

Sul Ross State University
Course Syllabus
CS 1309: Computer Science I
Fall 2023

Instructor: Neal Xiong

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Office Hours: MTWR 12:15-2:00 pm, W 2:00-3:30 pm, T 9:00-11:00 am, + by appointment

Time and Place of Class Meetings: M/W 9:30-10:15 am, W 1:30- 3:15 pm, at BAB-00302

CourseDescription: This course is a disciplined approach to problem-solving with structured techniques and representation of algorithms using pseudo-code and graphical tools. There will be discussions of methods for testing, evaluation, and documentation. Topics include data types; control structures; functions, structures, arrays, and file input/output; the mechanics of running, testing and debugging programs; introduction to programming; and introduction to the historical and social context of computing.

Prerequisite: Students may concurrently enroll in Math 1314

Recommended but not required Materials:

(1) C++ How To Program, by Deitel and Deitel,
Publisher: Pearson, ISBN-13: 9780133378719.

(2) STARTING OUT WITH C++, FROM Control Structures to Objects (8th Edition), ISBN-13:
978-0133769395, by Tony Gaddis (Author).

Student Learning Objectives:

1. Understand and use the fundamental concepts of data types, structured programming, algorithmic design, and user interface design
2. Demonstrate a fundamental understanding of software development methodologies, including modular design, pseudo code, flowcharting, structure charts, data types, control structures, functions, and arrays.
3. Develop projects that utilize logical algorithms from specifications and requirements statements.
4. Demonstrate appropriate design, coding, testing, and documenting of computer programs that implement project specifications and requirements
5. Apply computer programming concepts to new problems or situations.

Assignment Information:

Coding Lab Assignments: Expect to complete at least 5 coding tasks or labs. The code tasks will be completed in our lab, and will be submitted to our online blackboard, where they are graded. Make sure you are aware of when assignments are due to avoid a late penalty.

Quizzes: You will have several quizzes. You are allowed to use your textbook and/or notes, but these will have a time limit, so please prepare accordingly before attempting a quiz. The questions on the quizzes are multiple-choice and true-false. You will be taking the quizzes in Blackboard. Each quiz can be taken up to 3 times, the highest grade will be the grade that is recorded.

Projects: You will complete several projects. These will need to be submitted through Blackboard for grading.

Exams: There are two-three exams associated with this course. You may take each exam only once. The lowest exam grade will be dropped. If you do not miss any exams and are satisfied with your exam grade at the end of the semester, you do not have to take the final exam.

General Policies: Students are expected to check on Blackboard for announcements and updated assignments. You are expected to check your Sul Ross e-mail account. I will only discuss grades and attendance issues via a zoom meeting. When meeting through Zoom, make sure your first name and at least last initial are visible. Preference will be that your video is available, but please make sure you are properly dressed.

Americans With Disabilities Act: Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Rebecca Greathouse Wren, LPC-S, SRSU's Accessibility Services Coordinator at 432-837-8203 (please leave a message and we'll get back to you as soon as we can during working hours), or email rebecca.wren@sulross.edu. Our office is located on the first floor of Ferguson Hall (Suite 112), and our mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas, 79832.

Library Services: The Sul Ross Library offers FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu. Off-campus access requires your LoboID and password. Check out materials using your photo ID. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or phone (432-837-8123).

Distance Education Statement: Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login information to verify students' identities and to protect students' information. The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website.

Grading:

Letter grades will be determined using a standard percentage point evaluation as outlined below. Grades will be calculated in the following manner:

Exams (Middle Exam and Final Exam); Lab exercises (5-6);

Quiz (2-3); Homework (2-3); Attendance (100);

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.

For simplicity, we use a 1,00-point scale (calculated as a percentage %).

90+ = A;
80 - 89 = B;
70 - 79 = C;
60 - 69 = D;
less than 60 = F

Student Learning Outcomes (SLO):

At the end of this course, students will be able to:

- Use variables, arrays, and constants of appropriate data types
- Use expressions and conditions
- Use appropriate decision structures
- Use appropriate repetition structures
- Use simple file structures for external data storage
- Use functions for modular program structure
- Create relevant internal documentation

Marketable Skills:

1. Students will develop logical and analytical skills
2. Students will use problem-solving skills
3. Students will know computing methodologies in demand by public and private sectors