CS 270 – System Software

Course Syllabus

Instructor:Bruce BoldenJEB 232bruceb@uidaho.eduTexts:UNIX for Programmers and Users, Graham Glass & King Ables, Prentice-Hall, 2003(recommended)The C Programming Language, Kernighan & Ritchie, Prentice-Hall, 1988

Fall 2023

| Week | Day | 7 | | Торіс | Text/Ref |
|------|-----------|----|------|---------------------------------------|----------------|
| 1 | August | 21 | М | Introduction, orientation, history | Chap 1 |
| | _ | | W | History, C executable concepts | Chap 1 |
| | | | F | C compilation process | Notes |
| | | 28 | F | C Overview | Notes |
| 2 | | | W | C Overview | Notes |
| | | | F | C compilation | Notes |
| | September | 4 | М | *** Labor Day - NO Classes*** | |
| 3 | | 6 | W | Basic UNIX Commands | Chap 2 |
| | | | F | Basic UNIX Commands | Chap 2 |
| | | 11 | М | C compilation process | |
| 4 | | | W | The UNIX file system | Chap 14, Notes |
| | | | F | Advanced UNIX Commands | Chap 3 |
| | | 18 | М | Advanced UNIX Commands | Chap 3 |
| 5 | | | W | UNIX Shells | Chap 4 |
| | | | F | UNIX Shells | Chap 5, 6 |
| | | 25 | М | Shell Programming | Chap 7, 8 |
| 6 | | | W | Shell Programming | Chap 7, 8 |
| | October | 2 | F | Shell Programming | Chap 7, 8 |
| | | 2 | W | Scripting Languages - Python | Chap 3, Notes |
| 7 | | | W | Scripting Languages - Python | Chap 3, Notes |
| | | | F | Scripting Languages - Python | Chap 3, Notes |
| | | 9 | W | Scripting Languages - Python | Chap 3, Notes |
| 8 | | | W | *** Test 1 *** | Chap 3, Notes |
| | | | F | Scripting Languages - Python | - |
| | | 16 | М | Networking | Chap 9, Notes |
| 9 | | | W | Networking | Chap 9, Notes |
| | | | F | The Internet | Chap 11, Notes |
| | | 23 | М | The Internet | Chap 11, Notes |
| 10 | | | W | The executable Environment | Notes |
| | | | F | The executable Environment | Notes |
| | | 30 | М | C Programming Tools - ld | Chap 12 |
| 11 | November | 2 | W | C Programming Tools - ld | Chap 12 |
| | | | F | C Programming Tools - libraries | Chap 12 |
| | | 6 | М | Systems Programming - Pipes | Chap 13 |
| 12 | | | W | Systems Programming - Sockets | Chap 13 |
| | | | F | *** Test 2 *** | Chap 13 |
| | | 13 | М | Systems Programming - System Calls | Chap 13 |
| 13 | | | W | Systems Programming - Sockets | Chap 13 |
| | | | F | Systems Programming - File Operations | Chap 13 |
| 14 | | 20 | - 24 | ** Thanksgiving Break – NO Classes ** | |

| Week | Day | | | Торіс | Text/Ref |
|------|----------|----|---|--|----------|
| | | 27 | М | Systems Programming - File Operations | Chap 13 |
| 15 | December | 2 | W | Systems Programming - Process management | Chap 13 |
| | | | F | Systems Programming - Signals | Chap 13 |
| 16 | | 4 | М | C Programming Tools - make | Chap 12 |
| | | | W | C Programming Tools - make | Chap 12 |
| | | | F | Final Exam Review | _ |

Final: Monday, December 12 10:15 AM – 12:15 PM – To be confirmed

Grading:

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

| А | 90% | - | 100% |
|---|-------|---|------|
| В | 89.9% | - | 80% |
| С | 79.9% | - | 70% |
| D | 69.9% | - | 60% |
| F | 59.9% | - | 0% |

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

| Two One Hour Tests (15% ea) | | | |
|-------------------------------|-----|--|--|
| Final Exam | 120 | | |
| Quizzes (1-5) | 50 | | |
| Homework/Programming Projects | 120 | | |
| Total | 440 | | |

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 Fridays 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.

Exams/Final Exam

The midterm and final exams are cumulative. No makeup exams will be given.

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 Website: www.uidaho.edu/current-students/cdar

POLICIES FOR HEALTHY VANDALS

It is a longstanding tradition that Vandals take care of Vandals, and we all do our best to look out for the Vandal Family. The simple precautions listed below go a long way in reducing the impact of coronavirus on our campuses and in our communities. With everyone engaging in these small actions, we can continue to participate in our vibrant campus culture where we are able to learn, live, and grow. Visit U of I's COVID-19 page often for updated information. Questions related to U of I's coronavirus response can be sent to covid19questions@uidaho.edu.

IN-PERSON CLASS ATTENDANCE

Refrain from attending class in-person if you are ill, if you are experiencing any of the known symptoms of coronavirus, or if you have tested positive for COVID-19 or been potentially exposed to someone with COVID-19.

If you display symptoms and/or test positive, you should quarantine following the CDC's recommendations. Do not return to class until you meet the CDC's requirements. If you have been exposed but are asymptomatic, you should stay home for 14 days from the last exposure if you remain asymptomatic, adhering to the CDC's requirements. Documentation (a doctor's note) for medical excuses is not required; instead, email me to make arrangements to submit any missed work and make plans to use Zoom and/or online course materials to stay current with the course schedule.

FACE COVERING REQUIREMENTS

All faculty, staff, students and visitors across all U of I locations must use face coverings over the nose and mouth whenever in any U of I buildings. Thus, you are required to wear a face covering in classrooms at all times.

If you have a medical condition that affects your ability to comply with the face covering policy, please contact the Center for Disability Access and Resources (CDAR) to request a reasonable accommodation.

If you have other reasons you believe make you exempt from wearing face coverings, please contact the COVID-19 Coordinator.

Failure to wear a face covering over your nose and mouth will require you to leave the classroom immediately. If a disruption to the learning experience occurs due to repeated offense and/or egregious behavior, you will be reported.