Beginning
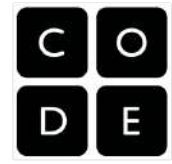# Computer Science Discoveries
2022-2023
7th/8th Grade
Course Syllabus

Contact Information

Miranda Viechec-Lingbaoan

Classroom Location: Portable 7

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Course Description:
COMPUTER SCIENCE DISCOVERIES

Computer Science Discoveries is an introductory computer science course. Mapped to CTSA standards, the course takes a wide lens on computer science by covering topics such as problem solving, programming, user centered design, and data, while inspiring students as they build their own websites, apps, animations, and games.

Additionally, we will be using Google's CS First curriculum as well as participating in Amazon CoderZ's virtual robotics program and Cal State East Bay's MESA program.

	Unit 1 - Problem Solving and Computing The Problem Solving and Computing unit is an interactive and collaborative introduction to the field of computer science, framed within problem solving. Through a series of puzzles, challenges, and real world scenarios, students are introduced to a problem solving process that they will return to repeatedly throughout the course. Students then learn how computers input, output, store, and process information to help humans solve problems within the context of apps. The unit concludes with students designing an app that helps solve a problem of their choosing.
	Unit 2 - Web Development In Web Development, students are empowered to create and share content on their own web pages. They begin by thinking about the role of the web and how it can be used as a medium for creative expression. As students develop their pages and begin to see themselves as programmers, they are encouraged to think critically about the impact of sharing information online and how to be more critical consumers of content. They are also introduced to problem solving as it relates to programming while they learn valuable skills such as debugging, using resources, and teamwork. At the conclusion of the unit, students will have created a personal website they can publish and share.

	Unit 3 - Interactive Animations and Games
	In the Interactive Animations and Games unit, students build on their coding experience as they create images, animations, interactive art, and games. Starting off with simple shapes and building up to sprite-based games, students become familiar with the programming concepts and the design process computer scientists use daily. They then learn how these can be combined to create more complex programs. In the final project, students develop a personalized, interactive program. Along the way, they practice design, testing, and iteration, as they come to see that failure and debugging are an expected and valuable part of the programming process.

Grading Policy

Grading Scale	**Grading Policy:**
90% - 100% = A	40% Assignments
80% - 89% = B	25% Participation
70% - 79% = C	25% Projects
60% - 69% = D	10% Assessments
59% or below = F	

Late Work Policy:

Late work **will be** accepted up until the end of the quarter. **Late Projects** will get a 5% deduction for each week that they are late. Incomplete work will be returned to students with feedback. Students need to use the feedback to make improvements to their work and they may re-submit their work for a better grade. Students who have an excused absence will be given a week to complete work missed during their absence and will not be deducted points. **Students who are suspended** must complete their work via Google Classroom and Code.org and adhere to all deadlines for assignments during their suspension, **make-up work will not be allowed if suspended**.

School & Classroom Rules:

1. Be Safe   2. Be Respectful   3. Be Responsible

Expectations & Consequences:

If a problem arises regarding any of the classroom rules, the following consequences will apply: **1st** = WARNING, **2nd** = student/teacher conference, **3rd** = phone call home, **4th** = referral to the principal, **5th** = student is escorted to the office by security.

Note that intimidation and teasing by other students will not be tolerated at any level in my classroom, if this behavior or any other unique situation arises, the previous discipline plan will be disregarded and administration will be involved immediately.

I am a firm believer that in order for a student to be successful parent involvement is necessary. My door is always open to my students and their parents. Don't hesitate to call, email, or message me via ParentSquare if you have any questions or concerns.

Parent & Student Acknowledgment:

I read this syllabus with my parents and agree to follow all classroom rules and procedures. If I have any problems or questions about anything in this syllabus or something is done or said in this class all year, I agree it is my responsibility to speak to Ms. Viechec about my concerns.

Student signature _____

Parent signature _____