💻 AP COMPUTER SCIENCE PRINCIPLES
2024–2025 COURSE SYLLABUS
INSTRUCTOR: PETE BARCENEZ

CYBERDAWGS CODE CLUB

WELCOME! to the **AP Computer Science Principles** course. This is the 2nd of four courses in the IT/Cyber Security Pathway. It is often very exciting for students to enroll in a technology course. Most students really love computers, while others are very afraid of computers.   I will do my best to help everyone succeed in this course. One of the most beneficial outcomes of this course is the possibility of earning college credit for introductory computer science classes. Learning how to understand computer programs and better yet, how to write computer programs will be a highly marketable skill in any career field.

What is AP Computer Science Principles?

AP Computer Science Principles is a course that encompasses a wide range of topics. When you take AP CSP, you'll learn how computers and technology are impacting our daily lives, from the apps we use, to how our personal data is collected, to how AI can have positive and negative consequences. You will learn the principles that underlie the science of computing and develop the thinking skills that computer scientists use. You'll work on your own and as part of a team to creatively address real-world issues using the tools and processes of computation.

Students will learn how to harness technology to:

- Work collaboratively to address real-world issues
- Design a program to solve a problem
- Analyze computational work
- Communicate ideas about technology

Skills You'll Learn

- Making connections between concepts in computing
- Designing a program to solve a problem or complete a task
- Applying abstractions in computation and modeling
- Analyzing computational work
- Communicating ideas about technology and computation
- Working collaboratively to solve problems

COURSE CURRICULUM

In AP Computer Science Principles, the course is broken down into the 5 big ideas of computer programming.

Big Idea 1: Creative Development
You'll learn how important collaboration is in developing programs and how to use an iterative process in your work.

Big Idea 2: Data
You'll explore how computers handle data and how data can be used to produce new information and solve problems.

Big Idea 3: Algorithms and Programming
You'll learn how to use algorithms and abstractions to create programs that solve problems or to express your own creativity.

Big Idea 4: Computer Systems and Networks
You'll explore how computer systems and networks work and how using multiple computers to divide tasks can speed up processes.

Big Idea 5: Impact of Computing
You'll examine the effects computing has had on societies, economies, and cultures and consider the legal and ethical responsibilities of programmers.

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INSTRUCTOR

Contact	Conference period	Tutoring hours	Prerequisite courses
Email: pbarcenez1@saisd.net	3rd (1:15-2:50 pm) "A" Day only	4:35pm - 5:15pm Wed *Or by appointment*	Foundations of Cyber Security

INSTRUCTIONAL METHODS

The recommended methods of Instruction for this course will be a combination of lecture, discussion, and demonstrations, followed by applied skills activities. Students are expected to prepare for lectures and discussions by reading and viewing the assigned videos and notes. The instructor can then present content by lecture and discussion regarding theories, principles and concepts relating to the topic. This is followed by demonstrations of the various skills that will be developed. Students are then given practical application activities. Once all activities, and/or projects have been completed, students will then be evaluated on completed works.

About the AP CSP Exam

The **AP Computer Science Principles Exam** has **two sections**: an **end-of-course exam and the Create performance task**. The end-of-course exam includes multiple-choice questions and two questions that require you to write responses that demonstrate your understanding of the Create performance task. The two written-response questions will relate to code contained in a Personalized Project Reference that you will develop in class. You will have access to your Personalized Project Reference while answering these questions.

You will complete the Create performance task over the course of the year and submit all three performance task components online through the AP Digital Portfolio for scoring. Both measure your proficiency in and grasp of the course practices and content, and **both contribute to your final AP score on a scale of 1–5.**

AP Computer Science Principles Create Performance Task Due Date Wed, Apr 30, 2025 11:59 PM ET

Submit all three components of your AP Computer Science Principles (CSP) Create performance task as final in the AP Digital Portfolio by this date.

AP Computer Science Principles Exam Thu, May 15, 2025 12 PM Local

This is the regularly scheduled date for the AP Computer Science Principles Exam.

EVALUATION

Grade Distribution	Grading Scale	Late Work	Make up Work	Work Corrections
60% Daily Assignments 40% Assessments	A= 90-100% B= 80-89% C= 75-79% D= 70-74% F= 69%-50%	Students will be able to submit late work without penalty, but the highest grade that can be earned is an 85.	A student is allowed two instructional days for each day missed during which make up work may be permitted, or they can schedule a make-up assessment	Students can correct work that is below an 85. At other times, work will be handed back to students to complete at a higher level.

TUTORING

Students are welcome to stay for tutoring afterschool. I am available from 4:35-5:15 pm on Wednesday. Please have student email or talk to me to schedule an appointment. I will confirm with the parent.

SUPPLIES

Classroom	Electronic	(2) most important supplies
• Pen and Pencils to write with • A composition book for notes • ½" to 1" binder with pocket folders	• A personal device or chrome book from library • Personal earbuds/headphones • No USB drives or DVD's from home	The most important supplies your child can bring are these: 1. **EFFORT** 2. **GOOD ATTITUDE**

COMPUTER USE

Computers are to be used for educational purposes only. To use a computer, the students must agree to follow the computer usage agreement as well as the SAISD Student Acceptable Use Policy for the Electronic Communications Systems. If they break the agreement, the student will be given an alternate assignment that is related to the topic being covered in class. Using a computer in the lab is a privilege, I will ask that all students please take care of the equipment assigned to them.

CLASSROOM RULES	COMPUTER LAB RULES
• *Respect is given to you in this class, you keep that Respect by earning it. Show respect to teacher, peers.*	• *No food or open container drinks in the lab, - gum, potato chips or snacks while using computers in the lab*
• *Cell phones are permitted in the lab while working on a project, a distracting phone will become confiscated*	• *Please do not relocate furniture in the classroom or move any*
• *Students will not use computers as personal devices for entertainment. You will be asked to log out.*	• *Do not swap any devices such as keyboards or mice*
• *Please ask for a pass to leave the room*	• *Do not use USB devices in the lab*
• *Please keep conversations to a minimum, side conversations should stop when teacher is talking*	• *Please use your own earbuds in class, do not share*

Rule Violations

There are some instances for which removal from class and an immediate referral are non-negotiable, as outlined in the campus handbook. If these instances occur, the teacher will work with administration at an appropriate time to resolve the situation. These situations may include, but are not limited to physical aggression and engaging in unsafe behavior, minor insubordination and other infractions will be handled using the following steps:

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Warning	Private conversation	Parent phone call	After school detention	Parent student teacher conf.	Office referral

INTERNET ACCESS POLICY

When accessing a school district computer, do not expect any privacy during use. Use of the school's network constitutes consent to monitoring, retrieval and disclosure of any information stored with the network for any purpose including criminal prosecution.

PARENT COMMUNICATION

Parents, teachers, and students work together to promote learning. It is important to me to communicate with you on a regular basis concerning your child's progress in learning required concepts and standards. I will either email, text, or call when appropriate. Please feel free to email me at any time. My email is listed on the top section of this syllabus.

To further promote efficient communications to the home, I would ask that you fill in the required information regarding your preferred contact methods.

Parent/Guardian 1 name	Lives with student	Cell phone	e-mail
	❑ YES ❑ NO	( ) _____ - _____	

Parent/Guardian 2 name	Lives with student	Cell phone	e-mail
	❑ YES ❑ NO	( ) _____ - _____	

PARENT/GUARDIAN 1 -- I PREFER TO BE CONTACTED BY: ❑ PHONE ❑ TEXT   ❑ EMAIL
PARENT/GUARDIAN 2 -- I PREFER TO BE CONTACTED BY: ❑ PHONE ❑ TEXT   ❑ EMAIL

PARENT ACKNOWLEDGEMENT OF SYLLABUS

❑   I have received the Networking syllabus.

❑   I am aware of the class subject and the topics that my child will be learning.

❑   I have been made aware of how my child's classwork will be graded.

❑   I have been made aware of what the procedures are for making up missed work.

❑   I have been made aware of the responsibility my child has for reviewing work where they have received a low grade.

❑   I have reviewed the classroom management procedures, expectations, rules, and consequences for the course.

❑   I understand that for my child to be successful, the teacher, the student, and the parent all must do their part.

❑   I will support the teacher's efforts with my child to maintain an environment conducive to learning.

Student Name: _____   **Student Signature:** _____

Parent/Guardian 1: _____   **Signature:** _____

Parent/Guardian 2: _____   **Signature:** _____