



Workshops

Youth will pick one (1) workshop per session; Parts 1 & 2 must be picked together.

Session A Tuesday July 29 2:15-5:15PM		
Part 1: Digging into the Earth	UF Geological Sciences	Max: 15
Part 1: The Meat We Eat	UF Meat Lab	Max: 25
Part 1: Health Rocks!	Reitz – 2330	Max: 10
State Council	Reitz – Chamber	Max: 83
Explore Biodiversity: Become an Ecologist	Reitz – G320	Max: 16
College Survival Guide	Reitz – G325	Max: 40
Finding Balance in a Busy World	Reitz – 2335	Max: 20
Bridge Building	Reitz – 2355	Max: 20
Guardians of the Animals: Bio-Security	Reitz – 2365	Max: 20
Plant Doctor GPT	UF/IFAS Horticulture Teaching Garden	Max: 20

Session B Wednesday July 30 9:30AM-12:00PM		
State Officer Appointed Interviews	Reitz – Chamber	Max: 17
Harvest the Power of AI	Reitz – G320	Max: 36
Outdoor Explorer: Spot It with iNaturalist	Reitz – G330	Max: 20
Work Ready	Reitz – 2335	Max: 65
"Sew" into the EARTH: Megafauna	Reitz – 2355	Max: 20
Bee the Change: Protecting Pollinators	Reitz – 2365	Max: 20
Discovering Lake Alice	North Shore of Lake Alice	Max: 30
NaviGATORing CALS: Becoming a Gator	McCarty Hall D	Max: 25
There's a Tech Solution for that Ag Problem	UF/IFAS Horticulture Teaching Garden	Max: 20
Discovering Cancer Mutations	UF Cancer & Genetics Research	Max: 50

Session C Wednesday July 30 2:15-5:15PM		
Part 2: Digging into the Earth	UF Geological Sciences	Max: 15
Part 2: The Meat We Eat	UF Meat Lab	Max: 25
Part 2: Health Rocks!	Reitz – 2330	Max: 10
Ichthyology: A Brief Dive into Studying Fishes	Reitz – North Lawn	Max: 16
Improv! For Real Life	Reitz – G320	Max: 30
Enhancing Intercultural Communication	Reitz – G330	Max: 30
Lead, Teach, Have Fun: Using Learn-By-Doing	Reitz – 2355	Max: 40
Leatherworking Basics: Belt Making	Reitz – 2365	Max: 20
Run Through – Wed & Thurs Ceremonies	Reitz – Grand Ballroom	Max: 20
Buzzing into Beekeeping	UF/IFAS Honey Bee Research Lab	Max: 20
Pathways to Equine Excellence in 4-H	UF/IFAS Horse Teaching Unit	Max: 30
Taking on the Food Challenge	UF/IFAS Food Lab	Max: 20

WORKSHOP DESCRIPTIONS IN ALPHABETICAL ORDER

Bee the Change: Protecting Pollinators One Nest at a Time

Presented by: **Teen Ambassadors**, Florida 4-H Pollinator Habitat Program;
Crystal McCazzio & Katie Davis, UF/IFAS Extension – 4-H Youth Development

Discover the exciting world of pollinators in this hands-on workshop led by Florida 4-H Pollinator Habitat Teen Ambassadors! You'll dive into fun activities, create your own pollinator-themed projects to take home, and even enjoy a honey tasting. Learn how bees, butterflies, and other pollinators help our environment—and how you can make a difference!

Special note:

Event coordinators and presenters should be made aware of any honey allergies.

Building Bridges

Presented by: **Spencer Hewitt, Katelyn Mulinix, & Candy Wickham**,
UF/IFAS Extension – 4-H Youth Development

Design and build bridges using toothpicks and gummy candies! Challenge your critical thinking and problem-solving as you build prototypes and test your bridges for strength and stability. Explore key principles like compression and tension, along with different bridge types such as arch, truss, and suspension. Connect your experiences to real-world engineering and careers.

Buzzing into Beekeeping

Presented by: **Luis Rodriguez**, UF/IFAS Extension – Agriculture and Natural Resources

This workshop will instruct participants in everything they need to know about honey bees. Participants will learn about honey bee biology, pests and diseases, and beekeeping tools. The workshop will be composed of a tour of the UF/IFAS Honey Bee Lab, a short lecture, and a honey bee hive demonstration.

Special note:

Required waiver will be available to sign upon signing up for workshop.

Make sure to pack:

Long sleeve shirt, long pants, and closed-toe footwear.

College Survival Guide

Presented by: **Katie Howard & Brooke Hill**, UF Collegiate 4-H

Come have a fun time as you learn about preparing for your first year of college, living alone, choosing a major, and student life from 4-H alumna and Collegiate 4-H members.

Digging into the Earth: Exploration of Earth and Planetary Science

Presented by: **Courtney Sprain**, UF Geological Sciences

This two-day workshop will introduce students to the exciting field of Earth and Planetary Science. Students will tour the labs in Department of Geological Sciences and learn about the exciting research being performed here ranging from understanding sea-level and coastal change, exploration of Earth's mantle and core, to the search for life on Mars. Students will also learn some Earth Science basics and will get hands on experience running real samples in the UF Paleomagnetism Laboratory.

Special note:

This is a two-part workshop that covers sessions A and C.

Be sure to pack:

Closed-toe footwear and long pants.

Discovering Cancer Mutations

Presented by: **Maddy Carelock & Maria Hernandez**, UF Health

The University of Florida Heath Cancer Center Discovery program will encompass cancer research from the gene level to the protein level. Students will learn about oncogenes, tumor suppressor genes, hot topics in cancer research, and different techniques used in cancer research. Students will also conduct a hands-on experiment to extract DNA.

Discovering Lake Alice: Aquatic Science and Lake Ecology

Presented by: **Bethan Gillett & Elizabeth (Liz) Duermit Moreau**,
UF/IFAS School of Forest, Fisheries, and Geomatic Sciences

Join biologists from Fishing for Success and Florida Lakewatch for an exciting morning on Lake Alice! Embark on a unique research experience as you ride aboard boats to collect water samples and explore the lake. Back onshore, we will use nets and microscopes to catch, observe, and learn about aquatic invertebrates. Don't miss this opportunity to learn from experts and experience aquatic science in action!

Special note:

The required waiver will be available to sign upon signing up for workshop.

Be sure to pack:

Clothing that can get muddy/wet, closed-toe footwear (rubber boots recommended), towel, sunscreen, sunglasses (polarized recommended), hat, and water bottle.

Enhancing Intercultural Communication

Presented by: **Pablo Lamino & Jose Molina**, UF/IFAS Agricultural Education and Communication

Equip yourself with the knowledge, tools, and strategies needed to engage effectively with multicultural communities. Through a series of interactive activities, you will explore key social science theories, practical communication approaches, and case studies that foster cross-cultural engagement.

Explore Biodiversity: Become an Ecologist

Presented by: **Shelly Johnson & Hanna Wheatcraft**, UF/IFAS Wildlife Ecology and Conservation

Understanding the complexity of nature is not an easy task. Ecologists examine interactions among plants, animals, and the surrounding environment. In this hands-on outdoor workshop, you will become an investigator and conduct your own ecological study. Use the scientific method as you observe, hypothesize, collect data, analyze, and summarize your own conclusions. Practice using ai tools like iNaturalist and Merlin/eBird to collect data. By the end of the workshop, you'll emerge with newfound eco-sleuth talents, a passion for discovering Florida's unique environment, and the confidence to share your findings with the world.

Be sure to pack:

Sun protection (sunscreen, hat, etc.) and clothing comfortable for the outdoors.

Optional: a full charged mobile device with camera capabilities and the iNaturalist and/or Merlin app downloaded.

Finding Balance in a Busy World

Presented by: **Emily Schoenfelder**, UF/IFAS Extension – 4-H Youth Development

Do you constantly feel stressed? Or like you're on the verge of a mental breakdown? Do you feel like you have way too much going on? Mindfulness strategies can help create emotional well-being and balance in both school and future work environments. Through creative expression, movement, and guided reflection, participants in this workshop will explore how mindfulness can support their personal and professional development.

Be sure to pack:

Active wear for light yoga.

Guardians of the Animals: Bio-Security Workshop

Presented by: **Shane Michael, David Hafner, & Chelsea Woodard**,
UF/IFAS Extension – 4-H Youth Development

Join us for an interactive workshop where you will learn the crucial importance of animal biosecurity. Through hands-on activities, participants will explore various aspects of biosecurity, from understanding disease transmission to implementing preventative measures. You will have the opportunity practice basic animal first aid techniques including wound care and injections.

Special note:

No live animals will be a part of this workshop.

Be sure to pack:

Closed-toe footwear.

Harvest the Power of AI

Presented by: **Tara Dorn, Amber Norris, & Paula Daniel**,
UF/IFAS Extension – 4-H Youth Development

Whether it's games or homework, route directions or streaming music, buying products or farming, artificial intelligence is an integral part of everything in today's world. Join in our fun activities that help investigate the big questions. What is AI? How does it work? When and where can AI be used? How will AI shape your future and how will you shape the future of AI? Grow your skills. Grow your future.

Be sure to pack:

If possible, a mobile device with camera capabilities.

Health Rocks!

Presented by: **Vanessa Spero & Martha Barnes**, UF/IFAS Extension – 4-H Youth Development

Life is hard! Making decisions, avoiding risky behaviors, and trying to keep up with the pressures of being a youth can be difficult. This workshop will address the dangers of making poor choices, such as the effect on your mental and physical well-being. Join us for engaging information presented with fun, hands-on demonstrations.

Special note:

This is a two-part workshop that covers sessions A and C.

Ichthyology: A Brief Dive into Studying Fishes

Presented by: **Erin Mugge**, UF/IFAS Extension – 4-H Youth Development

Have you ever noticed that fish have unique adaptations to survive in their habitats? Whether you like to fish or are interested in aquatic ecology, this class will provide you an opportunity to join a brief dive into ichthyology, the study of fishes. This workshop will include a comparative fish dissection, showing how two marine species can have such different adaptations for their survival. We will also learn more about fish anatomy and their classification within the animal kingdom, while comparing them to other aquatic organisms. Come join for a very hands-on class, highlighting one of the classes both Camp Timpoochee and Camp Cloverleaf offer!

Improv! For Real Life

Presented by: **Jesse Price**, UF/IFAS Extension – 4-H Youth Development

Take a break from the serious and come have fun with Improv! You will have the opportunity to gain experience in improv and how it can be used in everyday life. We will play different games and exercises to help build improv skills, which may surprise you as being some life skills as well.

Be sure to pack:

Active wear; pants/leggings under any dresses and skirts; flat comfortable shoes; hair ties for long hair.

Lead, Teach, Have Fun: Using Learn-by-Doing to Plan & Conduct Events & Activities with Others

Presented by: **Keith Diem**, UF/IFAS Family, Youth and Community Sciences

Learn how to plan and lead events and activities of interest to your club, school, or community. You will also learn creative teaching methods to help make it fun for all involved.

Leatherworking Basics: Belt Making

Presented by: **Courtney Toelle**, UF/IFAS Extension – 4-H Youth Development

Learn the basics of leatherworking through making a belt! We will learn about leather safety, how to cut leather, set rivets, smooth sides, and punch holes; all skills that can be taken to make many other projects.

NaviGATORing CALS: How to Become a Gator

Presented by: **Andrew Horvath**, UF/IFAS College of Agricultural and Life Sciences

Interested in becoming a Gator? Through NaviGATORing CALS, you can explore the many majors and career outcomes through the College of Agricultural and Life Sciences. You will learn about the UF admissions process, student resources, scholarships, and more. Additionally, you will explore the UF campus through an engaging campus scavenger hunt led by current UF and CALS students. You are sure to have a collegiate experience and learn what it takes to join the Gator Nation.

Be sure to pack:

Comfortable clothing for walking around outside.

Outdoor Explorer: Spot It with iNaturalist

Presented by: **Sarah Davis & Erin Nadel**, UF/IFAS Extension – 4-H Youth Development;
Corey Callaghan & Samantha Lowe, UF/IFAS Global Ecology Research Group

Learn the basics of iNaturalist, download the app, start a profile and learn how to use iNaturalist to explore the outside world. Find, photograph and identify species outside. iNaturalist is a free application and used by scientists around the world to document and show evidence of species diversity. Participants will learn how to use the app and perform a short bioblitz outside identifying plants, insects and other species.

Be sure to pack:

Optional: a full charged mobile device with camera capabilities and the iNaturalist app downloaded.

Pathways to Equine Excellence in 4-H

Presented by: **Sheri Trent & Paula Daniel**, UF/IFAS Extension – 4-H Youth Development

Dive into equine science and riding while building safety, responsibility, and leadership skills. Explore riding disciplines, horse show opportunities, and activities like Horse Bowl and Hippology, while learning how to progress from Area to Regional competitions. With a focus on equine safety and welfare, you will also visit the UF Horse Teaching Unit for hands-on learning and insights into equestrian opportunities. Gain skills and confidence to make your mark in the equine world.

Be sure to pack:

Closed-toe footwear that can get dirty.

Plant Doctor GPT: Using AI to Detect Diseases in Plants

Presented by: **Tre Easterly, Ian Small, Camryn Farquhar, Brantlee Spakes Richter, Valerie Mendez, Sarah Hensley, Andy Seepaul, & Bill Eisenstadt**, UF/IFAS

In this hands-on and interactive workshop, the Inspire-Instruct-Equip-Empower (I2E2) team will lead you through detecting diseases in plants using machine learning and AI software. By the end of the workshop, you will develop an AI model that can differentiate between diseased plants and healthy plants. You can use the tools you learn in this workshop to create machine learning models for a variety of uses.

Be sure to pack:

Sun protection (sunscreen, hat, etc.) and clothing comfortable for the outdoors.

Run Through – Wednesday & Thursday Ceremonies

State officers and emcees will sign up for this. Officer candidates will sign up for this and an alternate Session C that they will attend if they don't become an officer.

"Sew" into the EARTH: Megafauna

Presented by: **Marnie Ward, Prudence Caskey, Paula Davis, Sonja Crawford, & Toni Noaker**, UF/IFAS Extension – 4-H Youth Development

Use your creativity and sewing skills as you take a "bould" step into the future. Using a variety of textured fabrics, accessories, and notions, you will team up to construct megafauna, while learning more about Florida's unique geology and natural environments.

State Council

State officers, officer candidates, and county voting delegates will sign up for this.

State Officer Appointed Interviews

Officer candidates will sign up for this.

Taking on the Food Challenge

Presented by: **Marie Arick & Paula Davis**, UF/IFAS Extension – 4-H Youth Development

Ever been stuck at home, feeling hungry, with nothing in the house to eat? In this workshop, you and your team will unleash your imagination, cooking skills, and leadership to create a delicious dish using a limited set of ingredients. Learn about the Food Challenge format and take part in a mock challenge to experience the excitement firsthand!

Be sure to pack:

Closed-toe footwear and hair restraints.

The Meat We Eat (Parts 1 & 2)

Presented by: **Brian Estevez**, UF/IFAS Extension – 4-H Youth Development;
Chad Carr, UF/IFAS Animal Sciences

Experience the meat industry firsthand in this exciting two-day workshop! You will dive into pork fabrication, sausage production, food safety, and hands-on meat science activities. Discover the Florida 4-H Tailgate Contest and learn how to get involved. Tour a USDA-inspected facility, meet UF professors, and take part in a taste panel for a truly immersive experience.

Special note:

This is a two-part workshop that covers sessions A and C.

Be sure to pack:

Closed-toe footwear, long pants, and a jacket.

There's a Tech Solution for That: Using Technology to Solve Agricultural Problems

Presented by: Tre Easterly, Camryn Farquhar, Bill Eisenstadt, Brantlee Richter, Sarah Hensley, Valerie Mendez, Andy Seepaul, Vivek Sharma, Mary Elizabeth McKellar, Abinaya Inbamani, Ian Small, UF/IFAS

Work with a small team to come up with a creative solution to a problem in agriculture. Your team will have a brief scenario and a suite of tools to use to solve these problems including smart sensors, AI modeling software, and data analysis tools. See if you have what it takes to solve real problems facing agriculture.

Special note:

Recommended to have a familiarity with technology (computers and sensors), but certainly not required.

Be sure to pack:

Sun protection (sunscreen, hat, etc.) and clothing comfortable for the outdoors.

Work Ready

Presented by: Sarah Sarver, UF/IFAS Extension – 4-H Youth Development

Work Ready Florida club members will sign up for this.