Fresno City College

Title: Programming Concepts & Methodology I - (**CSCI-40**)
Section #: 23693
Meeting Days/Times: TTH 6:30PM-7:55PM
TTH 8:05PM-8:55PM

Start Date: 08/09/2021 - End Date: 12/10/2021
Instructor: Gregory Jamison
Term: 2021FA
Room: WEB WEB
WEB WEB

Units: 4.00

PreRequisites/CoRequisites and Advisories

Prerequisite
MATH-103
Foundations of Algebra

Co-Requisite
MATH-4A
Trigonometry

Advisory
CSCI-1
Introduction to Programming Concepts and Methodologies

Welcome Message

The aim of this course is to enable you to write computer programs in C++ to solve problems that would be too long or complicated to solve by hand. Emphasis will be placed on proper programming style.

Note that this course is online, so a reliable computer and internet connection will be required. Checking your school email account regularly is a requirement. Your computer needs a browser, PDF reader, and webcam. You will be required to use Zoom.

In order to submit homework and classwork, a flatbed scanner or [GeniusScan](#) for your phone is required. If you are concerned about these requirements, please contact me at the beginning of the course because it may be possible to make arrangements.

Instructor

Name: Gregory Jamison
Email address: greg@jamison.tk
Office Location/Hours: S-16
Phone: 338-0409 (home)
Other Contact Information:
https://greg.jamison.cc/Web%20Pages/contact/ContactMe.html
Division Office Phone: 442-8215
Comments
Website: greg.jamison.tk

Office Hours: 5:00-6:50 TTh; 2:30-3:20 F

Course Description

Introduction to problem solving, algorithm development, procedural and data abstraction using the C++ language; program design, coding, debugging, testing, and documentation.

Course Objectives

1. Determine if a computer program can be used to analyze or solve the problem.
2. Design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions.
3. Write a program that incorporates the correct use of built-in and user-defined simple data type for storing and processing data information.
4. Write a program that uses built-in and user-defined structured data types to solve the problem, including arrays, structures, and classes.
5. Use pseudocode to provide a computer programming solution to a given problem.

Student Learning Outcomes

1. Analyze and explain the behavior of simple programs involving the fundamental programming constructs.
2. Debug and test existing C++ programs to insure correct execution.

3. Design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions.
4. Apply the techniques of structured (functional) decomposition to break a program into smaller pieces and describe the mechanics of parameter passing.
5. Write programs using arrays and other data structures.

Required Texts/Materials

course materials
All course materials can be found at http://greg.jamison.tk

Early Alert

Fresno City College has a team of individuals working closely with instructors to ensure students receive the support and resources necessary for academic success. In addition to messaging you through the Canvas Inbox, I will be using the Starfish Early Alert Program to communicate concerns or praise (kudos) about your progress. Throughout the semester, you may receive an "EARLY ALERT" message from Starfish Solutions.

The message will be sent to your SCCCD student email account and either contain a Kudo or a Flag.

A Kudo acknowledges your hard work, and a Flag identifies an area that may pose a barrier to success in this class. Students receiving a flag will be instructed to either contact me (your instructor) or contact a counselor.

Please follow the email instructions promptly so we can address the issue as quickly as possible. Your success is important to all of us!

Attendance Policy

This class is held largely asynchronously. However there will be three scheduled exams and one final. The exams and final will be held during the scheduled class time. If the scheduled times are not possible for you, please contact me and I will do my best to make accommodations.

You should turn in homework every week. If you do not turn in homework for two consecutive weeks, you may be dropped.

Drop Policy & Deadlines

If you miss two weeks of tests or assignments, you may be dropped from the class. You should turn in homework every week. If you do not turn in homework for two consecutive weeks, you may be dropped.

Holidays

Labor Day: Sept. 6

Veterans' Day: Nov. 11

Thanksgiving: Nov. 25-26

Participation and Engagement

The computer assignments will be submitted electronically. Each assignment will be given a grade from 0 to 10, corresponding to a percentage from 0% to 100%. I will not accept any assignments which would not receive at least a 7, including considerations of style as well as output. If you show me a program in progress, I will be happy to tell you how to perfect it. Computer programming can be very time consuming. Make sure you do not fall behind on the homework assignments since it will be extremely hard to catch up later. A class normally requires two hours of homework for every hour in class; this class may require even more. A conscientious student will need to be working on homework for at least twice the scheduled number of lab hours.

Class Outline/Calendar

https://greg.jamison.cc/Web%20Pages/CSCI40/CS40ScheduleMWSp2021.html

Exams and Assignments

https://greg.jamison.cc/PDFs/CS40/CS40assignments.pdf

https://greg.jamison.cc/PDFs/CS40/CS40OtherBases.PDF

Also a group assignment described here:

https://greg.jamison.cc/Web%20Pages/CSCI40/adventureIslandWeb/AdventureIslandHome.html

Accommodation for Students with Disabilities

Fresno City College is committed to creating accessible learning environments consistent with federal and state law. To obtain academic adjustments or auxiliary aids, students must be registered with the DSP&S office on campus. DSP&S can be reached at (559) 442-8237 and is located in Building A. All information is kept confidential. If you are already registered with the DSP&S office, please provide your Notice of Accommodation form to me as soon as possible, preferably during the first two weeks of class.

Your success is important to me. If your accommodation includes taking the tests in the DSP&S office, it is your responsibility to make an appointment to take the test on or before the day and time of the in-class test and to inform me of the appointment.

Please contact me as soon as possible if you have any questions.

Grading Scale

There will be three tests. The final will cover all of the material taught in the class. There will be no make up tests. Homework will be submitted via the network. The homework score will total 100 points. Each test will be worth 100 points. The lowest of the three test scores will be dropped There will be a semester group project worth 100 points. The final will be worth 150 points. In summary then, grading will be as follows:

test 1	100		
test 2	100		lowest test score dropped
test 3	100		
homework	100	
Project	100	
final Exam	150	
total	550	

To compute the letter grade for the course:

	90-100%		A
	80-89%		B
If you get	70-79%	then your grade will be at least	C
	60-69%		D

0-60%	F

Make Up

I do not give make-up tests. I drop your lowest test score instead.

Late Work

I do not accept late work.

Academic Dishonesty Policy

Students at Fresno City College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism

Plagiarism is a specific form of cheating and is the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work to be evaluated in different courses without the knowledge and consent of the instructors involved, or encouraging, permitting, or assisting another to do any act that could subject him or her to discipline. Incidents of cheating and plagiarism may result in a variety of sanctions and penalties

that may range from a failing grade on the particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Support Services

Services available to students:

[Health Services web site](#)

[Tutorial Services web site](#)

[Psychological Services web site](#)

[RAM Pantry web site](#)

Final Exam Date

Dec. 7 at 6:30 pm