## Sul Ross State University

## Course Syllabus

CS 1309: Computer Science I (2-2)

Fall 2020

Instructor: Adriana Lumpkin

Office Number: N/A

Office Telephone Number: (432) 279-0062 Email Address: <a href="mailto:adriana.lumpkin@sulross.edu">adriana.lumpkin@sulross.edu</a> Office Hours: by appointment; by zoom Time and Place of Class Meetings: online

Course Description: 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

Required Materials: Programming MindTap Programming, 1 term (4 months) Instant Access for Farrell's Programming Logic and Design, 9th Edition, Joyce Farrell, ISBN-10: 1-337-27461-5, ISBN-13: 978-1-337-27461-6. NOTE: You are not required to purchase a printed textbook. However, students can obtain this book thou their Cengage Unlimited account for an additional fee.

Software: BlueJ is a free IDE used to program in Java. You may get a copy of BlueJ by going to <a href="bluej.org">bluej.org</a>. Online Tools: Google Doc's Draw is a free app offered by Google.

## **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:

Codding Lab Assignments: Expect to complete at least two coding tasks per week (some weeks four). The code tasks will be completed in the Cengage MindTap "sandbox" where they are graded. Make sure you are aware of when assignments are due to avoid a late penalty.

Quizzes: You will have at least one quiz per chapter. 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 a three-part project. These will need to be submitted through Blackboard for grading.

*Exams*: There are 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. Offcampus 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.