

Computer Science I 2025 - 2026 Syllabus

Teacher: Mr. Robert Friesenhahn

Email: rfriesenhahn@astecschoools.com

Plan Period: 3rd Hour

Monday - Friday: 10:26 AM - 11:14 PM

Early Release Monday: 9:56 AM - 10:30AM

Phone: 405-947-6272

Textbook: *N/A*

Course Description: Computer Science I offers an introduction to computer science and programming basics. Scholars work through a series of projects using Code.org's Computer Science Principles course, which empowers scholars to create authentic websites, video games, animations, and more. Scholars will engage with computer science as a medium for creativity, communication, problem solving, and fun.

Course Objectives:

1. Digital Citizenship (Impacts of Computing): Scholars examine ethical, social, cultural, and economic impacts of computing, including privacy, security, equity, and bias.
2. Artificial Intelligence: Scholars explore foundations of AI, including machine learning, neural networks, and decision-making through hands-on projects.
3. Digital Information: Scholars learn how computers represent text, images, and sound, and consider the effects of digitization.
4. The Internet: Scholars study how the Internet works and analyze its impact on politics, culture, and the economy.
5. Intro to App Design: Scholars design simple apps while practicing programming basics and collaboration.
6. Variables, Conditionals, and Functions: Scholars use variables, conditionals, and functions to create more dynamic apps.
7. Data: Scholars collect, visualize, and analyze datasets to identify patterns and societal impacts.
8. Lists, Loops, and Traversals: Scholars build apps that process data with lists, loops, and traversals.
9. Parameters, Return, and Libraries: Scholars create reusable code using parameters, return values, and shared libraries.
10. Cybersecurity and Global Impacts: Scholars evaluate risks, benefits, and ethical issues of computing innovations.
11. Create Performance Task: Scholars independently design, build, and document a computing project.
12. Algorithms: Scholars design and analyze algorithms, comparing efficiency and exploring advanced concepts.

Required Materials:

- Composition Notebooks – one per class; additional notebooks may be needed later in the year..
- #2 pencils and pens - replenished during the year
- One handheld pencil sharpener with a shaving catcher
- Loose-leaf, lined paper. 500 Count to start. Students must replenish as needed.

Attendance Policy and Classroom Expectations:

- All scholars must attend class with the required materials, be on time, and participate.
- Scholars must be present 90% of class time each semester. This means scholars can not miss more than eight days a semester per class.
- Three tardies will equal one absence.
- All scholars are expected to be respectful to all individuals in the classroom at all times.

- There is to be no gum in the classroom.
- Scholars are to come to class prepared with all materials, including notebook paper, pens, and assignments.
- Any scholar absent from class has the same number of days as they are absent, plus one day to turn in missed assignments. The scholar must find out what assignments were missed (check Google Classroom or ask the teacher as soon as possible). Failure to turn in missed work will result in a zero. Any assignment or project due on the day of absence must be turned in the following school day in attendance.
- Scholars have one week to meet with their teachers to set a date to make up a test. Scholars have until the quarter ends to take a test missed due to absence. Only tests not made up will receive a grade of zero.
- All assignments must be completed by the day they are due.
- Academic Dishonesty: Plagiarism and cheating will not be allowed in this classroom! Zeros will be given for plagiarism and cheating, parents will be called, and further disciplinary actions may be taken. Plagiarism and cheating include copying another scholar's work.

Academic Meaning of a Grade:

The grades reported to parents and students will be divided into two parts. A traditional "A through F" grade will be given to reflect the percentage assigned to the academic work attempted by the scholar. It DOES NOT reflect the scholar's mastery of the content. In addition, scholars will be given a Mastery-Based Learning grade. The last grade of the year will express how well the scholar has mastered the state-required content.

For example, a scholar may be given an "A" for the traditional grade but a "2" on the Mastery-Based Grading system and would be reported as "A/2." Ideally, these grades will match up as "A/4."

- Grades should accurately reflect individual scholar achievement about course evidence outcomes related to Oklahoma Academic Standards / National Standards for the subject taught.
- A "3" on a task/assessment is considered proficient or meeting grade-level standards, while a "4" is considered advanced or meeting grade-level standards with high excellence.
- Extra credit is not applicable, but an extension or alternative assignments/assessments may be offered to show proficiency or advanced proficiency.
- Scholars are given timely feedback and reteach/relearn/reassessment opportunities are provided to promote proficiency in the standards.

Weighted Categories:

Formative: 25%
 Summative: 45%
 Classwork: 20%
 Participation: 10%

Grading Scale:

A 90-100%
 B 80-89%
 C 70-79%
 D 60-69%
 F Less than 60%

Formative Versus Summative Scores: "Teachers record and track *formative scores* from individual assessments as indicators of students' knowledge or skill at particular moments in time. In comparison, *summative scores* are final scores based on the pattern of students' responses over time. Teachers may base each score on several common assessment forms, such as obtrusive, unobtrusive, and student-generated assessments. However, formative scores are used for tracking progress. In contrast, summative scores express students' mastery of a topic, generally at the end of a unit."

— Robert Marzano

Enrichment/Remediation: Students who struggle on an assessment with one or more standards may be assigned enrichment during the school day and required to attend Saturday morning enrichment. When students have

completed enrichment, they are given a reassessment to show their understanding of the standard. The grade on the reassessment will replace the original grade.

Scholar Progress:

- Progress reports for scholars are prepared three times each year, midway through each 9-week grading period *except for the first quarter*. Parents MUST come onsite to pick up and sign for the progress report on the day they are issued. Parents/guardians of scholars making a “D” or “F” grade must meet with teachers then. If a parent/guardian does not attend this important meeting, their scholar will not be allowed back in class until the progress report is picked up and the meeting is attended. The conference will be scheduled according to the teacher's work schedule.
- School dismisses at 3:35 pm. Students not making adequate progress may be required to attend Saturday school and be assigned to Personalized Learning instead of an elective.