

# Monticello Academy Robotics Club (2021 - 2022)

#### 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 poster to present what they learned at a season-ending Expo.

### FIRST LEGO League Discover (Grades K - 1)

A new class starting this year, participants will harness their natural curiosity to explore and help shape future habits to aid in learning. With the coach, the students will explore a real-world theme, and create a solution with a team of other students. Teamwork, group learning and group play are all important components of this program, and it requires a minimum number of students. This year's theme is CARGO CONNECT. Students will explore how cargo is transported, sorted and delivered to its destination.

#### Club Participants will have an opportunity to:

- Explore real-world problems and concepts.
- Create a solution using LEGO DUPLO pieces.
- Learn critical thinking, team-building, presentation and confidence
- Present their solution and models to other schools

#### Advisor

Mr. Kenneth Glassey Email: kglassey@monticelloacademy.org

# Coach

TBD

#### Dates, times, and location

FIRST LEGO League Discover:

Once a week.

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

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 Discover program tuition is a one-time **non-refundable fee of \$245 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**

This is a non-competitive event. Students will present their model of a solution and a map of their progress to the solution to their parents, other students and potentially other schools.

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







# Monticello Academy Robotics Club (2021 - 2022)

### Junior FIRST LEGO League (Grades 2 - 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 CARGO CONNECT. Students will explore how cargo is transported, sorted and delivered to its destination.

### 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

Mr. Kenneth Glassey Email: <u>kglassey@monticelloacademy.org</u>

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):

#### TuesdaysMac Lab/Makerspace4:00-5:30PM

\*\*\* 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 \$245 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, the expo was held online. This year will most likely be the same. Additional information can be found at: <u>https://www.firstinspires.org/robotics/flljr/challenge-and-season</u>







# Monticello Academy Robotics Club (2021 - 2022)

# 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. This year's theme is CARGO CONNECT. Students will explore how cargo is transported, sorted and delivered to its destination. This club will be held at the same time as the Middle School Robotics Class, allowing the club to hone their skills against the class and inspire each other to innovate and refine further then they would have alone.



### 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

Mr. Kenneth Glassey Email: <u>kglassey@monticelloacademy.org</u>

Coach TBD

### Dates, times, and location

FIRST LEGO League: Once a week.

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

#### Mondays 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 \$350 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**

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 only held a single scrimmage at the end of Winter due to the pandemic.

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

