

# AP Computer Science Principles

Lowndes County Career Tech Center 2024 - 2025 Mrs. Kaneka Threatt kthreatt@lowndesboe.org

# Google Classroom Codes:

AP Computer Science Principles **Department Philosophy:** The LCCTC CTE Department believes that education's most important function is to provide all students with the skills needed for post-secondary and careers. This is accomplished by providing interest-based programs that meet industry standards.

<u>Course Description</u>: AP Computer Science Principles Computer Science Principles (CS Principles) curriculum is a rigorous, course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the internet, big data, digital privacy and security, and the societal impacts of computing.

**SkillsUSA Membership Fees:** : \$25 Professional Organization: All computer science students are also encouraged to join SkillsUSA. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce.

<u>Computer Science National Honor Society:</u> (More details later)

#### Course Supplies:

- Textbook (Provided)
- Three-Ring Binder w/ Loose Leaf Paper
- Writing Utensils (Pencils and Black or Blue Ink Pens)
- Dividers

Coverage of the AP CS Principles Framework and Computational Thinking Practices The CS Principles Framework outlines seven "Big Ideas" of computing, and six "Computational Thinking Practices". Activities in this course ensure that students are engaging in the Computational Thinking Practices while investigating the Big Ideas.

 Seven Big Ideas The course is organized around seven big ideas, which encompass ideas foundational to studying computer science.
 Big Idea

o 1: Creativity Big Idea

- o 2: Abstraction Big Idea
- o 3: Data Big Idea
- o 4: Algorithms Big Idea
- o 5: Programming Big Idea
- o 6: The Internet Big Idea
- o 7: Global Impacts
- Six Computational Thinking Practices Computational thinking practices capture important aspects of the work that computer scientists engage in.
  - P1: Connecting Computing
  - P2: Creating Computational Artifacts
  - o P3: Abstracting
  - P4: Analyzing Problems and Artifacts
  - o P5: Communicating
  - o P6: Collaborating
- AP Exam: This course is designed to prepare students for the AP exam in May. This
  exam is the driving force for the curriculum taught throughout the year. The Exam
  will be given on May 15, 2025 at 12 noon.. This exam date & time is set by AP
  College Board.

# Assignments & Late Work:

For each unit you can expect: daily bell work, notes, videos and discussion questions, independent practice, hands-on and group activities, homework, laboratory work, quizzes, and tests.

**Homework** will be an important element in our class to ensure we can maximize in-class activities. YOU MUST PREPARE FOR CLASS! Failure to complete homework will affect your ability to complete in class assignments.

Due dates will be noted on the board and stated verbally during class. Major assignments due dates will be posted on Google classroom or discussed in class.

**Late work** is generally not accepted. However on rare occasions it may be necessary. In this instance the student will lose 10% of possible points for every day that the assignment is late unless the student has an excused absence.

# <u>Grading:</u>

Almost everything given in class will be counted as a grade. These assignments will fall under the categories classwork/homework, or assessments. Grades will be recorded in the district online portal PowerSchool. Your final grade will be calculated using averaged quarterly grades (every 9 weeks).

Assignments will be weighted according to the following:

- Classwork/Homework (25%)
  - Daily Assignments = 100 points
  - Homework = 100 points
- Assessments (75%)
  - Notebook Checks = 100 points
  - Projects = 100 points

The grading scale will be:

• A = 90-100% A B = 80-89% C= 70-79% D = 60-69% F=59% and below

I try to provide ample opportunities to receive **bonus points**. These opportunities are posted in class with instructions and requirements. I try to regularly update the assignments. Please contact me if you have any questions about how you can earn additional points.

#### Absences and Make-up Work:

If you are absent, it is your responsibility to make up for missed work! Additional assignments and teacher notes for each school day will be posted on Google Classroom. You will have two class days per day absent to submit make-up work.

#### Classroom Management:

I manage my classroom in a way that creates the best learning environment for every student. The contributions of each student will be valued and heard. In order to achieve these goals, a set of rules are enforced that I expect all my students to abide by in order to keep a safe and productive classroom.

#### Rules:

- Be in your seat and ready to begin on time.
- No cell phones or lpads are allowed during class.
- Remain in your assigned seats at all times.
- There is a strict no eating or drinking policy.
- The Teacher will dismiss the class, not the time.
- Raise your hand for recognition to speak
- Follow instructions the FIRST time.

#### Consequences:

- 1. Warning
- 2. Conference
- 3. Parent Phone Call/Writing Assignment
- 4. Office Referral

#### Academic Misconduct

Academic dishonesty and misconduct includes, but is not limited to, acts of abetting, cheating, plagiarism, fabrication, and misrepresentation. You will receive a zero for any work found to violate any of the actions listed below. Any time you use someone else's work you *must* give that source credit through academic citation. We will review how to cite sources in APA format. Academic misconduct includes the following acts:

- **Plagiarism:** Copying & pasting text from the internet or any other material without quoting and citing the source.
- Cheating: Copying another student's work.
- Abetting: Giving another student your work to copy.
- **Fabrication:** Creating false data or copying an idea directly from the internet when told to create your own work. ChatGpt

In this class using AI tools is not allowed. The main goal is to build critical thinking and problem-solving skills in students. This course teaches core computer science ideas like algorithms, programming, data analysis, and computational thinking. If students are allowed to use AI for answers, they miss learning from tough problems. This process is key for developing their minds and creativity. Coding exercises aim to do more than just get the right results. They help students learn how to debug errors and make algorithms better—skills that AI shortcuts can hurt. If AI is detected in any assignment you will receive a zero.

This syllabus is subject to be changed by the teacher at any time to fit the needs of the students.