COMP 182 (Data Structures & Program Design)

Fall 2025 Instructor: Bahram Zartoshty (bzartoshty@csun.edu)

Course Web Page: https://bzartoshty.github.io/

Office: Jacaranda Hall room 4441

Office Hours: MoWe: 12:45 am - 02:00 pm

Class Title	Class Name	Days & Times	Room	Class Dates
COMP 182-16 (16655)	DATA STRCT/PR DSG (Lecture)	MoWe 11:30AM - 12:45PM	Jacaranda 1600	Aug 25, 2025- Dec 12, 2025
COMP 182L-17	DATA STRUCTURES	MoWe	Online Class	Aug 25, 2025-
(16660)	LAB (Laboratory)	2:30PM - 3:45PM		Dec 12, 2025
COMP 182L-18	DATA STRUCTURES	MoWe	Online Class	Aug 25, 2025-
(16661)	LAB (Laboratory)	4:00PM - 5:15PM		Dec 12, 2025

Final Exam:

Zoom Information:

Topic: Bahram Zartoshty's Zoom Lab hours

Join Zoom Meeting

https://csun.zoom.us/j/8186772656?pwd=N3ZVcnBOQXVtLzNsUUIRY3FJeFVzdz09&

omn=84500160657

Meeting ID: 818 677 2656

Passcode: JD4441

Communication:

Please use email. Please keep emails short and focused, and use a clear subject line beginning with "COMP 182 Question". Many technical questions are better handled in person during the lecture or Canvas Q&A page rather than by email since the class as a whole might benefit from the discussion. You may email me (bzartoshty@csun.edu) at any time; I will generally respond within 24 hours (during the academic days). Use the CSUN email address and always include

your name and course in your messages to me; an email address like meqwik@love.com leaves me clueless about who you are!

CANVAS: All announcements, course notes, and assignments will be posted in Canvas.

In all cases, the announcements in the Canvas General Forum will take precedence over all other forms of communication, even over what I might say in an absent-minded moment, or just to escape (happens!)

COURSE SYNOPSIS:

Introduction to data structures and the algorithms that use them. Review of composite data types, such as arrays, records, strings, and sets. Role of the abstract data type in program design.

Definition, implementation, and application of data structures, such as stacks, queues, linked lists, trees, and graphs. Recursion. Use of time complexity expressions in evaluating algorithms. Comparative study of sorting and searching algorithms.

Required Text: None

One recommended textbook is Y Daniel Liang's Introduction to Java Programming, *Brief Version*, 10th, 11th, or later edition, Prentice-Hall. The instructor will make references and present content from this book.

Attendance:

Attendance is mandatory. I will give unannounced quizzes during class time.

Exams:

Exams, programming assignments ("labs"), and projects are based on what is presented in the lecture. There will be a Midterm and a Final Exam. All these exams are in-person and on paper.

Lecture:

All lectures/codes examples will be delivered via the instructor's website: https://bzartoshty.github.io/COMP182/: https://bzartoshty.github.io/COMP182/

It is recommended that for the best level of preparation, students should attend every lecture and lab and participate in discussions, rather than simply reading the lecture or lab material on their own.

Exams - There will be two(2) exams (Midterm and Final) and will account for 50% of student grades (25% each)

Projects:

- There will be 5-6 consecutively scheduled "Projects". The projects are carefully selected to integrate the current lecture material and lead the student to mastery of traditional and fundamental programming techniques, algorithms, and data structures.
- Projects are done as a group (maximum of two students)
- All submitted files must have all group members' names as comments at the beginning of the file.
- All students must submit their projects
- All submissions are done via Canvas.
- Submission files should be in a compressed folder using the format "P#_LastNake_FirstName.zip", for example, "P01_Zartoshty_Bahram.zip".
- Students are expected to have read and abide by the <u>University's Academic Honest</u> in the current catalog. If you do not understand that policy you are expected to discuss the policy with the instructor.

Project/programs grading criteria: (failure of any of the following list will result in a grade of zero (0).

- All submitted programs must compile without any syntax errors.
- All projects/programs must be implemented using the data structure discussed in class and specified in the project description.
- You must submit all necessary files to run your program.

Exams, programming assignments ("labs"), and projects are based on what is presented in the lecture. There will be a Midterm and a Final Exam. All these exams will be a combination of multiple questions and coding/tracing algorithms.

Collaboration

Collaboration among students is encouraged. However, this must fall short of copying any code segments, which is plagiarism. (That said, it is often the case that there is only one good solution to each part of an assignment, and this instructor will take that into account.)

Late Submission Policy:

All projects will have a due date. No project will be accepted after the due date.

Grading Scale:

You will receive a single combined grade for both 182 and 182L

Category	Weight
Midterm Exam (closed book/note)	25%
Final Exam (closed book/note)	25%
Projects	25%
Quiz (open book/notes)	25%

Lab 25

B \mathbf{C} D F A 100-94 = A89-87 = B+79-77 = c+69-67 = D+59 and below = F 93-90 = A-86-83 = B76-73 = C66-63 = D82-80 = B-72-70 = C-62-60 = D-

Hardware & Software Tools:

Use of your laptop (Mac/Windows) is mandatory.

We will be using Java SE8 or higher with (java development environments) JGrasp, Eclipse (recommended), or NetBeans IDE

JDK: http://www.oracle.com/technetwork/java/javase/downloads/index.htmlLinks to an external site.

jGRASP: http://www.jgrasp.orgLinks to an external site.

eclipse: http://www.eclipse.orgLinks to an external site.

netbeans: https://netbeans.apache.org/download/nb110/nb110.html

Click on the Downloads link and download the installation for your platform (Windows, MacOS, or Linux/Unix).

Plagiarism and Academic Integrity:

Academic integrity is a core value of the academic community. It is essential for maintaining the quality of higher education, for the development of critical thinking skills, and for ensuring that academic achievements are based on merit. CSUN defines academic integrity as the ethical and honest pursuit of knowledge, scholarship, and intellectual growth. It involves upholding the values and principles that guide ethical behavior in academic work, including honesty, fairness, trust, and respect for the intellectual work of others.

At CSUN, we believe that academic integrity is one of the most important qualities college students need to develop and maintain. Conversely, academic dishonesty is any practice or behavior, whether intentional or unintentional, that undermines the integrity of material submitted for academic credit. Academic dishonesty violates the principles of academic integrity and can have serious consequences for both the individual and the academic community. Common types of academic dishonesty fall into one of three categories:

1. Plagiarism or self-plagiarism.

- a. Plagiarism is submitting someone else's work as one's own, or without adequate or proper attribution, including unauthorized use of Al-generated material.
- b. Self-plagiarism is resubmitting the same work from a different class without the current instructor's knowledge and approval (e.g., using the same programming exercise solution in more than one class).
- **2. Cheating.** Examples of cheating include (but are not limited to):
- a. Copying from someone else's quiz or exam.
- b. Using an unauthorized aid during an exam (e.g., phone, smartwatch, notes, or browser).
- c. Unauthorized collaboration or communication with others, over services like Discord, during a quiz or exam, including downloading, uploading, sharing, or duplicating course material.
- d. Unauthorized use of generative AI like ChatGPT or other web-based applications like stackoverflow.com, chegg.com, coursehero.com, Quizlet during a quiz or exam.
- 3. Fraud. Examples of fraud include (but are not limited to):
- a. Having a quiz or exam completed by someone else.
- b. Buying, selling, or otherwise obtaining quizzes or exams.
- c. Falsifying, misrepresenting, or forging an academic record or supporting documents (e.g., submitting a fake doctor's note, misrepresentation of identity).
- d. Improper access/obstruction of materials/systems (e.g., stealing a quiz or exam).
- e. Falsely claiming participation in a breakout room.

It is the responsibility of all members of the academic community to uphold the principles of academic integrity and to prevent instances of academic dishonesty. Cases of alleged academic dishonesty may be referred to Student Conduct for investigation. Relevant disciplinary action policies can be found in the <u>Student Conduct Code</u>.

COMP 182 Policy on Academic Dishonesty

- 1. Assign a grade of 0 to an assignment, examination, or the entire course.
- 2. The incident will be reported to the office of the Vice President for Student Affairs.

Disabled Students:

"If you have a disability and need accommodations, please register with the Disability Resources and Educational Services (DRES) office or the National Center on Deafness (NCOD). The DRES office is located in Bayramian Hall, room 110 and can be reached at (818) 677-2684.

NCOD is located on Bertrand Street in Jeanne Chisholm Hall and can be reached at (818) 677- 2611. If you would like to discuss your need for accommodations with me, please contact me to set up an appointment."

Changes to Syllabus:

Changes may be needed to this syllabus and to the course plan. All such changes will be announced in class and will be announced via email. Students are responsible for this information.

Course Outline (List of Topics)

- Review: COMP 110 Review (Arrays)
- Objects and Classes
- Inheritance and Polymorphism, Exception Handling
- Abstraction, Recursion

- ADT ArrayList, LinkedList
- Algorithm Efficiency
- Review & Midterm Exam
- Stack, Queue
- Binary trees
- Heap & PQ
- Hashing, Map, Set