# <u>509 – ROBOTICS ESSENTIALS</u>

2024

# **General Project**

For info on approved Robot Kits go to: http://www.ohio4h.org/robotics

- For project COMPLETION and GRADE, Member MUST participate in either:
  - County 4-H Project Judging Day Ross County Fairgrounds
    Member is eligible for County Awards (Judges' Choice, Outstanding, Honorable Mention) and State
    Fair Selection (if applicable)
  - Early 4-H Project Judging Ross County Service Center
    Members unable to attend County Project Judging Day should plan to attend Early Judging. Member is
    eligible for County Rosettes (Outstanding, Honorable Mention).
    \* Exception for State Fair selection at Early Judging If there is only one member judged in a project,
    - \* Exception for State Fair selection at Early Judging If there is only one member judged in a project, then the judge has the option to select a state fair representative.
- Complete "Thank You" note activity (see copy of instruction sheet included in your project book)
- To receive Fair Premiums, your project must be displayed at the Ross County Fair in a Jr. Fair Building booth.
- For Project Judging Dates & Times & Details:

ASK your Club Advisor READ the *May Family HOTLINE* sent to every 4-H family LOOK on the 4-H App or website <a href="http://ross.osu.edu">http://ross.osu.edu</a>

Skill Level: Intermediate

### Completion:

A computer and internet access are required for this project!

- 1. All 10 activities
- 2. Construction of a LEGOS® SPIKE or VEX® Robot
- 3. All "Talking It Over" guestions
- 4. At least 2 Learning Experiences
- 5. At least 2 Leadership/Citizenship activities
- 6. In addition to your robot, prepare an educational exhibit (item made from project book, photo exhibit, notebook, scrapbook or poster; poster size minimum 14" x 22" and maximum 22" x 28") based on this project.

#### Judging:

- 1. Interview based on skills learned, activities completed and educational exhibit.
- 2. Bring to interview on 4-H Project Judging Day:
  - a. Completed project book
  - b. Completed educational exhibit
  - c. Robot (Be prepared to demonstrate Robot's ability to complete tasks found in the project book)
  - d. Test surface on which to demonstrate Robot's completion of tasks

#### **County Fair Exhibit:**

An educational exhibit relating to project work displayed in a fair booth.

It is recommended you do NOT display your robotics vehicle or equipment!

## **State Fair Competition:**

- 1. State Fair participants will be selected during county-level competition on 4-H Project Judging Day.
- 2. Event: STEM Day.
  - Completed project book, display, and interview.
- 3. Contestants will demonstrate their robot's ability to complete tasks. Contestants are required to bring their own test surface on which to demonstrate their robot's completion of these tasks, along with a printout of the program.

