

# LabSpace Winter Schedule 2019

(573) 645-0800

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

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

## Computer Club

We'll use the Scratch programming language and learn basic computer concepts while we create some fun projects. The Scratch programming language was designed at MIT to provide an intuitive introduction to programming for students ages 8-16. We'll learn about concepts like loops, wait statements, and events. Past students have enjoyed being able to share their projects with others. Beginning students will be working on an Art themed curriculum while those with previous experience will be using a Game Design theme. 8 sessions, Tuition: \$60. Ages: 9-13.

Thur 6:30-7:30 2/7-4/4 (no class 3/28)

## Intro to Programming

Scratch is an introductory programming language designed for ages 8+. We're pairing Scratch with Microbit, a small microprocessor that will allow us to use it's sensors and buttons in our programs. At the end of the 4 classes, the Microbit will be yours to take home and Scratch is a free program you can use at home, so you'll be able to continue the fun at home. Tuition: \$65. Register at [LabSpaceRobotics.com](http://LabSpaceRobotics.com). Registration deadline: Jan 3, 2019.

Thur 4:00-4:50 1/10-1/31



LabSpace is excited to have Rick Rother back this Creating Comics Workshop for 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. Sat, Jan 12 from 8:30-10:30. Tuition: \$20. Registration deadline: Jan 7th.

Animation-Feb 9 8:30-10:30

Stop Mo Level 1-Mar 9 8:30-10:30

Stop Mo Level 2-Apr 27 8:30-10:30

## 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, Platform Games (4 sessions \$65) is for those who've completed level 1.

Level 1-Fri 6:00-7:00 2/8-4/4 (no class 3/29)  
Platform Games- Thur 6:00-7:00 1/9-30

## National Geographic Science Fair Movie Screening

We're excited to be hosting a free screening of the National Geographic movie, Science Fair. Hailed by critics as "immensely likeable," "brilliant and quirky" and an "ode to the teenage science geeks on who our future depends," SCIENCE FAIR follows nine high school students from around the globe as they navigate rivalries, setbacks and, of course, hormones, on their journey to compete at The International Science and Engineering Fair.

Friday, December 7th at 6:30. Bring a snack, or grab your supper and join us!! If you plan on coming, just message us so we can have enough chairs for everyone!

## Mad Scientists

Our new science program for grades K-2. We'll be knocking down targets, making things fly and building our own toys as we explore magnets, static electricity, exciting chemical reactions, elastic potential energy and more. Families are encouraged to stay and work together in class. This session will cover different projects than November's classes.

Wed 4:30-5:15 1/9-1/30  
Fri 5:30-6:15 1/11-2/1

## Music and Making- Pre-K

Join us Wednesday mornings Nov 28, Dec 5 and 12 and Jan 9-Feb 27 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.

## 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 challenge 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 2/7-4/4 (no class 3/28)  
Advancing Thur 4:00-5:00 2/7-4/4 (no class 3/28)

## 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 making their own automaton. Tuition: \$40 Ages 8+. Registration Deadline: Jan. 1, 2018. Register at [LabSpaceRobotics.com](http://LabSpaceRobotics.com) or call (573) 645-0800.

Tuesdays 5:45-6:45 1/8 -1/29

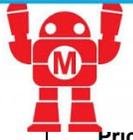
## Circuits, Circuits, Circuits

Students will start with very simple circuits and add to their knowledge base in each class. They will create several projects to take home. Tuition: \$40 Ages 8+. Parents are encouraged to stay and work with their child. Registration Deadline: Jan. 15, 2018.

Tuesdays 5:45-6:45 2/5 -2/26

# LabSpace Maker Camps Winter 2018

Maker Camp



	Description	Ages	Date(s)	Price
<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 \$15 per team, so grab a friend or come as a family team. This activity works best with 2 on a team.	8+	Sat. Nov 24 1:30	\$15 per team
<b>Storybook Maker Camp</b>	<p>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.</p> <p>The first class will feature the beautifully illustrated book Ada's Violin by Susan Hood. It tells the true story of the Recycled Orchestra of Paraguay, a children's orchestra that made their own instruments out of discarded items. Then we'll use engineering and problem solving skills to make our own recycled instruments.</p> <p>LabSpace is excited to welcome back Breanne Gibson as the teacher for this class. Miss Breanne has just complete her Master's degree in Library Science and is excited to put all she has learned to practice in this wonderful series of classes held on the first Monday from 10:30-12:00 Jan-April. Registration required-register at LabSpaceRobotics.com or call (573) 645-0800.</p>	Pre-K-Grade 2	1/7, 2/4, 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	Jan 12 Feb 9 Mar 9  10:00-12:00	\$5
<b>Christmas Craft Morning</b>	We'll have a variety of Christmas crafts available for families to work on. Come spend the morning creating with your children!	5+	Dec 15 10:00-1200	\$5 per maker, max of \$10 per family.

Register at 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.