Evergreen Valley College
Spring 2023
COMSC-76 (Computer Science II)
Section 203
1/30/2023 - 5/26/2023
Online, CANVAS Online, Asynchronous

Dr. Manny Kang
408-413-9800
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Online Virtual Office zoom hours: 8:00PM -10:00PM Monday - Tuesday (First make appointment with above phone (408)413-9800 text message or email: Manjit.Kang@sjcc.edu) with appointments: Zoom link: **https://sjeccd-edu.zoom.us/j/81054078146** .

Thursday : 10AM-12:00PM MSRC Tutoring Hours in MS-112

Additional Optional Online Zoom additional Office/ Lab Hours: 01:00PM-05:00PM Fri (Online) and Online by appointment in Zoom

Access to Online learning canvas: Click on https://sjeccd.instructure.com/login/canvas

Enter your username and password. Click on COMSC-76.

Perquisite: COMSC-75 or equivalent with a grade of "C" or better.

Course Description:

This course covers data abstraction and structures as well as associated algorithms for linear lists, stacks, queues, trees, and other linked structures, arrays, strings, and hash tables. Software engineering techniques are applied to the design and development of large programming projects in an object-oriented environment. Searching and sorting algorithms are also covered.

Student Learning Objectives

Upon completion of this course, students will be able to:

- Design and write programs that use each of the following data structures: arrays, records, strings, linked lists, stacks, queues, trees, and hash tables.
- Design, implement, test, and debug programs that employ simple recursive functions.
- Employ software engineering principles in the design, implementation, testing and debugging of large programs in an object-oriented programming language.
- Compare and contrast how analysis and design are performed in an object-oriented versus the procedural (or structured) programming paradigm.
- Explain how encapsulation, data hiding, and other abstraction mechanisms support reusability of software components.
- Evaluate tradeoffs in lifetime management, for example reference counting versus garbage collection.

Recommended Text

Starting Out with C++, 9th edition
By Tony Gaddis
Publisher: Pearson
ISBN-13: 978-0134498379

Lab Assignments

You will be assigned several programming projects ranging from light to moderate complexity. The material you send to the instructor must contain the source code with comments that include your name, the assignment number, and a description of the problem to be solved. Assignments will be graded on functionality, organization, readability (which includes proper use of naming and indention), and appropriate use of programming constructs.When you upload an assignment, you must name the files exactly as required in the assignment, or they will not be graded. File names may not contain blanks unless specifically required.

One Quiz will be assigned online every week.

Exams: There will be three exams and one comprehensive final. No make-up exam will be allowed. ***The final exam needs to be taken to be able to pass this class, and it is 30% of the total grade***.

- **Exams: See schedule**
- **Final Exam: Wednesday May 24, 2023**

Quizzes: The quiz will be given once or twice a week during lecturing. One problem for each quiz is worth 10 points. There is no make-up quiz.

Grades

Programming Labs (14 Labs)	100 points	20%
Weekly Discussions (14 Discussions)	50 points	10%
Weekly Quizzes (12 Quizzes)	100 Points	20%
Midterm	100 Points	20%
Final (one)	150 points	30%
Total	500 points	100%

A:90-100% ; B: 80-89% ; C:70-79% ; D: 50-69%; F: 0-49%
Quizzes, which may be announced, will be given about every week in class. Please see the weekly plan for more details.
The lowest quiz score of the course will be dropped from a student's final quiz grade average.

Class Participation and Attendance Policy

Zoom hours attendance is optional , but Online presentence will be considered every week such as discussion participation, completing lab assignments, quizzes , or other needed work on time .

Early Alert: Evergreen Valley College is committed to improving student success and believes that all students can succeed in their academic work and achieve their educational goals. Thus, it has implemented an Early Alert Program allowing instructors early in the semester to notify students who are struggling in their classes and who might be at-risk of not passing the course. Once the instructor reports that a student is at-risk of failing the course, the student will receive an email and a follow-up phone call encouraging the student to talk with his/her instructor, seek tutoring (if needed), and/or use other on-campus resources available to students.

Academic Honesty

Studies have shown that working in groups can improve performance in computer classes, so I encourage you to form study groups for working outside of online class. However, you must do your own work and take your own tests. Cheating on tests or copying someone else's work is not allowed. During a test, you are not to look at another student's work or talk to other students. If you do, I will assume that you are trying to copy an answer, and you will receive zero points on the test or quiz. If you don't understand test or quiz directions, ask me.

Please note: If I catch you cheating or plagiarizing the first time, I will warn you of the consequences and your work will receive zero points. If I catch you cheating the second time, I will forward your name to the Dean of Math and Science.

Drop/Withdrawal Policy

If you no longer wish to be enrolled in the course, call STAReg 408-223-0300 or go to http://www.evc.edu and click on MyWeb no later **than Sept 10** and receive no notation "W" on Permanent Record Card. You wish to withdraw from the course, the last day to do so Nov 21 After doing so, you will receive a "W" grade. To withdraw, again call the above number or go to http://www.evc.edu.

Math and Science Resource Center (MSRC)

The Math and Science Resource Center (MSRC) provides tutoring services to all students taking math and science classes at EVC. All tutoring and resource services are offered free on a drop-in, open-lab basis to registered math and science classes at EVC. For more information, please call (408) 274-7900, x6883, or visit http://www.evc.edu/mse/math center.htm.
Virtual tutoring Hours : Monday-Thursday 9:00 a.m.—6:00 p.m.; Friday 9:00 a.m.—1:00 p.m.

Student accessibility Services

The Americans with Disabilities Act (ADA) is a civil rights statute that prohibits discrimination against people with disabilities. The Student Accessibility Services Program at Evergreen Valley College is designed to allow students with disabilities to fully access and benefit from the general offerings and

services of Evergreen Valley City College. The DSP office is located in the Student Center, room SC120. Contact Information is as follows:
Phone: 408-270-6447
Website: DSP Website
https://www.evc.edu/current-students/support-programs/dsp

Student Code of Conduct

Please review the following document for information regarding Student Code of Conduct guidelines, principles of discipline, standards of conduct, academic and classroom disciplinary procedures, student grievance procedures, and suspension and expulsion.

Please click here to access the Student Code of Conduct: EVC Student Code of Conduct
https://www.evc.edu/current-students/student-life/student-code-of-conduct

Sexual Harassment/Discrimination Policy

It is the policy of the San Jose/Evergreen Community College District to provide an educational environment in which no person shall be unlawfully denied in whole or in part full and equal access to, the benefits of, or be subjected to discrimination in any program or activity of the District. This policy prohibits discrimination on the basis of legally protected categories which include ethnic group identification, race, color, language, accent, immigration status, ancestry, national origin, age, sex, religion, sexual orientation, gender identity, marital status, medical condition, veteran status, physical or mental disability, or on the basis of these perceived characteristics or based on association with a person or group with one or more of these actual or perceived characteristics.

Please click here for further information regarding the district's Nondiscrimination Policy and sexual harassment procedure:

(http://www.evc.edu/current-students/student-life/sexual-misconduct-title-ix)

EVC Student Support Resources links:

1. Virtual Campus Canvas and tutoring online tutorials: https://www.sjeccd.edu/virtual-campus

2. Student Program links to: CALWork, Extended Opportunity Program and Services, OASISS, STUDENT HEALTH SERVICES, Veterans Freedom Center, Youth Empowerment Strategies for Success (YESS)
https://www.evc.edu/current-students/support-programs

3. Student Pantry & Resources: students are encouraged to attend the EVC Drive-Thru distribution on campus. The distribution will take place the First and Third Friday of Every month from 9:30 am-11:30 am inside of Parking Lot 1.
Students can RSVP for Future Distributions:
https://www.evc.edu/current-students/student-life/student-pantry-resources

4. Financial Aid Resources: https://www.evc.edu/current-students/financial-aid-and-scholarships/student-loans

5. Mental Health and Wellness Program: https://www.evc.edu/current-students/support-programs/student-health-services/mental-health-and-wellness-program

Important Dates to Remember

01/30/23 (Mon)	Spring 2023 Session Begins
02/12/23 (Sun)	LAST DAY TO DROP Spring REGULAR classes without receiving a "W" on record or being assessed fees. LAST DAY TO DROP summer REGULAR classes with eligibility for a refund of registration fees. LAST DAY TO ADD via MYWEB using Add codes for summer REGULAR classes (10pm)
02/13/23 (Mon)	Census Day
09/12/22 (Mon)	FIRST DAY OF WITHDRAWAL "W" period for spring REGULAR classes.
04/27/23	LAST DAY TO DROP REGULAR classes and receive a "W" on record
05/25/23	Fall 2021 REGULAR Classes End

Tentative Schedule

Week	Chapter	Topics	Assignments
1	13	Introduction to Abstract Classes and Interfaces	
2	17	Binary I/O with FileInputStream and FileOutputStream. Object I/O and Random-Access Files	Assignment 1 on Abstract Classes is due on 02/10. Discussion 1 is due.
3	18	Recursion	Assignment 2 on File I/O Programming is due on.
4	19	Generics	Assignment 3 on Recursion is due
5		**Test #1**	Assignment 4 on Generics is due
6	20	Linear Lists, Stacks, and Queues	
7	21	Sets and Maps	Assignment 5 on Lists, Stacks, and Queues is due.
8	22	Big-O Analysis, Developing Efficient Algorithms	Assignment 6 on Maps is due
9	23	Sorting Algorithms and their Analyses Teams for Programming Project are Determined	(Group) Assignment 7 on Efficient Algorithms is due on
10		**Test #2**	Assignment 8 on Sorting is due
11-12	24	Implementing Lists, Stacks, and Queues.	Week 10 Assignment due

13-14-15	27, 25	Hashing , Binary Search Trees. Teams for Programming Project are Determined Work on Team Project. Review	Work on Team Project. Week12-14 Lab Assignment due, Group Project Due
16		**Final Exam (May 24, 2023)**	