



# **BP41 Computer Science Principles I**

**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**

Computer Science Principles I is an introductory course intended to familiarize students with the general concepts and thinking practices of computing, computer science, and information science. Students will learn computing concepts through authentic visual and interactive projects using visual programming languages. Students will focus on the "big C ideas" in creative ways that emphasize conceptual knowledge and thinking practices rather than on programming alone. The big ideas in CSP include computing as a creative activity, abstraction, facilitating knowledge creation through computing, algorithms, problem-solving, the Internet, and the global impact of computing. Emphasis is placed on problem-solving, communication, creativity, and exploring the impacts of computing on how we think, communicate, work, and play. Art, English language arts, and mathematical concepts are reinforced.

## **Course Outline**

20%	<b>Creative Development</b>	Describe Computational Innovations
		Understand Input & Out in computing systems
		Identify errors in algorithms or programs
		Design User Interface
15%	<b>Data</b>	Understand how binary numbers represent data
		Understand how computers store information
30%	<b>Algorithms &amp; Programming</b>	Understand basic data structures
		Write programs using sequential algorithms
		Evaluate expressions in an algorithmic process
		Utilize conditional expressions and selections
		Utilize procedure calls in programs
20%	<b>Computing Systems and Networks</b>	Understand Network Structures
		Understand how the Internet works
		Understand how data is sent through the internet
15%	<b>Impacts of Computing</b>	Understand the impacts of computational innovation
		Understand legal and ethical implications of computational innovation
		Understand privacy concerns with computing Systems
		Understand issues of cybersecurity in computing systems

## **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**

<p><b>Assessment Criteria</b> 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 Explore Performance Task</p>
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**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.

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 the Computer Science Principles I course 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

