

WILLIAMSON COUNTY 4-H

4TH-12TH GRADE

SPRING 2021



**CREATE.
LEARN.
EXPLORE.
HAVE FUN.**

<https://williamson.tennessee.edu/4h-youth-development/>



EXPLORE THE PROJECT areas we offer with your student to help them find the project(s) that fit them best! At our core, 4-H is a positive youth development program centered around family. We love for parents to be involved by volunteering alongside your student or with another club you have interest in. While volunteering as a parent is not a requirement, we know from experience it provides a positive atmosphere for everyone involved and hope you will find a way to join the fun!

THE MISSION of Williamson County 4-H is to teach youth in 4th-12th grade life skills through hands-on learning experiences in areas students enjoy. We get our name from our focus on the whole student– Head, Heart, Hands, and Health.



4-H strives to **TEACH YOUTH LIFE SKILLS** to prepare for the workforce, including communications, public speaking, teamwork, responsibility, leadership, service to others, technical skills, healthy competition, and more. Our method of teaching life skills is through hands-on activities related to topics students enjoy. One student might participate in designing a solar powered car while another learns to sew and another raises an animal. At the end of the project, each of the students will have learned life skills as applied to their area of interest.

We invite you to jump in, find a project to join, and get started with 4-H! As you have questions along your journey, don't hesitate to reach out to our office.

- Williamson County 4-H Team

HOW TO JOIN 4-H? After you and your student explore all the options in this packet, you can register online at:

<https://williamson.tennessee.edu/4h-youth-development/>

4-H PROJECT CLUBS FOR 4TH-12TH GRADE:

- ♦ Intro to Robotics & Programming
- ♦ Poultry
- ♦ Nutrition, Health, & Fitness
- ♦ Horse
- ♦ Livestock
- ♦ Junior Solar Sprint
- ♦ Micro:bit 201
- ♦ Python 201
- ♦ Honor Club
- ♦ Judging Teams

Payment for registration pay online as directed after registering or mail or deliver to: Williamson County 4-H, 4215 Long Lane, Suite 200, Franklin, TN 37064. We accept check or exact cash payment.

Refund Policy: *(for all clubs)* Refunds must be requested from the instructor within one week of the first meeting. No refunds will be given after one week after the first meeting.

UT Extension, Williamson County

Office: 615-790-5721

Address: 4215 Long Lane, Suite 200, Franklin, TN 37064

Email: Mary Beth Antunes, 4-H Agent, mlee60@utk.edu or

Doug Berny, 4-H Agent, dberny@utk.edu

COVID PLANS We have made the difficult decision to host the majority of our groups virtually for Spring of 2021. We feel this is the best way to ensure we are able to consistently offer quality youth programs safely to families. We will continue to evaluate the state of the community and adjust the meeting format as we are able to.

WHAT DO I NEED TO PARTICIPATE?

For all groups you will need access to the internet and a device that you can use Zoom or a similar platform. You will also need to check the email address you provide us with regularly for class communication. Beyond that we have tried to provide you with information in this packet about each group and what to expect to have provided or that you will be expected to provide for participation. Please read over the information in this packet and let us know what questions you have.

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Using a “block based” programming language, this class provides an overview of the foundational concepts of computer programming and robotics. During each class, youth will have hands-on opportunities to program robots. This class is offered for youth in grades 4-5 in the Fall term and in the Spring term.

Meets on Tuesdays from 5:00-6:15 pm on Zoom

\$75 class fee per student for spring class

2021 Spring term meetings:

February 9 & 23, March 9 & 23, April 6 & 20, 2021

Questions: email

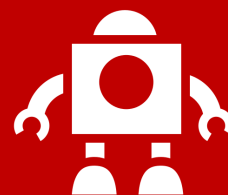
ag.robotics@williamsoncounty-tn.gov

Participants in the Intro to Robotics class will need a Lego EV3 Mindstorms robotics kit and a laptop or computer running Windows 10 equipped with a web camera, microphone, and internet access.

Also, Lego EV3 programming software, which is available free of charge, will need to be downloaded and installed.

If participants do not have a Lego EV3 Mindstorms robotics kit, one may be rented for home use for the duration of the class from the Williamson County 4-H Office. The rental fee for the Lego EV3 Mindstorms robotics kit is \$420. \$50.00 is non-refundable, and a refundable rental deposit of \$370.00 will be required. The \$370.00 rental deposit will be refunded when the complete and undamaged robotics kit is returned to the Williamson County 4-H office at the conclusion of the class. If cost is a barrier to participating in the class, please let us know, as scholarships may be available.

4-H INTRO TO ROBOTICS & PROGRAM



4-H POULTRY



Participants have the opportunity to learn about poultry in a variety of projects and activities like skillathon, showing poultry at the Williamson County Fair and/or participating in the Chick Chain project where they raise their own backyard flock per project guidelines. Participants learn about the poultry industry, grading standards, breed identification, nutrition, anatomy & physiology and flock management. Poultry Project members meet with the Livestock Project Group for monthly meetings. Some projects within the poultry project like Chick Chain and Skillathon have separate meeting times and contests.

Open to 4th-12th grades, Free.

Dates to know:

Chick Chain: February 11, 2021 - Workshop

1st week of March - chick distribution

July 22, 2021 - Poultry Skillathon

August 14, 2021- Chick Chain Show and Sale

Join us for the Livestock Project Meetings too!

Questions: Doug Berny at dberny@utk.edu

This group is a fantastic way to learn how to eat, play, and live in a healthy way. During the course of the year we will make and taste many exciting foods, gain an overall knowledge of eating in a healthy way, learn to exercise in class, different ways to exercise, and much more.

For 4th-12th grade. Volunteer led group.

\$15 per student for the year.

Meets from 6:00-7:30 pm on Zoom

Meeting Dates:

January 7th, February 4th, March 11th, and April 1st, 2021

Questions: Mary Beth Antunes at mlee60@utk.edu

For virtual classes, if we make a healthy recipe, students will be sent a list of ingredients to gather or purchase in advance.

4-H

NUTRITION, HEALTH, & FITNESS



4-H HORSE CLUB



Whether a first-time showman, an equine veteran, or just have a passion for horses with no previous experience, the 4-H Horse Project provides amazing opportunities for all levels to learn about the horse both inside and outside of the show arena as well as connect with our versatile equine community. We are committed to introducing all aspects of the horse by offering Hippology (the study of the horse) and Horse Judging lessons and competitions from October-May, the county horse show in May at the Williamson County Ag Expo Park. Region and State shows are also available.

Open to 4th-12th grade, Free to Join

Meeting Dates:

January 18, February 15, March 22, April 19, May 17, 2021

6:30-8:00 pm on Zoom

Questions: Christy Beattie at cbeatti2@utk.edu

We will use Google Classroom to access resources.

Learn the skills it takes to raise and care for sheep, swine, goats, beef, dairy, and poultry. Each project varies in length and commitment. Swine shows take place in January with all other species culminating their year at the Williamson County Fair in August. Participants will gain knowledge of animal science, learn responsibility and teamwork, and have the opportunity to bond with their family as they work together. Participants do not have to own and show animals to participate in learning about animal science through a variety of hands-on learning experiences and teams. Free to join.

Open to 4th-12th grades.

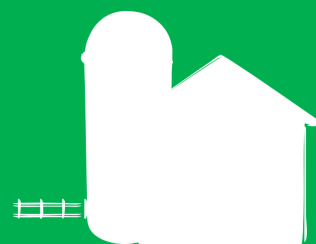
Meets on Mondays from 6:30-8:00 pm on Zoom

Meeting Dates:

January 4, February 1, March 1, April 5, May 3, 2021

Questions: Doug Berny at dberny@utk.edu

4-H LIVESTOCK CLUB



4-H JUNIOR SOLAR SPRINT



The Junior Solar Sprint (JSS) program is sponsored by the AEOP (Army Educational Outreach Program). It is a competition for 5th to 8th grade students to design, create and race the fastest, most interesting, and best crafted solar vehicle possible. Students will build and race solar powered cars using hands-on engineering skills and principles of science and math that will be taught in 6 virtual classes over ZOOM. Each class will consist of a 30-minute lecture with Q&A followed by 1 hour of hands-on construction that will be accomplished with the help of a parent or other adult mentor physically with the students. Instructors will stay on the ZOOM connection for consulting during the construction time. To be a part of the program you will need to form your team within family and close friend groups as well as having an adult committed to be a hands-on mentor. Mentors will assist in advice, problem-solving and construction. No particular skills are required, but a good DIY mentality is a plus. Students will develop teamwork and problem-solving abilities, investigate environmental issues, and gain hands-on STEM skills.

Open to 5th-8th grade students. \$100 per team for 6 session class.

Meets on Wednesdays from 6:00-7:30 pm on Zoom

Meeting Dates:

Spring Session: January 6, 13, 20, 27, February 3, 10, 2021

Questions: Jeff Duncan at fduncan1@utk.edu

Additional team effort in between classes will be encouraged. Essential materials including the solar panel, motor, gears and wheels will be provided. Other material will need to be obtained by the team based on their unique designs.

Teams can have 2-5 students, but in consideration of COVID social distancing we recommend that you keep the teams on the smaller side and limited if possible, to individuals that are in a family or already close friends. We do not encourage creating new “exposure” to others in order to form a JSS team.

When possible, we will hold a Williamson County Race for all teams wishing to compete. Winning teams will have the opportunity to move up to regional and national competitions.

4-H MICRO:BIT 101



A hands-on, project-based introduction to micro:bit programming using Tynker Blocks with instructions to build unique micro:bit projects. This class uses low cost hardware (micro:bit) that allows your student to plug it in to any computer with a usb port and start programming. The class includes access to web-based Tynker which is available on any home computer, laptop, or even tablets. Open to 5th-7th grade.

\$100 per student, 5th-7th grade.

Meets on Wednesday nights from 6:00-7:30 pm on Zoom

Meeting Dates: February 24th, March 3rd, 10th, 24th, 31st, April 7th, 2021

Questions: Elvia Klym at erodri15@utk.edu

Student must have a home computer capable of running a browser-based application. Most computers made within the last 5 years should suffice. Must have decent internet access for virtual meeting, with webcam for face to face interaction preferable.

Python is a high-level programming language that is popular in engineering and big data analysis as well as general computing.

It has an impressive standard library of functions and open source code. Students will learn Python syntax, programming flow, variables, operators I/O functions and code import processes. At the completion of the course, students will have the skill to turn a program concept into a working application.

\$100 per student, 8th-12th grade.

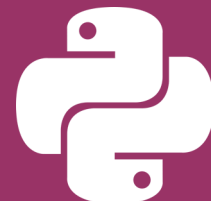
Meets on Wednesdays from 6:00-7:30 pm on Zoom

Meeting Dates: February 10, 17, 24, March 3, 10, 24, 31, April 7, 14

Questions: Chris Jackson at cjacks87@utk.edu

This class is a continuation of the Fall Intro and only open to those students with prior Python experience!

4-H PYTHON 201



4-H HONOR CLUB

Honor Club is a Leadership & Citizenship Focused Group for students who have been in 4-H at least one year prior and are in 6th-12th grade. Honor Club is the first level, of recognition in TN 4-H. At the county level we have the bi-monthly honor club meetings, civic field trips, service projects, and retreat youth can participate in.

Open to 6th-12th grade, free to join

Meets Monday nights from 6:30-8:00 pm on Zoom

Committee Meetings at 6:00 pm before regular meetings.

Meeting Dates: January 25th, March 8th.

Additional dates to come for field trips and service projects.

Questions: Mary Beth Antunes at mlee60@utk.edu

4-H Judging Teams provide students an opportunity to learn teamwork, decision making, and communication all while focusing on a topic they enjoy! We offer many different judging teams throughout the year. If you are interested in a topic listed below, please contact the 4-H leader listed for practice information and contest description.

Dairy Judging 4th-12th grade, June– July

Dairy Quiz Bowl 4th-12th grade, April—May

Meat Judging 6th-12th grade, November—April

Livestock Judging 4th-12th Grade, November - April

Outdoor Meat Cookery 6th-12th grade, June - September

Questions: Doug Berny at dberny@utk.edu

Outdoor Cooking 4th-12th grade, June– August

Horse Judging & Hippology 4th-12th grade, October - May

Questions: Christy Beattie at cbeatti2@utk.edu

4-H JUDGING TEAMS