



Anytime, Anywhere Learning.

Elective Options

jia.jpsonline.org

JIA Middle School Technology

COURSE DESCRIPTION

This elective option geared for upper level middle schoolers allows students to gain insight into technology resources they will be using for the rest of their lives, while learning about appropriate usage in academic and real world settings. Students begin the semester with a program which has them “choose their own adventure.” By exploring the world of digital citizenship through their choices and their consequences (both positive and negative), students learn how there isn't always a right or wrong answer, but usually a better choice. At the conclusion of the first unit, students will create a PSA item that showcases good digital citizenship based on one of the topics. The next unit requires students to complete an intensive, introductory coding course through Code.org that takes them through many facets of become a good programmer—how to work smarter, not harder. Through problem solving and the gumption of overcoming obstacles, students learn the feeling of success and frustration that programmers experience. Finally, students work through a unit on design thinking, which prepares them for higher level thinking and deeper analysis in the coming years. Students work through the steps of design thinking through the idea of creating a new packaging product that is less wasteful than the current form. At the end of the unit, students present their findings in a “Shark Tank” style investor presentation using multimedia presentation, video, and audio tools.

PREREQUISITES

None

REQUIRED MATERIALS

No outside materials required.

COURSE OBJECTIVES

- ▶ Students will examine and consider the outcomes and consequences of their decision-making when making choices in a digital environment.
- ▶ Students will create a PSA about safe choices online.
- ▶ Students will participate in an in-depth introductory coding program, in which they learn how to code thoroughly and efficiently.
- ▶ Students will select and create their own online game through a list of options.
- ▶ Students will integrate design thinking into their strategy set through the wasteful packaging activity.
- ▶ Students will present their findings of the wasteful packaging design thinking project using multimedia tools in a 3-5 minute presentation.
- ▶ Students will improve their reading and writing skills.

- Students will hone appropriate and professional communication skills and expectations, preparing them for high school and beyond.

COURSE OUTLINE

Unit 1: Digital Citizenship

Unit 2: Coding

Unit 3: Design Thinking