIX file system	Chap 14, Notes
			T The UNIX file system	
			T <b>Quiz</b> Advanced UNIX Commands	Chap 3
5	September	23	T Advanced UNIX Commands	Chap 3
			T UNIX Shells	Chap 4
			T <b>Quiz</b> UNIX Shells	Chap 5, 6
6	September	30	T Shell Programming	Chap 7, 8
	October	2	T Shell Programming	
			T <b>Quiz</b> Shell Programming	Chap 7, 8
7	October	7	T Scripting Languages - Python	Chap 3, Notes
			T <b>Quiz</b> Scripting Languages - Python	Chap 3, Notes
8	October	14	T Scripting Languages - Python	Chap 3, Notes
			T Scripting Languages - Python	Chap 3, Notes
			T <b>Quiz</b> Scripting Languages - Python	
9	October	21	T Networking	Chap 9, Notes
			T Networking	Chap 9, Notes
			T <b>Quiz</b> The Internet	Chap 11, Notes
10	October	28	T The Internet	Chap 11, Notes
			T The executable Environment	Notes
			T <b>Quiz</b> The executable Environment	Notes

Week	Day		Topic	Text/Ref
11	November 4	T	C Programming Tools - 1d	Chap 12
			C Programming Tools - 1d	Chap 12
		T	<b>Quiz</b>	
			C Programming Tools - libraries	Chap 12
12	November 11	T	Systems Programming - Pipes	Chap 13
			Systems Programming - Sockets	Chap 13
		T	<b>Quiz</b>	
			Systems Programming - Sockets	Chap 13
13	November 18	T	Systems Programming - System Calls	Chap 13
			Systems Programming - System Calls	
		T	Systems Programming - File Operations	Chap 13
			<b>Quiz</b>	
14	November 24 - 28		<b>Fall Break - NO Classes</b>	
15	December 2		Systems Programming - Process management	Chap 13
		T	<b>Quiz</b>	
			Systems Programming - Signals	Chap 13
			System Administration	
			Final Exam Review	
	December 9	T	<b>***FINALS ***</b>	

**Final** Monday, December 9, 10:15 AM – 12:15 PM

### Grading

The letter grade you receive from the course will be determined as follows:

A	90%	–	100%
B	80%	–	89.9%
C	70%	–	79.9%
D	60%	–	69.9%
F	0%	–	59.9%

The instructor reserves the right to adjust these percentages lower if deemed necessary.

### Programs

All programming assignments must be submitted as specified. Class time will not be spent on homework. No late homework assignments will be accepted.

### Quizzes

Quizzes will normally be given most Thursdays on the material covered since the last quiz. Knowledge of material in this class is cumulative. Your lowest quiz grade will be dropped. **No makeup quizzes will be given.**

### Final Exam

The final exam is cumulative.

### **Center for Disability Access and Resources (CDAR) Reasonable Accommodations Statement**

Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through the Center for Disability Access and Resources located in the Bruce M. Pitman Center, Suite 127 in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course. Phone: 208-885-6307

Email: [cdar@uidaho.edu](mailto:cdar@uidaho.edu)

Website: [www.uidaho.edu/current-students/cdar](http://www.uidaho.edu/current-students/cdar)

### **University of Idaho Classroom Learning Civility Clause**

In any environment in which people gather to learn, it is essential that all members feel as free and safe as possible in their participation. To this end, it is expected that everyone in this course will be treated with mutual respect and civility, with an understanding that all of us (students, instructors, professors, guests, and teaching assistants) will be respectful and civil to one another in discussion, in action, in teaching, and in learning.

Should you feel our classroom interactions do not reflect an environment of civility and respect, you are encouraged to meet with your instructor during office hours to discuss your concern. Additional resources for expression of concern or requesting support include the Dean of Students office and staff (5-6757), the UI Counseling & Testing Center's confidential services (5-6716), or the UI Office of Human Rights, Access, & Inclusion (5-4285).

### **Academic Dishonesty**

Academic Dishonesty will not be tolerated in this course. The following are examples of violation of normal academic integrity:

- |                    |   |
|--------------------|---|
| <b>Cheating</b>    | Using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term "academic exercise" includes all forms of work submitted for a grade earned in a course that generates credit hours. |
| <b>Fabrication</b> | Falsification or invention of any information or the source of any information in an academic exercise.   |
| <b>Collusion</b>   | Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.   |
| <b>Plagiarism</b>  | Copying or imitating the language, ideas, and/or thoughts of another author and passing off the same as one's original work.  |

If academic dishonesty is suspected, I will withhold a grade until we have discussed the circumstances. Any work that I determine is dishonest will receive an automatic F and you may receive an F for the course. I will also forward a report of the incident to the Dean of Students for prosecution in accordance with the University of Idaho Student Code of Conduct.

Do your assignments on your own. Consulting with friends is permitted. However, blatant copying will not be tolerated and will be dealt with according to the guidelines on academic dishonesty: University of Idaho Academic Integrity.