AP Computer Science A Semester 1/2 2022-2023

Course Information:

CTE Course Industry Sector & Career Pathway:

Information & Communication Technology - Software & System Development

Class Schedule: Period 1 - 8:30-10:05am

Period 2 - 8:30-10:05am Period 3 - 10:42-12:17pm Period 4 - 10:42-12:17pm

Grades: 9-12

Course Hours: 2 Semesters, 360 Hours

Course Credit: 5 Credits/Semester

Course Overview: This course provides the fundamentals of computer science and the logical process of computer programming. Students will learn how to read, design and implement coding algorithms using the object oriented programming scheme using the Java programming language. Students who complete this course will be able to design and build projects of their own through a project life cycle of design, build, test, debug and re-design.

How to find Success in this Course:

- 1. Be Curious.
- 2. Get Ahead!
 - a. Read ahead in lecture material to ask clarifying questions (Similar to college courses)
 - b. Due to the lab centric nature of the course, you have all the material to work on from the start. Get ahead on labs!

3. Don't fall behind

a. This course continuously builds on top of knowledge learned the ENTIRE year. If something doesn't click, take the time to try to understand it.

4. Make friends!

a. Like any course, it's hard to get through alone. I encourage collaborative work for better understanding!

Resources for Success in this Course:

- Class Textbook
- 2. Class website
- 3. Google Classroom
- 4. Yearlong schedule of lecture, homework, and guizzes.
- 5. AWS Cloud 9 IDE
- 6. AP Classroom Lectures and Videos

Optional external help:

- Codecademy
- I'd be careful of other sites that

Books that this course is based around:

- Java Methods A & AB Object Oriented Programming and Data Structures, Maria and Gary Litvin, Skylight Publishing.
- Be Prepared for the AP Computer Science Exam in Java, Maria and Gary Litvin, Skylight Publishing.
- Karel++ A Gentle Introduction to the Art of Object-Oriented Programming, Joseph Bergin, Mark Stehlik, Jim Roberts, Richard Pattis, John Wiley and Sons.
- Java, An Eventful Approach, Kim Bruce, Andrea Pohoreckyj Danyluk, Thomas P. Murtagh, Prentice Hall.

Recommended Materials:

Listed below are <u>recommended</u> materials for students taking *AP Computer Science A*. These materials are not required, and full participation in the course does not require the purchase of any of these materials. State law requires us to provide a public education free of charge. Subject to certain exceptions, the right to a free public education means we cannot require students or their families to purchase materials, supplies, equipment or uniforms for any school activity, to pay security deposits for access, participation, materials, or equipment, or to make donations to a class, activity or program.

Recommended Materials:

- Laptop of your choice
 - District provided Chromebook is completely acceptable and accessible

Teacher Philosophy: I am here to help you learn! The more time you put in, the more I can help you. This subject is such a fascinating area of study and can benefit you anywhere you want to go. So why not learn a little! :D

CV School Wide Behavior Expectations, Academic Honesty, and Discipline Policies may be found here:

https://www.qusd.net/domain/1302 or scan the QR Code below.



CV Policies: School policies are distributed to all families at the beginning of the year, and are also available in the Parent/Student Handbook on the school website: www.cvhsfalcons.com

PBIS The Falcon Way: (Suggestion: Instead of a long list of Do Not's, share a short list of expectations positively framed --for example: Be Safe, Be Respectful, Be Responsible. Provide a few examples of what this may look like in your class.)

Behavior:

Students are expected to show respect to me and their peers. Examples of misbehavior are (but not limited to):

- 1. Bullying another student
- 2. Cheating talking during a quiz, looking up quiz information
- 3. Cheating copying labs from a neighbor
- 4. Removing/altering files from another student's work
- 5. Inappropriate use of photographs or language

Any "Cheating" violations will, at a minimum, result in the student's grade being determined solely by their quiz average.

Grading Policy:

I firmly believe that **grades aren't everything**. Grades should be an accurate **representation of your understanding** of the material at hand. Quizzes are just assessments for me to know where we are as a class and individually how each student is doing.

There are two things I do with grading:

- 1. I tend to curve the median of quizzes
 - a. This is to accommodate the difficulty of quiz questions. Quizzes will be built for material taught in class prior.
- 2. I drop at least one quiz
 - a. Everyone has a bad day, my focus is to learn from it and move on.

Below is the grading breakdown of the course and the grading scale:

Activity	% of Grade	Expectation
Exercises	10%	Completion of in class exercises
Homework	10%	Completion of weekly homework
Lab Check	25%	Progression through labs
Mini Quiz	15%	Bi-weekly Knowledge check
Quiz	40%	Bi-Weekly Longer Knowledge Check
Extra Credit Project	5%	Extra Credit of up to 5% for projects built out of school. Graded on effort, difficulty, and learning
Total	105%	

Α	>= 90%	
В	>= 80%	
С	>= 70%	
D	>= 60%	
F	< 60%	

Attendance: Attendance is tracked through exercises completed and lab progression checks.

Extra Credit: This is an opportunity for you to create something outside of class! I encourage exploration beyond the classroom and reward those who try to build something!

Late Work: Work is meant to be completed by due dates to help with understanding of quizzes or classwork. I give a 2 day grace period of up to 100% on work. After that, students can earn up to 80% credit for work done late.

Best Way to contact the teacher:

Email: jpoole@gusd.net
Discord: In class link
Google Classroom

Office Hours: Mondays 3:30pm-4:30pm

I encourage students to attend office hours for extra time understanding material. Students in the past who have attended said they wished they attended earlier. Come by and say hello!

<u>Home-Teacher Communication Plan:</u> GUSD schools and classes report home every five weeks via progress reports, these reports will notify parents and students if a student is in danger of failing.

Beyond these reports, parents and students can access student's grades via my <u>public</u> <u>spreadsheet.</u> These are updated intermittently. This is as transparent as I can be with my grading scheme. If you have inquiries about grades, I would love to have the student chat with me about what we can do to work on better understanding the material.

Grade website: https://jacobpoole.net/Grades

Course Schedule:

A full timeline of the schedule of the course can be found on my website

here: https://jacobpoole.net/APSchedule

Student-Parent Contract

Crescenta Valley High School AP Computer Science A Mr. Jacob Poole

IVII. Jacob Foole				
Student: I have received a copy of the course sylla requirements and classroom rules.	abus. I agree to abid	le by all of the standards,		
Student Name	_Student Signature			
Parent: I have read and discussed this syllabus with my student. My student and I are aware of the expectations of this course. I give my student permissions to participate in all activities and discussions related to this course.				
Parent Name	Parent Signature			

Instructor:

My promise to the student is to do my best to teach students material, give them relevant coursework to practice material, and correctly and fairly assess students' learning. I enjoy this course and I look forward to sharing my knowledge with you all.

Instructor Jacob Poole Jawpan