



# Computer Science Foundations

1st grade

## Programming Language:

ScratchJr

## Software used in Course:

ScratchJr

## Supported Devices

iPad  
Android Tablet  
Amazon Fire Tablet  
Chromebook

## Instructional Models:

Direct Instruction  
Instructional Scaffolding  
Use of Learning Objectives  
Relevant Vocabulary  
Bloom's Taxonomy or Questions  
Inquiry-Based Instruction  
Project-Based Instruction  
Cooperative Learning  
Independent Study

## Supported Learning Models:

Classroom  
Blended  
Hybrid  
Synchronous  
Asynchronous

## Standards Aligned:

National and State Computer Science Standards

## Reinforces:

Math  
ELA  
Social-Emotional Learning

## Course Description

In this course, students review foundational coding skills and explore new computer science concepts to expand their skill sets. Through free play and criteria-driven exploration in Unplugged and Coding lessons, students develop more advanced algorithms. Digital Citizenship and STEM Career lessons introduce healthy screen time habits, peer feedback, and a variety of careers. By the end of this course, students will be able to use resources to develop and debug projects that incorporate events and broadcasting.

## Learning Objectives

Each lesson plan is designed to enable students to achieve specific learning outcomes related to course aligned computer science competencies. For example, at the end of this course students will be able to:

- Differentiate between different types of technology.
- Create programs that include loops and triggering blocks.
- Demonstrate how to debug an algorithm when a desired task has not be completed.
- Demonstrate ways to give feedback that is positive and constructive.
- Express the importance of maintaining a healthy media balance.
- Use a set of criteria to create code for a program.