CSA 3316-001 Operation Systems

Spring 2024, Sul Ross State University

Instructor: Neal Xiong

Office Location: BAB floor 3

Office Phone: 404-645-4067 (Available 9 am – 10 pm M-Sun). Please note that if you do call before or after these hours, it is also available. You can email me 24/7. If you have any questions about my hours please let me know. These hours are outside of office hours and are a privilege not a requirement. Email: neal.xiong@sulross.edu

Office Hours:

Office Hours: MTWR 10-11am, 12:15-1:15pm, TR 11-12:15pm, + by appointment. Time and Place of Class Meetings: MW 11-12:15 pm, at BAB-00302. If you need assistance with your homework or have issues that need to be discussed. Call 404-645-4067. Be brave be bold call if you need help.

Class: face to face

Textbook: No, be required to watch certain online lectures or read selected online readings.
Optional material:
(1) Computer Organization and Architecture, 11th Edition, William Stallings, Pearson, 2019, ISBN-13: 9780135188941. (2)Author Null, L. and Lobur, J; Title Computer Organization and Architecture 5th addition ISBN 178-1-284-12303-6. (3) Operating System Concepts (8/e), by A. Silberschatz, G. Gagne and P.B. Galvin, Addison-Wesley, 2008.

Topics include combinational logic circuits and design sequential circuits, registers and counters, memory and programmable logic devices, register transfers and data paths, and sequencing and control. Offered spring odd years. Prerequisites: CS 2315

Program Learning Objective

1. Understand the fundamental concepts of computer science including algorithms and data structures.
2. Understand modern computer systems, databases and networking.
3. Display an understanding and ability to implement current programming methodologies.
4. Become proficient with systems design based on object-oriented programming.
5. Work as a team in workgroup environments.

Course Objectives
Students will learn how a modern computer system processes binary instructions as well as how information is stored and retrieved from persistent storage to main memory into the cache and finally the central processor's registers. Students will gain a working knowledge of binary and assembly programming as well as the primary hardware logic units to include, AND, OR XOR, XAN,

and Flip-flops and how they are integrated into modern chips. Students will learn how processors use super-scalar and read-ahead execution to speed up processing.

Need for Assistance

Qualified students with disabilities needing academic or other accommodations to ensure full participation in the programs, services and activities at Sul Ross State University should contact the Disabilities Services Coordinator, in Counseling and Prevention Services, Ferguson Hall 112, Box C-117, Alpine, Texas 79832. Please notify me before the third day of classes.

Course Policies

Quizzes and assignments must be submitted on time. I have set up rules in Blackboard so that assignments cannot be submitted after the due date.

Academic Dishonesty: Honesty in completing assignments is essential to the mission of the university and to the development of the personal integrity of the student. Cheating, plagiarism, or other kinds of academic dishonesty will not be tolerated and will result in appropriate sanctions that may include failing an assignment, failing the class, or being suspended or expelled. Suspected cases in this course may be reported to Student Life.

Posting of Grades

As soon as assignments, exams, and quizzes are graded, the grades will be posted in Blackboard.

Grading

Letter grades will be determined using a standard percentage point evaluation as outlined below. Please note that this is a tentative schedule and can change. Any changes that happen will be updated in Blackboard. Due Dates for all assignments are available in Blackboard.

GRADES: Grades will be calculated in the following manner:

Exams (2); Home-works and Quizzes (4~5); Project (1)

The instructor reserves the right to lower the cutoffs for each grade, but he will not raise the cutoff. In other words, an 86% may end up being an A at the instructor's discretion, but a 91% is guaranteed to be an A. I will let you know after each exam what the current grading scale is.

Your final grade will be determined by calculating points based on the following weights:

- A   90 - 100 %
- B   80 - 89 %
- C   70 – 79 %
- D   60 – 69 %
- F   < 60%