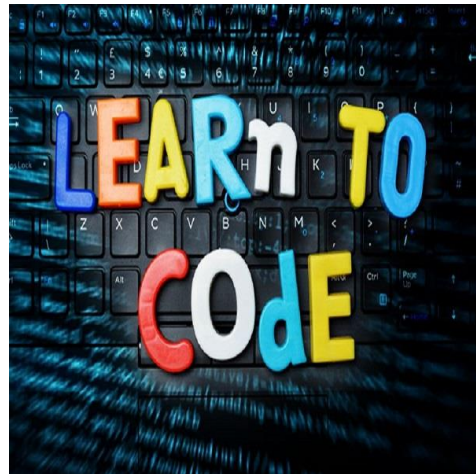6th Grade Introduction to Coding
20-week course (A/B days)
Room: 193
Mrs. Castiglia
Email: rcastiglia@silvercreekschools.org

Course Description:

Introduction to Coding is a 20-week course designed to demystify "code", to show that anybody can learn the basics, and to broaden participation in the field of computer science. Every student should have the opportunity to learn computer science. It helps nurture problem-solving skills, logic and creativity. Bstarting early, students will have a foundation for success in any 21st-century career path.

Course Goals

- Introduce computer science as an engaging and relevant discipline.
- Develop foundational skills and knowledge in programming and computer science.
- Strengthen problem solving and critical thinking skills.
- Foster creativity, collaboration, and communication.
- Explore issues raised by present and future societal impacts of computing.
- Demonstrate that all students can be successful in computer science.

Scratch
Module 1: Introduction to Scratch
Module 2: Sprite, Shapes and Drawing
Module 3: Intro to Backdrops
Module 4: Exploring Logic and Variables
Module 5: Animation/Costumes * Audio
Module 6: Experimenting with Loops
Module 7: Experimenting with Conditionals
Module 8: Intro to Game Design/Story Telling

Thimble
Module 1: Introduction to Thimble/Arduino
Module 2: Sensors/Indicators/Actuators
Module 3: Connecting Sensors/Cables
Module 4: Generating Code/Sketches
Module 5: LEDs, voltage, current, and polarity
Module 6: Integrated Develop Environment
Module 7: Plotters

Class Expectations and Rules:

1. Respect the teacher and other students

2. Cell Phones – Must not be used during class! Will be taken away and given to Dean.

3. Headphones – May be used in class
4. Food, drink, or gum is not allowed in the computer lab

5. No backpacks

6. Responsible for care of equipment, software, and computer station assigned to you

8. Be on Time!

Homework: Students will be given time in class to complete assignments. Any work not completed during class will have to be completed after school to ensure students do not fall behind in class assignments.

Grading:
Students' grades will be determined by a point system:
- Participation/Quizzes 20%
- Classwork 35%

- Projects/Tests 45%
- A cumulative exam/project will be given at the end of the quarter
- Classwork will be deducted one letter grade for each day late.
- Classwork will NOT be accepted after that unit has been completed.
- Students that are absent should come to me for missed work, I will not run after you!
- If you are absent the work is expected to be turned in the day after you return.

Attendance: Regular class attendance is very important, as it will enable the student to better understand the assignments, to take advantage of the guidance provided by the teacher and other students.