**HS Computer Science**
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**Prerequisites:**

- This course is open to all high school students grades 9-12.
- No previous programming or electronics knowledge is required for this class!

**Course Description:**

Students will have the opportunity to advance their understanding of computer concepts and operations, including but not limited to basic coding, design skills, and file management. Internet research skills and the ethical use policy will be reviewed. Some of the projects will include advanced document creation and formatting, resume building, computer programming (JavaScript, HTML, CSS, Python), and video game development, website design, interactive templates, graphic design for a board game, advanced floor plan/house design, and future technological careers. Quarter Four will introduce basic Arduino skills and builds for a hands-on introductory to robotics.

*Beginning at the start of the 2024-25 school year, every high schooler must have access to CS education that will include one high school credit of CS. Starting with the freshman cohort of the 2024- 25 school year, each student must take at least one course in CS education as a graduation requirement provided by an educator with a CS Endorsement. This course meets that requirement, compatible with Computer Science Foundations (C10H11), Coding I (C10H14), Coding II (C10H15), and AP Computer Science Principles (G02H44).

**Commitment:**

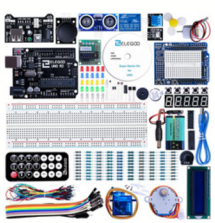
- This course meets once a week.
- Students will mostly complete their projects using class time; however, if not finished in the allotted class time, students must complete the work at home.
- Students will be sharing their work with Mrs. Lambert via Google Drive.
- Each project assignment will be given sectional due dates when certain parts or checkpoints of a project must be completed.
- It is very important to check Schoology for updates, class summaries, assignments, submissions, and homework deadlines. This is the student's responsibility, not the parents'.

**A typical class will look like...**

Introductions to new lessons will take up the first 15-20 minutes of class, depending on the subject. The majority of the class will be spent on project completion and individual Q&A sessions.

## Books and Supplies

- Elegoo UNO R3 Starter Kit (Quarter 4)



- Laptop and charger required weekly in-class
  - (Mac/PC/Chromebook)
- 1" Binder for handouts
- Headphones (Quarter 2)
- Pencils or pens
- Paper notebook
- Any extra build pieces will be provided by Mrs. L and covered by the lab fee.

- Course Online Resources: (Free)
  - Kira-learning
  - Code HS
  - Code.org
  - Google Workspace
  - Planner 5D
  - Applied Digital Skills
  - Flixier
  - Canva
  - Arduino IDE
  - Tinkercad