AP COMPUTER SCIENCE PRINCIPLES

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I. COURSE DESCRIPTION

AP Computer Science Principles (APCSP) is a year-long, College Board certified Advanced Placement course geared toward introducing students to the breadth of the field of computer science. Students will engage with computer science principles as a medium for creativity, communication, problem solving, and fun. They will learn to design and evaluate solutions and use computer science to solve problems in a hands-on and project-based approach.

This course follows the <u>College Board's</u> curricular framework for <u>Computer Science Principles</u> (CSP). This framework was developed by leading computer science educators from around the country with guidance from the College Board and with funding support from the National Science Foundation. The class is geared toward preparing students for the College Board's Advanced Placement Exam for Computer Science Principles in May.

Note: sign-up & registration for the exam takes place in October.

This course also uses <u>Code.org's</u> Computer Science Principles online curriculum, one of the College Board's Endorsed Providers, which provides preapproved material such as, lesson plans, guided practice, and formative assessments. We have a virtual classroom for you to join.

II. COURSE OUTLINE

This course follows the prescribed curriculum from Code.org's AP Computer Science Principles course.

- UNIT 1 Digital Information
- UNIT 2 The Internet
- UNIT 3 Intro to App Design
- UNIT 4 Variables, Conditionals, and Functions
- UNIT 5 Data
- UNIT 6 Lists, Loops, and Traversals
- UNIT 7 Parameters, Return, and Libraries
- UNIT 8 Cybersecurity and Global Impacts Create PT
- Prep UNIT 9 Create PT Prep
- *UNIT 10 Algorithms

Post AP Exam Unit – After the AP Exam we have time to explore other CS topics & projects. In the past this has included subjects like programming drones to diving into the mechanics of Artificial Intelligence.

*As time permits. Since the goal is to be ready for the AP Exam in May (UNIT 9 is specifically geared toward working on the AP Performance Task portion of the AP Exam) there may be some units we don't get to or look at after the AP Exam.

III. CLASSROOM RULES

- 1. Respect for students and adults. You may not agree with someone but that is not a reason to be disrespectful.
- 2. Assignments are due on the posted due date. Late work is accepted if the teacher is notified and an agreement is made on when it will be turned in. Assignments must be made up prior to the unit test. Missing assignments will earn a "0" until turned in and will be final after the test for the unit.
- 3. If you are absent on the day a quiz or test is given, it must be made up either before or after school, or Panther Period, on the day your return.
- **4.** Follow all SHS rules in student handbook. The handbook can be located online at the SHS website.
- 5. <u>Cell phones and other personal connected electronic devices will be turned off</u> and put away while in class and during instructional time.

IV. GRADING POLICY

Your grade will be determined as follows:

60% - Tests, Quizzes and Projects

40% - Daily Participation and Homework

Grading is based on the following scale:

Α	93-100%	В	83-87%	С	73-77%	D	60-67%
A-	90-93%	B-	80-83%	C-	70-73%	Fail	<60%
B+	87-90%	C+	77-80%	D+	67-70%		

V. MATERIALS

You will need a composition notebook for keeping notes and journaling during the course. There will be scheduled journal checks - so this is an important piece to have.

Other materials for 'un-plugged' (i.e., non-computer) activities will be provided.

You are welcome to bring a 3-ring binder for retaining class handouts – these can be stored in the classroom and are not a requirement.

VI. COMPUTER LAB RULES

While this class will be conducted in a shared computer lab, you are free to bring a laptop if you wish. For the lab specifically you will be responsible to ensure the computer you are using is working correctly. **Do**Not make any alterations to the desktop, wallpaper, shortcuts or programs in anyway. Inform the teacher immediately if your machine has been altered or you will be held responsible for any damages or misuse of the computer.

Follow the computer use agreement that is presented the first time you log into the network. Food and

VII.	Accommodations
	Please let me know what, if any, accommodations you need for this class. I am committed to help ensure that you are successful as my student.
	please sign and return
	AP COMPUTER SCIENCE PRINCIPLES
Syllabı	us Signature Page 2023-2024
Glacier Peal	the rules and requirements for the AP Computer Science Principles course, the classroom, and the computer lab at a High School. I agree to follow/that the student will follow these rules, and any departure from the rules will result in action which may include revocation of computer use privileges.
Student'	s Name: Student's Signature:
Parent/Gua	rdian Name: Parent/Guardian Signature:

Food and drinks are not allowed in the classroom. All food must be put away before you enter the

Drink

classroom – water bottles are accepted.