

## **MIDDLE SCHOOL DESIGN LAB**

Mondays, January 25-April 26 (no class Feb 15, Mar 15, Apr 5; 11 weeks)

9:30-11:00am

Ages 11-14

Students study methods of designing physical and digital content, and use this knowledge and a variety of media to brainstorm, draft, and create their own pieces of art. Personal computers or tablets are required on designated weeks. All lab costs are included in registration fee. Course enrollment is limited to 12 students.

Instructor: Candra Umunna, BSc

Location: STEM Lab (suite 21)

Course fee: \$250 OR \$25/lab

10% sibling discount

### **LAB SCHEDULE:**

**Color Theory** - Monday, January 25

Today, students review the color spectrum and explore subtractive color mixing while we work on drawing basics and techniques.

**Pottery and Sculpting** - Monday, February 1

We study the physical properties of clay and how some pieces of art undergo different reactive processes as we learn to sculpt.

**Textiles** - Monday, February 8

Students explore the variety of textiles used in manufacturing clothing and upholstery and examine different fibers on a microscopic level.

**Woodworking** - Monday, February 22

We practice woodworking skills using different techniques which require measuring with units, sanding, staining, and proper use of tools.

**Animation** - Monday, March 1

In lab today, we review plotting coordinates in a 2-dimensional space and experiment with design software to animate 3D objects in a 2D space. Computers are required for this class.

**3D Printing** - Monday, March 8

Students learn about plotting 3-dimensional coordinates and test printing objects on a 3D printer. We will have time to work on and share 3D animations made in the previous week. Computers are required for this class.

### **Photography and Editing** - Monday, March 22

Students study the science behind photography and how to manipulate light and color using post-process software. Computers are required for this class.

### **Cover Art** - Monday, March 29

We investigate what makes a trendy logo by incorporating symmetry, simplicity, color, and contrast to our custom designs as we work with software to create our own book and album covers. Computers are required for this class.

### **Video Game Design** - Monday, April 12

Today, we dive into coding to design and develop our own video game apps. Computers are required for this class.

### **Cricut Design** - Monday, April 19

This week, we learn what goes into planning tangible and wearable art as we collaborate as a team to design stickers and t-shirts utilizing Cricut software.

### **Cricut Create** - Monday, April 26

In lab today, we work on printing and applying a collaborative class design as we utilize and troubleshoot our way through Cricut software.