



# AP® Computer Science Principles

**Teacher:** Renee Driggers

**Email:** rdriggers@randolph.k12.nc.us

**Course Room:** B23

**Tutoring:** available by appointment

**Office Hours:** 7:30 to 3:30 remote learning days; 11:30 until 12:45 M,Tu,Th,F

## Course Description

AP® Computer Science Principles introduces students to the breadth of the field of computer science. In the course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. This class is equivalent to an introductory college computer science course, and students can earn college credit based on their AP® score.

## Course Outline

- Unit 1: Digital Information
- Unit 2: The Internet
- Unit 3: Introduction to App Design
- Unit 4: Variables, Conditionals, & Functions
- Unit 5: Lists, Loops, & Traversals
- Unit 6: Algorithms
- Unit 7: Parameters, Return, & Libraries
- Unit 8: Create Performance Task
- Unit 9: Data
- Unit 10: Cybersecurity & Global Impacts

## AP® Score Components

Score Component	Description	Date(s)	Weight
<b>Create Performance Task</b>	Students will complete a programming task to be evaluated by the College Board.	12 hours of class time during semester	30%
<b>AP® Exam</b>	A 2-hour, multiple-choice exam consisting of 70 questions that will cover all topics including: Computational Solution Design 18–25% Algorithms and Program Development 20–28% Abstraction in Program Development 7–12% Code Analysis 12–19% Computing Innovations 28–33%	May 13, 2021	70%

## Required Online Tools

- Canvas (for online resources, assignments, performance tasks, and announcements)
- Computer Science Online Journal (in Canvas, used for daily reflections)
- Code.Org account (programming practice and performance tasks)
- Khan Academy account (unit assessments during virtual learning)
- Quizlet account (vocabulary reinforcement)

**Course Grading Policy****Assessment Criteria**

20% Participation: Journal Entries, Discussions, Classwork/Homework, Reading Assignments

20% Vocabulary Quizzes and Lesson Summative Assessments

30% Projects and Unit Formative Assessments

30% Cumulative Tests and AP Create Performance Task

**Class Principles**

We will review classroom expectations together to build a sense of community and respect. Following the Randolph County Schools handbook, we will comply with the rules and policies set forth. In our computer lab, please keep your computer area clean and free of food crumbs and clutter. Please be prepared to start your bellringer when you enter the classroom. Our Computer Science classes encompass creativity and discovering about the technological world around us, while developing your own personal, social, and workplace skills. I believe in each of you and embrace your creativity and individualism. Our overall goals will be to learn the content of the course while building our confidence within ourselves, our classmates, and our classroom... together.

**Academic Honesty**

All Trinity High School students must adhere to the school's Academic Honesty Policy, which prohibits plagiarism and cheating on all assignments. Academic honesty can be especially difficult when you are using internet tools and writing computer code. If you are not sure if a particular choice will adhere to the Academic Honesty Policy, please check with me.

Academic honesty is also especially important in an AP® course: the Create Performance Task encompasses specific rules for academic honesty. Failure to follow these rules may result in loss of AP® credit. The College Board actively checks for evidence of plagiarism or prohibited help on all parts of the assessment, and each year students' scores are disqualified for this reason. Please be very careful to cite your sources, submit only your own work, and ensure you are following all the rules for academic honesty on each assignment for this course.

**Parents/Guardians:**

*Your student is enrolled in AP® Computer Science Principles this semester. I have high expectations for my students and request your cooperation in seeing that he/she is successful in completing this course. In the cases of inclement weather, students will be assigned work to complete online to continue their course. Please sign below acknowledging your understanding of the above information. If you need to contact me, please call the school office at (336) 861-6870 or email me.*

**Student Learner Signature:** \_\_\_\_\_

**Parent/Guardian Signature:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Cell Phone number(s):** \_\_\_\_\_

\*\*\*Do you have a Parent Portal account for PowerSchool? Circle: YES or NO

