CSCI 2302.001: Computer Science Principles
Fall 2023

Anne Marie Eubanks
Department of Computer Science
College of Sciences and Mathematics
312P Ed and Gwen Cole STEM Building (#12 on campus map)
eubanksanne@sfasu.edu & within your D2L class
Department of Computer Science Office Phone Number: 936.468.2508

Office Hours – Online, Zoom Meeting & In-Person
Monday and Wednesday   12:00 p.m. – 12:50 p.m. & 2:20 p.m. – 3:50 p.m.
Tuesday and Thursday   10:45 a.m. – 12:15 p.m. & 3:00 p.m. – 3:20 p.m.
The office hours above are just a starting point. I am often online and I am frequently available outside these hours. Please feel free to Page any time you see me online. You may also email me at any time; typically during the school/business days, I will respond within 24 hours.

I will gladly make appointments for other times; either online, in person, or schedule a Zoom meeting. Please note, when scheduling a Zoom meeting, advanced notification is needed to accommodate scheduling.

Zoom Meeting Information:
The Zoom Office Hours are hosted with a waiting room and you will be muted. This accommodates privacy just as it is in person. I will admit you as soon as I can.

All SFA students have a pro Zoom account. When signing into Zoom, do not log in to Zoom with Google or Facebook accounts, as this will result in them creating extra Zoom accounts that you do not need and will not have all the pro features. To authenticate and log into a Zoom meeting, follow the steps provided here: How to join a Zoom meeting.

Please see the D2L Office Hours Content Page for Zoom meeting ID and password.

Email: The course requires that you have and use your SFA Jacks email account & your D2L email account. You are responsible for messages sent by course instructors and other SFA officials to your SFA Jacks email address. Due to FERPA restrictions, any email correspondence regarding this course must be sent to me from your SFA Jacks email account only; due to this, emails sent to me from an address other than your official SFA email address will not receive a response. You are responsible for checking your email daily.

D2L: The course has a D2L site that can be found at d2l.sfasu.edu. You may also use this email. Keep in mind that D2L is an intrasystem, meaning that you must be logged in to D2L and can only

access individuals who are on the Class list of that particular course. You are responsible for all announcements and materials presented on this web page, so you must check it daily. If you do not have access to our class D2L page for any reason, you must contact me. Also, get in touch with the Center for Teaching and Learning Tech Support, Phone: 936.468.1919 or email: d2l@sfasu.edu; their hours are Monday - Friday, 8 a.m. - 5 p.m. CST.

Class meeting time and place: CSCI 2302.001
4:00 p.m. – 5:15 p.m. Monday and Wednesday

In-Person:
Ed and Gwen Cole STEM Building (# 12 on the campus map)
Room 316

Notice: If for any reason we are required to attend only online, class meetings will be asynchronous and exams will be given only online.

Prerequisites: CSCI 1302
Grade Reminder: Must have a C or better in each prerequisite course.

Credit Hours: 3

CSCI 2302 "Computer Programming Principles" (3 credits) typically meets twice each week or three times each week for an average of 2,250 minutes during a semester, a 150 asynchronous minutes, and a 2-hour final examination. Students have significant weekly reading assignments. Students are expected to complete 8 - 9 homework assignments, 8 - 17 laboratory or programming assignments, and 2 periodic exams in addition to the final exam. Students are expected to prepare for any in-class assignments or quizzes over the material covered in class or in the reading material. These activities average at a *minimum 6 hours of work each week* to prepare outside of classroom hours.

Computer Science Program Accreditations
The Bachelor of Science degree with a major in Computer Science is accredited by the Computing Accreditation Commission (CAC) of ABET, Inc., the recognized accreditor of college and university programs in applied science, computing, engineering and technology. ABET accreditation demonstrates a program's commitment to providing its students with a quality education.

Technology Requirement
It is your responsibility to acquire a consistent, stable, dependable computer and internet connection with which to complete the assignments for the course by the deadlines indicated on the Semester Calendar. It is not the responsibility of the instructor to provide additional time for assignments or exams or an alternative means of completing the course due to technological issues on your part. On campus, you may use the Department of Computer Science's Open Lab in STEM 206 or the Library Linc in the Ralph W. Steen Library.

Catalog Description
Problem solving and algorithm design, program structures, data types, software development methods, and programming style.

Purpose Of Course
To introduce a disciplined approach to problem solving methods and algorithm development; to introduce procedural and data abstraction; to teach program design, coding, debugging, testing, and documentation using good programming style; to teach a block-structured high-level programming language; and to provide a foundation for further studies in computer science.

Program Educational Outcomes:
Program educational outcomes define the knowledge, skills, and abilities students are expected to demonstrate upon completion of an academic program. These learning outcomes are regularly assessed to determine student learning and to evaluate overall program effectiveness.

Educational Objectives
Upon successful completion of the course, students should be able to:

1. Apply a disciplined approach to problem solving and algorithm design.

2. Use the following: strategies for problem solving, techniques for analyzing problems and defining requirements, tools for representing algorithms, and methods for verifying and validating algorithms and programs.

3. Write programs in a modern block-structured procedural programming language.

4. Design and, by means of the programming language being learned, implement imperative solutions to moderately complex problems.

5. Demonstrate through artifact creation and testing, a solid knowledge of and an ability to properly use these programming features and facilities: data types, fundamental data structures (arrays, records, and arrays of records) control structures, procedures, functions, parameters, text files, and binary files.

6. Demonstrate through artifact creation, familiarity with abstract data types, pointers, and recursion.

7. Use operating system tools (command system, editor, compiler, linker, and loader) in single and multiuser environments.

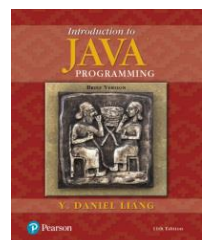8. Write cooperatively on software development projects.

Course Requirements:
This course will be making use of the SFASU D2L Learning Management System. Students are encouraged to complete the D2L Student Tutorials.
This is a face-to-face class and student success is dependent upon being present at every class meeting.

Required Materials (to be used in class every meeting):
*   *Introduction to Java Programming, Brief Version*, 11th Edition by Y. Daniel Liang
    ISBN-13: 978-0-13-461103-7
    ISBN-10:   0-13-461103-7

- USB Flash Memory Drive

Content	Hours
Computer Terminal or Microcomputer Skills Review	1

Use of operating system and editor command languages

Problem Solving and Algorithm Design	10

Strategies for problem solving--problem decomposition, solution by analogy

Problem analysis and requirements definition--understanding the problem, describing the output requirements, identifying the input data

Algorithm representation--pseudocode and graphical techniques including structure charts and flowcharting

Algorithm verification--desk checking with and without test data

Program Structures	10

Control structures--sequential, iterative, and selective

Subprograms--procedures and functions, parameters, scope of identifiers, subprogram nesting, and introduction to recursion

Data Types, Operations, and Storage	14

Standard scalar types--integer, real, boolean, character

Structured types--arrays, character strings, records, arrays of records

Standard user-defined types--subrange, enumerated

Introduction to abstract data types

Files--text files for data, source programs, and operating system commands; binary files for data, object programs, and load modules

Program Development--Methods and Style	7

Design--procedural abstraction, data abstraction, top-down design and stepwise refinement, modular design, block structure, information hiding

Coding--use of structured control statements and modern programming style including proper indentation and choice of appropriate descriptive identifiers

Program debugging and verification--generation of test data, debugging techniques including manual and built-in tracing as well as use of stubs and drivers, top-down versus bottom-up testing External and internal program documentation techniques

Exams (Plus Final)	3

TOTAL   45

References

Shotts, William, The Linux Command Line, 5th Edition, No Starch Press, 2019.
    Online PDF version: http://linuxcommand.org/tlcl.php
Unified Modeling Language website: http://www.uml.org/
Eckel, Bruce, Thinking in Java, 4th Edition, 2006.
    Online PDF version: https://sophia.javeriana.edu.co/~cbustaca/docencia/POO-2016-01/documentos/Thinking_in_Java_4th_edition.pdf

Course Calendar/Timeline:
Tentative **Timeline:**

Week	Topic
1	Review 1302 Concepts Review Assignment
2	Unix Environment Multidimensional Arrays
3	Objects & Classes
4	Object-Oriented Thinking
5	Object-Oriented Thinking
6	Object-Oriented Thinking Review
7	Exam 1 Inheritance & Polymorphism
8	Inheritance & Polymorphism
9	Abstract Classes & Interfaces
10	Abstract Classes & Interfaces Review
11	Exam 2 Generics
12	Generics Exception Handling
13	Thanksgiving Holiday
14	Exception Handling Recursion
15	Binary IO Review
16	Final Exam

Disclaimer: Per SFA policy 5.4, this schedule and chosen exercises reflects that for each credit hour we will have three hour of faculty instruction with two to six hours of out-of-class student work per week. In other words, for an 3 credit hour class the student should expect 3 class hours of faculty instruction with 2 or 3 times 3 out-of-class hours of student work per week. Please see the Credit Hours for specifics.

Grading Policy:

End of Course Grade: There are a total of 1,000 possible points in the course. End of course letter grades will be based on the number of points earned.

Points Earned	Letter Grade
865 - 965	A
765 - 864	B
675 - 764	C
580 - 674	D
0 - 579	F

Missing the final Exam   F

This course is incorporated into students' grade point average (GPA) as listed in the [Course Grades](#).

A student who wishes to appeal the final grade must follow the procedure listed in the [Final Course Grade Appeals by Students](#).

Desire2Learn: This course will use the Desire2Learn Management System. The course login page may be accessed directly, https://d2l.sfasu.edu/. All grades will be posted in the D2l Grade Page. You are responsible for all announcements and materials presented on this web page, so you must check it daily. If you do not have access to our class D2L page for any reason, you must contact me. Also, get in touch with the [Center for Teaching and Learning Tech Support](#), or Phone: 936.468.1919 or email: d2l@sfasu.edu; their hours are Monday - Friday, 8 a.m. - 5 p.m. CST.

Examinations are worth 50% of the course grade. See class calendar in D2L for the dates.
- **Comprehensive** Final Examination worth 250 points (25% of course grade)
  - NO Exemptions
  - [Friday, December 15, 2023](#), 10:30 a.m. – 12:30 p.m.

All class examinations are considered to be a major part of the course work upon which a large part of the course grade depends. Class examinations will be announced at the start of the semester.

Examination Policy: If you have a conflict with another university event, you must contact me well in advance of the examination. In case of an extreme emergency, contact me **before** the scheduled examination. Failure to do so will result in an examination grade of zero.

In-class attendance: **Once a student leaves the room on the day of an examination, they will not be permitted to return. Once the first person has left the room on the day of an examination, no one else will be permitted to begin the exam**. Possession of a cell phone or other electronic communication device during an exam will result in an examination grade of zero.

NOTE: THERE ARE NO EXEMPTIONS FOR THE FINAL EXAMINATION AND NO CHANGES IN TAKING THE FINAL EXAMINATION. ALL STUDENTS MUST TAKE THE FINAL EXAM. A zero on the final exam will result in an F in the course. Check the final examination time. If the final examination time is a problem, you need to drop this course. Please see the SFASU [Final Examination Schedule policy](#) for more information.

Assignments and Quizzes:
Assignments and quizzes are worth 50% of the course grade.
Periodic in class and online quizzes will be given. Assignments/quizzes will be of unequal weight. Not all assignments/quizzes will be graded.
In order to pass this course, your programs and labs must have an average of 60% or higher.

All assignments are due at the announced time on the specified due date. If you have a conflict, please contact me in advance. Please Note: You will be given assignments and quizzes during the [last five class days](#) of the semester. **No Make ups.**

Specific exam dates and assignment due dates will be available on the Calendar tool in the D2L management system. Once registered, students can access D2L via d2l.sfasu.edu using their mySFA username and password.

Help Support Resources:

GTAs: in 320 Ed and Gwen Cole STEM Building.
> Please see the Content Page in Brightspace by D2L for specific times.

AARC Tutors: The AARC tutors are in in 206 Ed and Gwen Cole STEM Building.
> You may use this time to get help from the tutors, or to use the lab computers.
> Please see the Content Page in Brightspace by D2L for specific times.

Open Lab - in 206 Ed and Gwen Cole STEM Building
> You may use the lab computers during this time.
> Please see the Content Page in Brightspace by D2L for specific times.

The Library Linc is open:
> The Library Linc has the software that we use in this course.
> Please see Ralph W. Steen Library Hours for specific times.

Participation: Participation in the course is essential and may be taken into consideration for your final grade.

Attendance: Roll will be taken regularly. Attendance and participation *may* be taken into consideration for your final grade. If you are absent from class, *please make sure to obtain notes from a classmate*.

In-class Attendance: There is no smoking, no chewing of tobacco, no eating or drinking, no bare feet, and no cell phone use during class. Inappropriate student behavior and offensive language in class, computer science facility or other related activity will not be tolerated. Do not sleep in class, I will wake you up. Only students officially registered for the course and approved assistants may attend class.

Coming Late to Class/Leaving Early: Students are encouraged to come to class on time and to stay for the entire class period. However, students are allowed to come late and leave early, as long as they do their best to minimally disrupt class when they arrive/leave and don't make a habit out of coming late and/or leaving early.

Missing Class: I make no distinction between a good and a bad reason to miss class, so there is no need to bring me a note. If you miss class and want class notes of that day's lecture, please obtain the notes from a fellow student. Each class meeting's Zoom video will be posted on the Content Page in D2L. Please note the examination policy.

Absence Notifications: For those classes that need to submit a faculty notification request, please follow the instructions found online at https://www.sfasu.edu/thehub/sos/notification-request.

Acceptable Student Behavior: SFA Policy manual states the classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program. Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Academic Integrity:
The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation.
Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one's self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one's own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one's own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

If in my judgment an instance of academic dishonesty on an EXAM has occurred, a grade of zero will be assigned and a minimum of one (1) letter grade will be lost in the course grade. *A Report of Academic Dishonesty will be filed*. Please note that being in possession of a cell phone or other

electronic device during an exam will result in an examination grade of zero. A student found cheating on an examination may not drop the course.

If in my judgment a student is found cheating on any part of a HOMEWORK ASSIGNMENT OR QUIZ, the student will receive negative points equal to the value of the entire homework/quiz will be given. *A Report of Academic Dishonesty will be filed*. A negative grade will not be replaced by any possible bonus assignment. I consider the person who did the work (homework, quiz, and test) and the person copying the work as both cheating.

Do your own work. Do not share your work with others. A course grade of F may be assigned depending on the situation.

All instances of academic dishonesty will be reported to Office of the Dean of the student's major and to the Chair of the Department of Computer Science. This report shall be made part of the student's record and shall remain on file with the Dean's office for at least four years. Instances of academic dishonesty may also be reported to the University Committee on Academic Integrity.

A student who wishes to appeal decisions related to academic dishonesty should follow procedures outlined in Academic Appeals by Students.

AI Policy: Work submitted for grading must be your own. Use of AI-generated material for homework, quizzes, or exams is a violation of SFA's academic integrity policy (see above).

For more information regarding SFA's Academic Programs and Policies, please see SFASU's Bulletin.

Identification: Valid SFA student I.D. cards with CID (not SSN) must be presented on each exam day. (No I.D... No exam...Grade of zero.)

University Drop Policy: If you have questions concerning registration, add/drop or the withdraw process, contact the Registrar at (936) 468-2501 or E-mail. The Registrar is located on the 2nd floor of the Rusk building.

Withheld Grades, Semester Grades Policy: At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within the specified time frame agreed upon if a WH is approved. If the work is not completed by then, the grade automatically becomes an F, except as allowed through policy [i.e., Active Military Service (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Student Wellness and Well-Being
SFA values students' overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students' mental health and wellness. Many of these resources are free, and all of them are confidential.

The Dean of Students Office
Location: Rusk Building, 3rd floor lobby
Website: www.sfasu.edu/deanofstudents
Telephone: 936.468.7249
Email: dos@sfasu.edu

SFA Human Services Counseling Clinic
Location: Human Services, Room 202
Website: www.sfasu.edu/humanservices/139.asp
Telephone: 936.468.1041
Email: SFACounselingClinic@sfasu.edu

The Health and Wellness Hub "The Hub"
Location: corner of E. College and Raguet St.
Website: www.sfasu.edu/thehub
Telephone: 936.468.4008
Email: thehub@sfasu.edu

To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:
- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education

Crisis Resources:
- Burke 24-hour crisis line: 1.800.392.8343
- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline: 1.800.273.TALK (8255)
- johCrisis Text Line: Text HELLO to 741-741

Special Accommodation Request: Students with special accommodation have the responsibility to immediately initiate a meeting with the instructor to discuss how the special accommodations will be provided. Students who are aware of these special needs at the beginning of the semester must inform the instructor in person or via email about any event which requires special accommodations.
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 936.468.3004 / 936.468.1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional

information, please contact [Disability Services](), 936.468.3004; office hours are Monday through Friday 8:00 a.m. – 5:00 p.m.

Software Policy: Disciplinary action will be taken against individuals who perform unauthorized duplication of computer software or who are involved in the unauthorized use of duplicated software. This action may make it impossible for you to complete this course.

Computing Laboratory Usage: Students who utilize equipment in university computing laboratories are expected to read and abide by all posted policies for the laboratories. Please note that no children are permitted in university computing laboratories.

Tobacco Products and Vaping Products: Effective August 22, 2016, Stephen F. Austin State University is a [tobacco and vape free campus](). The use of all tobacco and vape products (including but not limited to cigarettes, cigars, pipes, smokeless tobacco, e-cigarettes, vaporizers, vape pens, hookahs, blunts, pipes, snuff, and any other tobacco or vape related product) is prohibited on all property that is owned, leased, occupied, or controlled by Stephen F. Austin State University. Additionally, the sale or free sampling of tobacco or vape products is prohibited on university property. This policy applies to all employees, students, university affiliates, contractors, and visitors.
The university shall offer and promote [tobacco prevention and education programming]() on campus as well as provide applicable resources to help individuals who want to quit using tobacco products.