Family Academies 2016 Classes

ACES Family Academies offers a variety of activities for kids and families, but the main point of the program is for kids to have a glimpse into a college classroom setting. Participating departments from the College of ACES facilitate the classes. The class list below is grouped by the department represented to help identify the different categories of classes.

Each class has a 3-digit code that will be used during registration rather than the class name. You will need to rank the top four preferred classes for each section during the registration process. While every effort will be made to accommodate the enrollment of the student into their chosen classes, classes have maximum capacities and requirements that will have to be considered.

Families are expected to attend classes as a family unit. Acceptance to the classes is on a first-come, first-serve basis for each family, not individual student. Families will be notified of their schedule prior to the event. Enrollment in specific classes cannot be guaranteed and alternative classes will be assigned if preferred classes are full at the time of registration.

Class Codes:

101  Department of Agricultural and Biological Engineering
201 - 202  Department of Agricultural and Consumer Sciences
301  Agricultural Education Program
401 - 404  Department of Animal Sciences
501  Agricultural Communications Program
601 - 605  Department of Crop Sciences
701 - 702  Department of Food Science and Human Nutrition
801  Department of Human Development and Family Studies
901  Department of Natural Resources & Environmental Sciences
1001 - 1002  University of Illinois Extension
Tips for Selecting Classes:

While selecting classes, remember that the College of ACES is diverse and there are a number of different kinds of classes possible through the multiple participating departments. By choosing a diverse set of preferred classes, students have a better chance of getting into the classes they desire and provides the student a good outlook on the possibilities in ACES for their future.

Those marked with an * will be offered during two different time slots.

**Department of Agricultural & Biological Engineering**

#101 Erosion and Sediment Control
Learn about the fundamentals of hydrology, soil erosion, sediment transport and Best Management Practices (BMPs) for erosion sediment control and storm water management. Visit the South Farms for an on-site field demonstration to learn about current practices and proper installation methods.

**Department of Agriculture and Consumer Economics**

#201 Wonderful World of Agribusiness
Learn where your food begins and ends. Try your hand at things like trading commodities, creating a marketing plan, and drawing the food chain.

#202 Organic, Natural Certified, Oh My!
Come learn more about how a food product is labeled and how customers feel about the taste and quality of something based on their label. Take consumer surveys and make a label for a product yourself!

**Agricultural Education Program**

#301 McLean County Farm Bureau Food and Farm Discovery Zone! *
This class provides a hands-on look at GPS systems and combines in a simulator setting.

**Department of Animal Sciences**

#401 Where's the Beef?: Getting to Know Cows Inside and Out! *
Tour the University of Illinois beef cattle research farm and get to know the cows up close and personal. Learn all about beef cattle nutrition and stick your arm in a cow!

#402 Magical Milk Lab *
Learn about the different forms, functions, and chemical processes milk goes through to make the products we consume and enjoy. Make your own ice cream and eat it during class! You won’t want to miss this exciting lab activity demonstrating the different components and forms of milk.

#403 Of Pigs and People *
See what your brain has in common with one of the favorite farm animals. Test your knowledge by examining real piglet brains and watch a demonstration of how we use pigs to study neurosciences.
#404 Man’s Best Friend *
Learn all about man’s best friend. We will spend time learning about a dog’s behavior, training tips, and humane education!

Agricultural Communications

#501 Lights, Camera, Action: Telling Your ACES Story with Movie-Making Magic
Join the Agricultural Communications Program for a hands-on session on visually sharing your ACES experience. You’ll learn how to take great pictures and video footage, get some practice, and then turn your results into a visual story that can be shared with family and friends!

Department of Crop Sciences

#601 The Honey Bee – Our Hardworking Friend! *
*(in conjunction with U of I Extension)*

Did you know that the University of Illinois Pollinatarium is the first free-standing science center in the nation devoted to flowering plants and their pollinators! This session will begin with you exploring the outdoors as you collect and identify insects and prairie plants native to this area. You will also learn about bees and the critical role they play in food production. Bees are responsible for pollinating many of our specialty crops and help us maintain a good food supply. We will finish our session inside the Pollinatarium as you get a hands-on look at a working honey bee hive and enjoy tasting the honey the bees make!

#602 Paper Airplanes and Drones in Ag *
Small Unmanned Aerial Vehicles (sUAV) may change the way farmers monitor their crops. Learn about the University of Illinois research in using UAVs for monitoring crops and get up close with several UAVs. Try your hand at turning a paper airplane into a smartphone-controlled tiny UAV.

#603 Lesions, Cankers, and Rots! Oh My!
Did you know plants get diseases? Tour the University of Illinois Plant Clinic and learn about plant pathogens. Participate in hands-on activities in our lab and meet our favorite fungi, bacteria, and nematodes.

#604 Global Crop Failure Crisis! How Can You Be a Part of the Solution?
This Emergency Response Exercise puts you in the thick of global crop failure crisis. You and your team will have to find a solution to avert the crisis and save the world food supply.

#605 Bugs Up Close: Exploring Insects Using a High-Resolution Scanning Electron Microscope. *
*(in conjunction with Beckman Institute)*

Students will visit the high-resolution scanning electron microscope at the Beckman Institute’s Microscopy Suite and view an assortment of insects (mosquitos, ladybugs, ants, and whatever might be available) and comparable arthropods (such as pillbugs, silverfish, and centipedes) at much higher magnification and detail than any light microscope can produce. The presenters will explain both the concepts of scanning electron microscopy and what the specific body structures actually do.
Family Academies 2016 Classes

Department of Food Science and Human Nutrition

#701 Food Challenge *
Do you like to eat food? Do you like to cook food? Do you like to win prizes? Sound like you? Join the 4-H Food Challenge! You will learn about food nutrition, safety, and preparation all while working together as a team to create a dish in 30 minutes using mystery ingredients. The session will end with teams presenting their finished dish to a panel of judges who will evaluate and provide insightful feedback.

#702 I’ve Never Met a Chocolate I Didn’t Like! An Introduction to Chocolate Appreciation
Charles M. Schulz adorably said, “All you need is love.” But, a little chocolate now and then doesn’t hurt! This class will explore chocolate’s importance throughout history and its importance as a global commodity. Find out about the impact of processing, packaging, and storage on the chemistry of chocolate. Discover how the chemical properties chocolate provides, both biochemically and functionally, make it a popular indulgence. Learn about the role of a food scientist and try a few chocolate samples!

Department of Human Development and Family Studies

#801 Africa Jam: Drum for Emotional and Social Well Being *
Join a drum circle and learn simple rhythms on the djembe drums! Learn about the Department of Human Development and Family Studies’ perspective on the inter-relationship of physical activity, emotional well-being, and social competency, especially in children and teens. We will discover how these all work together as we drum in harmony.

Department of Natural Resources & Environmental Sciences

#901 Bird’s the Word: Exploring Avian Ecology and Conservation
Learn about the natural history of birds and research techniques used to protect wild bird populations in this workshop set outside! Get an up-close and personal look at wild birds with mist netting and banding demonstrations.

University of Illinois Extension

#1001 Fun with LEGO Mindstorms Robots! *
Learn hands-on with LEGOs and make your own robot! Learn how to program LEGO Mindstorms robots and work with the robots to complete different challenges. Program your robot to pick up a cow and avoid obstacles in its path. If you like LEGOs or robots, you don’t want to miss the fun! No previous experience necessary!

#1002 Taste of Forestry and Horticulture
Learn about plants, big and small by using tools of the trade like tree scale sticks, hypsometers and soil-less planting medium. Activities you will do during your plant exploration include plant propagation, estimating board foot volume of a tree, and basic tree identification. You will even learn how to use a compass to find your way back from our adventure!