

COMPUTER SCIENCE

COMPUTER SCIENCE PRINCIPLES



Course Purpose & Objective



Computer Science Principles (CSP) is a course within PLTW's Pathway to Engineering. Students work in teams to develop computational thinking and solve problems. The course covers the College Board's new CS Principles framework. The course does not aim to teach a single programming language but aims instead to develop computational thinking, to generate excitement about the field of computing, and to introduce computational tools that foster creativity.

The course also aims to build students' awareness of the tremendous demand for computer specialists and for professionals in all fields who have computational skills. Each unit focuses on one or more computationally intensive career paths.

Classroom Supplies

- **Composition Notebook.** It can have pages that are graph paper, or normal ruled lines. This item can be purchased at an office supply store or major retailer like Wal-Mart or Target.
- **All software** used for this class may be downloaded free of charge. Information is provided in class.
- **This is a digital classroom.** All handouts and assignments must be emailed or saved in the student's online storage account from the school for home use.



Grading Procedures & Weights

- **Classwork (40%)** - Classwork is designed to reinforce a component of a lesson. It is completed either individually or in a group. Grades range anywhere from 10 to 100 points per assignment. Some assignments are considered *formative assessments*. These are not graded, but feedback is given to prepare the student for future learning.
- **Tests / Projects (40%)** - Projects and tests are assessments based on lessons, notes, and classwork. Projects and tests have specific parameters and cover specific objectives.
- **Portfolio (20%)** - A Portfolio is required of all students. Each nine weeks period we will add 1 to 2 assignments to this portfolio to showcase your talents and abilities for the course. The portfolio is in the place of a Nine Weeks Exam.
- **Late Work Policy** - Assignments may be submitted before a progress grade reporting period with no points deducted. However, after grades have been submitted, the student will receive only 70% of the maximum points.
- **Homework Policy** - Assignments are designed to be completed during class. However, students may freely download the software and work at home. *Homework is not required for this class.*
- **Retesting Policy** - Students who receive failing grades on tests (with the exception of Semester Exams and Quizzes) are given an opportunity to correct the test or complete alternate assignments. Any retesting assignment must be completed before a progress grade reporting period.



School & Teacher Information

- **Fernando Grimaldo**, Bachelor of Science, UTPA
—Edinburg, TX fernando.grimaldo@stisd.net
 - A Day Conference Period 1:00—2:28
 - B Day Conference Period 10:30—12:07
- **David Wood**, Bachelor of Science, MSU
—Wichita Falls, TX david.wood@stisd.net
 - A Day Conference Period 2:28—4:05
 - B Day Conference Period 2:28—4:05

Parent & Student Signatures

Student _____

Parent Guardian _____

Staff Signatures

Teacher _____

Principal _____

I have received a copy of this course syllabus and have been given an opportunity to ask questions.

Science Academy of South Texas
900 Med High
Mercedes, TX 78570
(956) 565-4620



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AP[®] COMPUTER SCIENCE A



Course Purpose & Objective

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing.



The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities. challenged to work further.

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