

## **509 - Robotics Essentials**

### **Project Description:**

This project is intended as an intermediate-level project. Younger members can take the project, but the project helper will need to be more involved. This project requires fine motor skills, attention to detail, and interest and experience with building and coding. No previous knowledge of robotics is required. Members will use the website [go.osu.edu/4hlego](http://go.osu.edu/4hlego) or [go.osu.edu/4hvex](http://go.osu.edu/4hvex) to complete several of the activities.

**REQUIREMENTS: a computer and either a LEGO SPIKE Prime or VEX IQ educational robotics kit.**

### **To Complete This Project:**

1. Complete all 10 activities.
2. Complete all Talking It Over questions.
3. Take part in at least 2 learning experiences.
4. Take part in at least 2 leadership/citizenship activities.

Take part in a project review. If you choose not to participate in judging at the fair, make arrangements to discuss and review completion of your project with your advisor.

### **Judging of this Project**

This project will be judged as part of Special Interest Judging:

at the Union Co. Fair on Wednesday – Friday immediately prior to the start of the fair

OR

at the Richwood Fair on Sunday immediately prior to the start of the fair

Your advisor will tell you a more specific judging time later in the summer. At your judging time assigned to you, bring your completed project book and your project display. You will participate in an interview judging and then leave your exhibit (a display of your project) on display the entire week of the fair.

### **Project Display**

Prepare a display that shows the judge and fair visitors what you learned and accomplished in your project. **YOU MUST BRING YOUR CREATED ROBOT TO SHOW THE JUDGE.** You can also bring other objects used or created, experiments performed, visuals and other items used to complete project book activities, or a poster showing project activities and results. **If you choose to make a poster, it must be a regular poster board (maximum 22 x 28), not foam board or tri-folds. Your project book or your robot cannot serve as your project display.**

### **Display Areas**

At the Union County Fair Special Interest Projects will be displayed in the Armory.

At the Richwood Fair these projects will be displayed in the Jr. Fair Building.

### **Project Pick-Up**

You must pick up your project display at the end of the fair or arrange for someone to get it for you. At Union County Fair, Special Interest Projects will be released on Saturday of the fair from 4 p.m.-5 p.m. Projects not picked up by 5 p.m. will be disposed of or donated to charities.

At the Richwood Fair, all Special Interest Projects will be released at 3 p.m. on Monday of the fair and should be removed by 9 p.m.

### **Award Presentation**

Union County Fair Special Interest Project Awards will be presented at the Jr. Fair Awards Program on Tuesday of the fair at the Amory.

Richwood Fair Special Interest Project Awards will be presented at the Jr. Fair Awards Program during the fair. Check the fair paper for the day, time, and location of this program.

### **Ohio State Fair Opportunity**

This project **Does** have the opportunity to be displayed at The Ohio State Fair. Any 4-H'er who wishes to compete for an opportunity to display this project at The Ohio State Fair must participate in judging at the Union County Fair, as described above. Union County representatives to The Ohio State Fair will be chosen as part of Union County Fair judging. Display should be the one used in their county.