

Exploring Computer Science

Mrs. Kable

Room B221

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Overview: Exploring Computer Science is an introduction to the key concepts in the field of computer science. The purpose of this course is to give students a thorough understanding of computational practices and application of skills. Students will learn some basic computer programming by using an inquiry-based method of instruction. Key concepts in this course include: computing versus computers, problem solving, binary language, algorithms, basic coding, data analysis, and robotics. There are six units throughout the course of the year that promote inquiry, equity, and computer science principles.

Unit 1: Human Computer Interaction

Unit 2: Problem Solving (Algorithms)

Unit 3: Web Design (HTML and CSS)

Unit 4: Programming (Scratch and Snap)

Unit 5: Data Analysis

Unit 6: Robotics (Edware)

Materials: Spiral Notebook
Pencils/Pens
Folder or Binder
Chromebook

Textbook: Students will not have a textbook to bring home for this course. Students will be expected to carry a notebook for various assignments throughout the course.

Grading: 90% Performance - Unit Projects/Unit Tests
Late projects will only be accepted 2 weeks after the actual due date.

10% Daily Practice - Journaling (written response/reflection-daily) and In-Class Assignments and Activities

Chromebooks: We will be utilizing technology in this course, except for the first two chapters. It is important to bring your chromebook to class. Please make sure to take care of technology (yours and the

schools). As the year progresses we will be working with Arduinos, Edisons, and other devices.

Absences:

Attendance is very important to ECS since we do a lot of collaboration. Students will be allowed to make-up work, but they will miss important content connections. It is a student's responsibility to ask and get make-up work. Some assignments will be posted online on our Moodle class and some will be paper copies. Students can only make up work as long as it is in the current unit we are studying.

Partnerships:

We will be partnering with Marquette University on assessments. This collaboration is part of a grant by the NSF (National Science Foundation). More information will follow as the school year progresses.

Additional Help:
Wednesday,

I will be available for extra assistance 1st hour (Monday, or Friday) or after school. Please let me know as soon as possible so we can find a date that works.