Syllabus
Advanced Placement Computer Science Principles
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Course Description:

Covering the AP CSP Conceptual Framework

The CS Principles Conceptual Framework developed by the College Board outlines five “Big Ideas” of computing which are further subdivided into Enduring Understanding, Learning Objectives, and Essential Knowledge Statements.The framework also outlines six "Computational Thinking Practices," which encompass essential skills for students to develop and utilize. The curriculum is structured to ensure that students explore each of these major concepts while engaging in these computational thinking practices.

Students will be using their University School Code.org, and Collegeboard.org accounts for instruction.

AP Endorsed

Code.org is recognized by the College Board as an endorsed provider of curriculum and professional development for AP® Computer Science Principles (AP CSP). This endorsement affirms that all components of Code.org CSP’s offerings are aligned to the AP Curriculum Framework standards, the AP CSP assessment, and the AP framework for professional development. Using an endorsed provider affords schools access to resources including an AP CSP syllabus pre-approved by the College Board’s AP Course Audit, and officially-recognized professional development that prepares teachers to teach AP CSP.

Students will be expected to demonstrate knowledge, understanding, and control in each of the following areas:

- Big Idea 1: Creative Development
- Big Idea 2: Data
- Big Idea 3: Algorithms and Programming
- Big Idea 4: Computer System and Network
- Big Idea 5: Impact of Computer

Course Requirements:

Two 5 Subject Notebooks, ink pens/ pencils, computer

Grading Procedures:

All assignments, classwork, projects, and programs, and tests are given a point value and your grade will be based on the percentage of points you earn. For example, an assignment could be worth 10 points while an App Project would be worth 50 points. It is very important for this course that you complete all programs and assignments. Failure to do so will cause you to fail this class no matter how well you do on tests. You cannot fail this course if you complete well and turn in all of your assignments on time.Your success in AP Computer Science.

University School Grading Scale

Total Points	Grade
100-90	A
89-80	B
79-70	C
69-60	D
59-Below	F

Advanced Placement Computer Science Exam Breakdown

Section	Question Type/Component	Number of Questions	Exam Weighting	Timing
I	Multiple-choice questions	70	70%	120 minutes End-of-course AP Exam
	Single-select	57		
	Single-select with reading passage about a computing innovation	5		
	Multi-select	8		
II	Create Performance Task	*See Below*	30%	*See Below*
	Program code, video, and Personalized Project Reference			At least 9 hours in class
	Written response questions related to the Create performance task	2		60 minutes End-of-course AP Exam

Part 1: 70% Multiple Choice Test is in May. Does not factor into the Course Grade.

Part 2: 30% Creative Performance task project. Students will be responsible for turning in the the three parts in April. At least 9 hours of class time will be given directly to this project. Students will also have to answer questions about their project on their May exam.
More details:
See AP Collegeboard.org Creative Performance Task requirements **HERE**

AP CSP Curriculum "At A Glance"

Unit 1 Digital Information	Explore how computers store complex information like numbers, text, images and sound and debate the impacts of digitizing information.
Unit 2 The Internet	Learn about how the Internet works and discuss its impacts on politics, culture, and the economy.
Unit 3 Intro to App Design	Design your first app while learning both fundamental programming concepts and collaborative software development processes.
Unit 4 Variables, Conditionals, and Functions	Expand the types of apps you can create by adding the ability to store information, make decisions, and better organize code.
Unit 5 Data	Explore and visualize datasets from a wide variety of topics as you hunt for patterns and try to learn more about the world around you.
Unit 6 Lists, Loops, and Traversals	Build apps that use large amounts of information and pull in data from the web to create a wider variety of apps.
Unit 7 Parameters, Return, and Libraries	Learn how to design clean and reusable code that you can share with a single classmate or the entire world.
Unit 8 Cybersecurity and Global Impacts	Research and debate current events at the intersection of data, public policy, law, ethics, and societal impact.
Unit 9 Create PT Prep	Practice and complete the Create Performance Task (PT).
Unit 10 Algorithms	Design and analyze algorithms to understand how they work and why some are considered better than others.

Technology Rules (when in the Classroom)

- Cell phones are to be turned off and put away during classes.Consequently, earbuds of any kind should not be in a student's ear during class time unless Ii have given permission for students to watch corresponding videos from assignments on Code.org or Collegeboard.org.
- When using one of the school Chromebooks, students need to remember they are only to have the screens visible if they are actually doing AP CSPrinciples classwork. No other subject assignments/ emails should be worked on during AP Computer Science class.

Plagiarism/Cheating

ALL PLAGIARISM rules by AP Collegeboard and Code.org should be applied to ALL classwork, quizzes/tests and assignments.

- **More details:** See AP Collegeboard.org Plagiarism documentation **HERE**

University School is responsible for maintaining academic integrity for all of its students. It is the responsibility of the students to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Infractions of academic integrity include but not limited to:

- Cheating (using or attempting to use any information that the student knows is unauthorized)
- Fabrication (unauthorized falsification or invention of information in an academic assignment)
- Plagiarism (representing the words or ideas of another as one's own ideas, including copying fro another person's code or project and using Artificial Intelligence sites(AI) without proper citations
- Facilitating infractions of academic integrity (Helping or attempting to help another commit an infraction of academic integrity)

The above policy includes copying homework, projects, assignments, code, AP classroom, notes, or tests materials. It also includes using the on-line translators or "YouTube" videos. Students who facilitate cheating will receive the same consequences as those who copy the work.

Students caught plagiarizing/cheating will be addressed by teacher and/or school administration. Incidents of cheating or plagiarism could result in a disciplinary referral and loss of credit for the given assignment. Repeat offenses may result in additional disciplinary action at the discretion of the administration.