



## Monticello Academy's Robotics Club (2019-2020)

### Introduction

Begin a fun and educational journey that will teach you amazing concepts and skills in robotics. Each of the principles and skills taught are designed to help you develop a passion and strong interest in STEM subjects. The Robotics Club will introduce students to key concepts that involve researching, programming, problem solving, engineering, and creativity, developing student interest in STEM goals and objectives. Students who participate in this club will have the opportunity to develop important lifelong skills and critical thinking while having a great deal of fun! Students will in teams, build models using Lego Education WeDo 2.0 and create a show posters to present what they learned at a season-ending Expo.

### Junior FIRST LEGO League (Grades 1-3)

Students work together with their team coach to create a robotic LEGO model with moving parts. Working with their peers, students explore science and engineering concepts through research, teamwork, construction, and imagination. Space is limited, please submit your application as soon as possible. Priority registration is given to third and second grade students. This year's theme is FIRST RISE, powered by Star Wars for Change and the topic is Boomtown Build.



### Club Participants will have an opportunity to:

- Design and build a challenge-related model using LEGO components
- Create a Show Me Poster and practice presentation skills
- Explore challenges facing today's scientists
- Discover real-world math and science
- Develop teamwork skills
- Participate in expos and showcases
- Engage in team activities

### Advisor

Ms. Ling Lam

### Coaches

TBD

### Dates, times, and location:

Junior FIRST LEGO League: **Once a week.**

October – March or April, depends on the Expo (Please make sure you can commit the entire season):

Group 1:	Tuesdays	Mac Lab/Makerspace	3:45-5:00PM
Group 2:	Wednesdays	Mac Lab/Makerspace	3:45-5:00PM

**\*\*\* Dates and Times are above tentative and subject to change before the start of the season. \*\*\***

### Fee and Costs

The Jr. FLL program tuition is a one-time **non-refundable fee of \$175 for the year**. This fee includes the cost of all materials, tools, and facilities for team members. Please note that this does not include travel and competition costs if any apply.

### Competition and Additional Club Meetings

Jr. FLL is a non-competitive event. Students will attend Expos to showcase their work. Expos are typically held on weekends. The coach will provide the Expos schedule. Last year's Expo was on a Sunday at Google's Headquarter office.

Additional information can be found at: <https://www.firstinspires.org/robotics/flljr/challenge-and-season>

## FIRST LEGO League (Grades 4-5)

The next level in the LEGO robotics program, participants in the FIRST LEGO League work together with their team to solve real-world challenges by building LEGO-based robots to complete tasks on a thematic playing surface. By working with their coach, the team will not only explore engineering concepts, science, math, and programming, but they will also have an opportunity to explore this exciting career and learn to make positive contributions to society. Space is limited, please submit your application as soon as possible. The 2019-2020 theme is FIRST RISE, powered by Star Wars for Change. First Lego League is setting out to inspire citizens of the galaxy to work together by strengthening and protecting the Force that binds us and creating a place where collaboration and collective wisdom can elevate new ideas and foster growth.



### Club Participants will have an opportunity to:

- Design, build, test and program robots using LEGO MINDSTORMS technology
- Apply real-world math and science concepts
- Research challenges facing today's scientists
- Learn critical thinking, team-building, and presentation skills
- Participate in scrimmages or/and celebrations

### Advisor

Ms. Lam

### Coach

TBD

### Dates, times, and location

FIRST LEGO League: **Once a week.**

October – March (please note that season may go longer):

Group 1:	Tuesdays	Mac Lab/Makerspace	4:00-5:30PM
Group 2:	Wednesdays	Mac Lab/Makerspace	4:00-5:30PM

**\*\*\* Dates and Times are above tentative and subject to change before the start of the season. \*\*\***

### Fee and Costs

The FLL program tuition is a one-time **non-refundable fee of \$300 for the year**. This fee includes the cost of all materials, tools, and facilities for team members. Please note that this does not include travel and competition costs if any apply.

### Competition and Additional Club Meetings

The 2019-2020 theme is FIRST RISE, powered by Star Wars for Change, is setting out to inspire citizen of the galaxy to work together, strengthening and protecting the Force that binds us and creating a place where collaboration and collective wisdom can elevate new ideas and foster growth. This team will not be attending the FIRST Lego League competition but will be able to attend scrimmage throughout the year. Scrimmages are typically held on weekends. The coach will provide the scrimmage schedule. Last year, we held scrimmage at Monticello Academy and Rockwell's office in San Ramon.

For more information, visit: <https://www.firstinspires.org/robotics/fll/challenge-and-season-info>