



Course Syllabus

Welcome to my class!!!

Course Description

The first course in the Introduction to Computer Science series. Designed as a hands-on introduction to the field of computer science for students preparing to enter the field or who are looking for a general interest course. Includes an overview of the history of computers, their hardware, and systems software. Emphasizes algorithm development using modern design methodologies and programming concepts up to and including looping algorithms, functions, and arrays. Programs implemented in a contemporary high-level-language currently C++.

Learning Objectives

Upon completion of this course, the student will be able to:

1. Describe the mechanics of parameter passing.
Describe various data representations.
2. Describe the software development life-cycle.
Explain the function of the statements that form the basis of a programming language, using examples in several different languages.
3. Describe the principles of structured programming and be able to describe, design, implement, and test structured programs using currently accepted methodology.
4. Explain what an algorithm is and its importance in computer programming. Represent the solution to a problem in flowchart and pseudocode form.
5. Describe various data representations.
6. Utilize text editors, compilers and IDEs.
7. Break down a problem into the steps necessary for its solution. Translate those solutions into code (created to solve the same problem) in C++.
8. Demonstrate number system conversion to and from binary, decimal and hexadecimal.
9. Discuss basic fundamental units of digital computers.
10. Describe computer organization and operating

Key Points

- Class attendance is mandatory. You may be dropped if you are absent from three or more classes.
- Students with “perfect attendance” may be exempted from taking the final exam.
- This is a class with a laboratory component. Two hours of lab attendance are required each week. Additional lab time may be required to complete assignments.
- Personal electronic devices may not be used, and are to be stowed out of sight, at all times, prior to entering the classroom.
- Your final grade will be based on Class Participation (25%), Quizzes & Assignments (50%), and Practicums (25%). Students are expected to know their current grade at all times.
- All work must be submitted on, or prior to, the due date – please refer to the *Class Schedule*. No late work will be accepted.
- A *Twitter*® account is required for this class. Students are expected to follow #CS1A, acknowledge Tweets with a “like” and respond appropriately.

system features.

11. Analyze and design efficient algorithms for problem solving.
12. Utilize appropriate data types and structures.
13. Write, organize and assemble program documentation.
14. Create correct code, and debug simple errors in C++.
15. Define terms relating to computers and computer science.
16. Describe the historical development of computing machinery.
17. Create a worksheet using electronic spreadsheet software.

Student Learning Outcomes

1. Explain how a compiled program runs on a computer and define procedural programming.
2. Write code to solve an elementary problem using appropriate procedural programming concepts.
3. Write a program that uses an array to work with data.
4. Create the flowchart or pseudocode for a program containing accumulation and repetition.

Class Details

Location: ATAS 144
Day/Time: MTWTh 3:00PM – 4:20PM
Lab: MTWTh 4:30PM – 5:35PM

Canvas Class Website

You can access *Canvas* through the Saddleback College website: <https://www.saddleback.edu> and click on “*Canvas*” at the top of the page. Log on with the same user name and password as your *MySite* and school e-mail. If you can’t log on contact the Student Help Desk at 949-582-4363 or e-mail scstudenthelp@saddleback.edu. For *Canvas* technical assistance after hours phone 844-303-0343.

Instructor Contact Information

Instructor: Carl Argila
Phone: 949-582-4820
Office Hours: By appointment.
Email: cargila@saddleback.edu
Twitter®: @CarlArgila (Follow #CS1A for class updates)
Website: www.aligra.com

All official course communication will be sent to your Saddleback or IVC e-mail account (depending on which school you registered through). You are expected to check your e-mail regularly so that you don’t miss important announcements. If you forward your e-mail, make sure your forwarded account is in working order. Informal class information and updates

will be Tweeted with hashtag #CS1A. Students are expected to follow this class on Twitter® (@CarlArgila) to receive class updates and exchange information with other students.

Important Dates

Last day to drop with refund: 6/20/2025.
Last day to add with APC: 6/24/2025.
Last day to drop without “W”: 6/24/2025.
Last day to drop with “W”: 7/24/2025.
Last day to elect Pass/No Pass: 8/9/2025.

If you want to drop the course, be sure you do so by the required date. Although the instructor may drop students for non-attendance, it is ultimately the responsibility of the student to drop themselves by the appropriate dates.

Class Format

This class is an *AVID For Higher Education* class. AVID classes focus on academic literacy through writing, inquiry, collaboration, organization and reading. We emphasize participative lectures, discussions, project activities and individual participation – all geared toward expanding your knowledge of the subject matter. Students will use *Canvas* and other on-line tools as part of their instruction, to supplement in-class work and to access online resources and course materials. Be prepared to participate in class discussions by keeping up with assigned readings/homework and contributing thoughtful questions and input. Students are required to maintain a Twitter® account to receive class updates and exchange information with other students. Students are expected to follow #CS1A, acknowledge Tweets with a “like” and respond appropriately.

Accommodations for Students with Disabilities

This course meets the requirements set forth in the accessibility checklist and universal design grid provided by Special Services. The web pages, video presentations, textbooks and class materials used in this course are accessible to students with disabilities. If you need any accommodations due to a disability, please speak with the instructor. Student accommodations are preferably provided in the classroom which is the least restrictive environment.

Saddleback Disability Services : <http://www.saddleback.edu/dsps/>

Course Materials

Starting Out with C++ (7th Edition), Gaddis; Addison-Wesley ISBN 978-0-13-257625-3
(This textbook is available on-line at no cost to the student.)

Other course materials will be posted online. Please print, read and/or view the appropriate materials prior to class.

Attendance

The attendance policy at Saddleback College includes the following:

“Students are expected to attend classes regularly. Failure to attend classes may be taken into consideration by instructors in assigning grades.

“Students who fail to attend the first meeting of any class for which they have officially enrolled may be dropped by the instructor unless prior arrangement has been made with the instructor.

“Instructors may drop a student from a class when he/she is absent for a total of two cumulative instructional hours per credit unit or after six cumulative instructional hours.

“It is the student’s responsibility to drop classes he/she is no longer attending.”

Your attendance in class is mandatory. There are no “excused absences” in this class. Since you are graded on class participation, your absence from class affects your grade. Class is also the official place for announcements, taking quizzes, submitting assignments, and information exchange among students.

Students absent from the first class session are automatically dropped as “no-shows.” Students absent from the second class session will be dropped to accommodate “wait list” students. Instructors may drop a student when the student is absent for a total of two cumulative instructional hours per credit unit or after six cumulative instructional hours. In general, if you should miss three or more classes (10% of total class sessions) during the semester you may be dropped from the class at the instructor’s discretion.

Students with “perfect attendance” may be exempted from the final exam at the instructor’s discretion. “Perfect attendance” requires that a student attend each class session including the first class meeting.

Please note that late arrival to class, early departure from class, or leaving during class will affect your class participation grade and may constitute an absence from class.

Grading

Final Grades will be based on three instructional components: *Class Participation, Quizzes & Assignments* (including the final exam), and *Practicums*, as shown in the table below.

Occasionally, grades will be scaled at the end of the semester if the instructor feels that it will result in a more appropriate or fair assessment of the class. Grades will not be adjusted for students who were absent, did not complete all of their work, skipped quizzes, or are

involved in any form of academic dishonesty. Success in this class is largely dependent upon you. Successful students attend lecture, do the assigned work, and come to class prepared.

Instructional Component		Final Grade Assignment	
Class Participation	25%	Grade	Percentage Grade
Quizzes/Assignments	50%	A	90% - Top Score
Practicums	25%	B	80% - 89%
		C	70% - 79%
		D	60% - 69%
		F	Below 60%

Students are expected to know their current grade at all times. The instructor does not compute a “letter grade” (A, B, C, etc.) until the completion of the semester. Students who wish to know what their current “letter grade” is should calculate the letter grade based on their following rubric:

Class Participation: Class Introduction (10 pts) + Daily Class Feedback Forms (@ 10 pts) normalized to 100%.

Quizzes/Assignments: Twitter assignment (15 pts) + Lab 01 (30 pts) + Chapter Quizzes (@ 30 pts) + Homework (100 pts) + Final Exam (100 pts) + Extra Credit as applicable normalized to 100%.

Practicums: Two Practicums (@ 100 pts) normalized to 100%.

Coursework

All assignments must be completed using a personal computer (IBM or compatible) with the required IDE. Student projects should be completed using the computers in the Computer Science lab; no personal computers are to be used in the lab. Please adhere to the posted lab rules. Apple computers are frequently incompatible with the projects and on-line software used in this class.

Class discussions may be posted on Twitter® as a supplement to in-class presentation and discussions. You will need to respond to your instructor and fellow students.

Late Policy

In general, no late assignments will be accepted in this class. Please refer to the *Class Schedule* for due dates. If you know you will be late or absent you should make arrangements to submit your assignment early.

Quizzes

Quizzes will be based on assigned textbook readings and lectures. Please consult the *Class Schedule* for quiz dates. The official policy for this class is that there will be no make-up quizzes.

For on-line classes quizzes administered on-line may be remotely proctored using *Proctorio* remote proctoring software. As a general rule, grades deemed to be “likely” compromised (greater than or equal to 50% probability) will not be accepted. A grade of zero will be assigned for that quiz. Students may be given the opportunity for a make-up quiz.

Re-Grades

If you feel there was an error in the grading of your work or that you might have been assessed unfairly please meet with the instructor within one week of when the assignment was returned. Any work returned the last week of class needs to be submitted for a re-grade prior to the final exam.

Classroom Atmosphere

This class is taught as a college level, academic experience. Appropriate classroom decorum and standards are expected from all students and will be enforced by the instructor. Disruptions in class cannot be tolerated.

Please DO NOT use electronic devices in class (this includes text messaging devices, cell phones, calculators, video games, laptops, “wearables,” etc.). These devices are disruptive to other students and the learning process in general. All devices, including ear buds, must be stowed, out of sight, prior to entering the classroom and while in the classroom. Use of these devices in this class is considered a disruption and will result in a reduction in your class participation grade. Typically, one warning will be given regarding disruptions. More than one incident will result in being removed from the class.

Talking with your classmates during lectures or presentations is disruptive to the instructor and to other students. Talking with your classmates will result in a reduction in your class participation grade. Please raise your hand to ask questions at any time in class.

Leaving the classroom during lectures or presentations is disruptive to the instructor and to other students. You should plan on remaining in class for the full session. If you need to leave the classroom, while class is in session, please remain outside of the classroom until the next break. Leaving the classroom during lectures or presentations will result in a reduction in your class participation grade.

Time Management

When deciding how many units to take, it is very important to plan time for reading, studying, and preparing for those classes. No time is given "in class" for study. You are expected to be ready for each class before the class period begins.

Students should plan on 2-3 hours per unit, per week for studying. For CS 1A students are expected to devote a minimum of 7 hours per week for work outside of the classroom.

Academic Dishonesty

There is a zero tolerance policy for any instance of academic dishonesty. College policies are defined in the course catalog. It is required that you understand these policies; ignorance will not be considered a justification for a violation of policies in this class. Cases of academic dishonesty will be dealt with individually and may result in an 'F' grade for the assignment.

In this course, all assignments and individual projects should be completed solely by you. If you need assistance you may get help from the instructor or the Tutoring Center staff. You may not show or distribute your work to anyone in any of the CS 1A classes. All work you submit must be your own.

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