

# LEGO EV3 (Sr)

2022 • Spring Semester

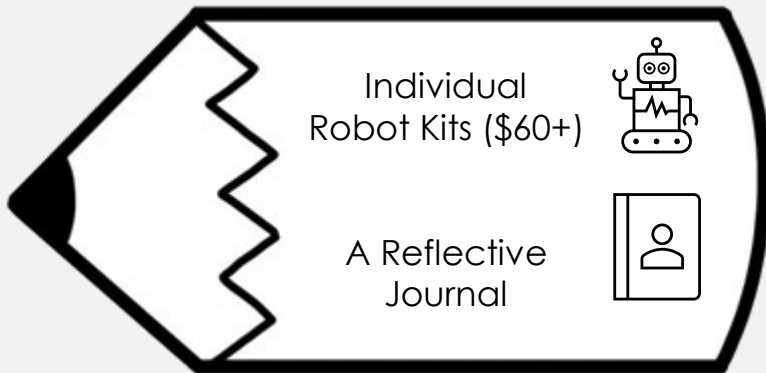
Mr. Cris

Thursdays @ 12:00pm (Lunch)

steam@hchomeschooling.org



## REQUIRED MATERIALS



## COURSE DESCRIPTION

This course acts as an introduction to robotics for students with little to no programming background. Using LEGO MINDSTORMS EV3 (Sr.) kits, students learn how to construct, control, and program robots through investigative and exploratory activities. Projects will expose students to the engineering process.

## COURSE OBJECTIVE

Introduce students to programming mobile robots using LEGO MINDSTORMS EV3:

- Motors and rotation, and sensors (sound, light, touch and ultrasonic)
- Programming using the NXT-G graphical programming language
- Robot navigation and path planning
- Systems and systems analysis
- Experimental process
- Communicating results through formal project documentation

## STUDENT GOALS

Integrate Science, Technology, Engineering & Mathematics using STEM Education concepts:

- Engineering process
- Time management
- Project management
- Problem solving and teamwork

