

## **COMPUTER SCIENCE DISCOVERIES/ CODING SYLLABUS**

**Course Title:** M/J Computer Science Discoveries #0200010

**Grade Level:** 6<sup>th</sup> – 8<sup>th</sup> grade

**Textbook:** None. This course will be presented through lectures, web resources and hands-on activities.

**Instructor:** Mrs. Overdorff

**Length of Course/Credits:** Semester Long/ 0.5 credits

**Course Materials Fee:** \$15

**Description:** Computer Science Discoveries introduces students to computer science as a vehicle for problem solving, communication, and personal expression. The course focuses on the visible aspects of computing and computer science and encourages students to see where computer science exists around them and how they can engage with it as a tool for exploration and expression. Students should see how a thorough student-centered design process produces a better application, how data is used to address problems that affect large numbers of people, and how physical computing with circuit boards allows computers to collect, input and return output in a variety of ways. Group activities and hands-on projects are the backbone of this course. No prior knowledge is needed to be successful in this course.

Please be aware that during this semester I plan to show video clips and full educational videos. I preview and vet all videos both clips and full length. They are used to enhance and enrich the STEM course content. A movie permission form will be sent home in your student's homeroom. Please make sure you sign and return this form.

**Course Content:** (not in order)

Computers and Society

The Design Process

Web Development

Interactive Animations and Games

App Development

Physical Computing (including robotics)

**Grading Procedure:**

Tests: 35%

Projects, Performance and Labs: 35%

Homework, Participation and Class Work: 30%

**Scale:**

A 100 - 90

B 89 - 80

C 79 - 70

D 69 - 60

F 59 - 0