

# LabSpace Winter Schedule 2019



(573) 645-0800

Register at [www.LabSpaceRobotics.com](http://www.LabSpaceRobotics.com)

[LabSpaceRobotics@gmail.com](mailto:LabSpaceRobotics@gmail.com)

## Music and Making- Pre-K

Join us Wednesday mornings Jan 9-April for some fun maker and play experiences and then a short sing along. We'll rotate between playdough, painting, science experiences, and art projects. Projects will be gear to ages 3+ but may be enjoyed by younger and older children. Adults should stay and participate in play with their child and also get to have some "grown-up" conversations. Tuition is \$4 per maker with a max of \$8 per family. Please register at [LabSpaceRobotics.com](http://LabSpaceRobotics.com) to let us know you're coming.

## Storybook MakerCamp

Join us Monday, April 1 at 10:30 and celebrate Earth Day early as we make our own seed paper, discuss ways to take care of our planet and explore the amazing illustration process of Eric Carle. Our stories will be **Five Tough and Tiny Seeds** and **The Tiny Seed**.

Tuition: \$5 per maker with a max of \$10 per family. Register at [LabSpaceRobotics.com](http://LabSpaceRobotics.com).

## Digital Arts with Rick Rother

LabSpace is excited to have Rick Rother back to present more of his Digital Arts Classes for students ages 9+. Students will be given firsthand knowledge and practical experience in creating and developing their own world and visual language for all to enjoy! Students of all experience levels are welcome. They learn to use tablets and free software to enhance their creations so they can continue creating at home.

Animation-Feb 2 8:30-10:30  
Stop Mo Level 1-Mar 16 8:30-10:30  
Stop Mo Level 2-May 11 8:30-10:30

## Robot Parade Workshops

Want to enter the robot parade on May 4th? Join us two Friday evenings in a row. We'll help you get a robot built and programmed. All supplies provided! Decide how you'll decorate your robot...will it pull a "float" or will you just decorate the robot itself? We'll help you program your robot to follow a line and not bump into the robot in front of you. Families are welcome to build together, or grab a friend and give it a try! Tuition: \$45.

Fri, April 12 and 26 6:00-7:30

## Game Design

Build and design your own video games using The Games Factory 2 game engine. We'll focus on good programming practices, user interface design, testing and refining our games. The class will work on constructive criticism skills-how to make productive suggestions for game improvement. Tuition: \$120 for 8 one-hour sessions. We encourage students to get a copy of The Games Factory 2. It is available on Amazon for about \$25. We get lots of programming done in class, but game design takes time and having access to the program at home will allow students to practice what they've learned. Level 1 is for beginners. *Level 1-Fri 6:00-7:00 2/8-4/4 (no class 3/29)*

## Mad Scientists

Our new science program for grades k-2. Students will explore new science concepts each week with fun, hands-on activities. Each 4 week session explores new concepts, so they can be repeated. Families are encouraged to stay and work together in class.

Wed 4:30 -April 3-24  
Teacher: Miss Annette

Fri 5:30-6:15 4/5, 4/12, 4/26, and 5/3  
Teacher: Miss Laura

## STEM Club

Grades 2-4-STEM Club is back! Hands-on science, tech, engineering and math at each meeting. Mrs. Markway from River Oaks Academy will be leading this fun, fast-paced class.

Wed 5:30-6:15 Mar 13-Apr 10  
No class 3/27

## Robot Lab Grades 2-4

Bring your Lego creations to life! We'll learn about motors, gears, pulleys, and sensors as we build and program a new creation in each class. Each week, we'll learn more about programming our creations using a special programming language created just for these robotics sets. Tuition: \$100 for eight 60-minute classes.

Level 1 Thur 5:10-6:10 2/7-4/4 (no class 3/28)  
Level 2 (our old level 3 and 4 new classes)  
Thur 4:00-5:00 2/7-4/4 (no class 3/28)

## Robot Lab Grades 3+

No experience required -An intro to building and programming robots using Lego Mindstorms. Students will program their robots to complete a variety of fun challenges. In our beginning classes, each student works on their own robot and computer, we don't share. That way we can be sure that everyone understands all the concepts and we can help as needed. Tuition: \$100 for eight 60-minute classes.

Students who have previous robotics experience are welcome in the advancing classes. We focus on specific challenges in these classes, but encourage the students to be more independent in how they arrive at a solution.

Level 1 - Thur 5:15-6:15 2/14-4/11 (no class 3/28)  
Advancing Thur 4:00-5:00 2/7-4/4 (no class 3/28)

## LabSpace Challenge Day Sat, May 4 1:00

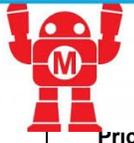
Join us for an afternoon of fun robot challenges. Cheer on local students who have worked to complete some fun robot challenges, or join in with your own robot or marshmallow launcher! If you don't have a robot, sign up for a workshop and use one of ours! Challenge guidelines are at [LabSpaceRobotics.com](http://LabSpaceRobotics.com). Challenge day is free and always fun!

## Cardboard Engineering

Students put their critical thinking and logic skills into action with activities that explore cardboard as a building material. What different ways can pieces connect? How could a hinge or spring be made? Time to make mistakes and take chances! This class will include designing several projects. Tues. 5:45-6:45 April 9-30. Ages 9+ Tuition: \$40.

# LabSpace Maker Camps Winter 2019

Maker Camp



	Description	Ages	Date(s)	Price
<b>WiggleBot</b>	Build a robot that scribbles as it wiggles! You'll learn to wire a circuit with a switch and then we'll attach some markers so that it can create some fun art and it spins. You'll get to take your WiggleBot home.	7+	Sat, Mar 16 10:00	\$10 per maker
<b>Storybook Maker Camp</b>	In this 60-90 minute cross-curriculum class we'll read a picture book and make a related project. Classes will focus on concepts such as engineering, science, problem solving, critical thinking, etc. Additional reading lists will be provided so you can continue exploring at home.  February's books will be <i>The Most Magnificent Thing</i> by Ashley Spires and <i>Rosie Revere Engineer</i> by Andrea Beaty. Both books illustrate the trial and error process of inventing and making. The stories encourage kids to keep trying and improving, especially when they're making something. We will be making rubber band helicopters, and then we'll try to make them even better!	Pre-K-Grade 2	3/4, 4/1 10:30-12:00	\$5, max of \$10 per family
<b>Young Maker Morning</b>	We'll have several "mini" projects set out for you to choose from and you can make as many as you like. This is family event-all are welcome to stay and build. \$5 builder. Makers younger than 8 must have a hands-on adult helper.	Ages 5+ with an adult	Mar 9 and April 6 10:00-12:00	\$5
<b>DIY Periscope</b>	Get ready to start your spy career! Make your own periscope to take home! We'll have all the supplies ready to go. This project has quite a bit of cutting, so younger children may need some adult cutting assistance.	7+	Sat, Mar 16 11:30-12:15	\$10 per maker
<b>Balloon Car</b>	Design a balloon powered car from recycled materials. Use the engineering design process as you build, test and improve your car.	8+	Sat, March 23 10:00	\$5 per maker
<b>Clip Mobile</b>	Using recycled materials, create a "clip mobile" to carry a box of paper clips down a ramp. We'll explore friction as we try our clip mobile on different surfaces.	8+	Sat, March 23 11:30	\$5 per maker
<b>SumoBot Challenge</b>	No experience necessary! Come build a robot and then remote control it to try to bush others out of the ring. There will be plenty of time for lots of battles and experimenting with designs and driving. Tuition is \$20 per team, so grab a friend or come as a family team. This activity works best with 1 or 2 on a team.	8+	Sat, Mar 23 2:00-4:00	\$20 per team.
<b>Cardboard Grabber</b>	Build a basic "grabber" from instructions and then experiment to find ways to make it better! You'll get to take your grabber home with you. Ages 7+ can do this independently, younger are welcome with a hands-on helper.	7+	Sat, Ap 13 2:00-3:00	\$10 per maker  Max of \$20 per family

Register at [LabSpaceRobotics.com](http://LabSpaceRobotics.com) or (573)645-0800. Registering will help us know how many materials to prepare and how many teachers to staff. Classes that don't meet minimum enrollment will be cancelled, so let us know you're coming.

We're excited to provide these low-cost making opportunities! Thank you to Capital Mall for making them possible. More events will be added, please check out website for the most up to date schedule.