Central Kansas District 4-H Project Guide





Salina Office:

2218 Scanlan Avenue Salina, KS 67401 (785) 309-5850

Minneapolis Office:

307 N. Concord Street Suite 190 Minneapolis, KS 67467 (785) 392-2147

Visit our website: http://www.centralkansas.ksu.edu/4-h







Ag & Natural Resources

Entomology – Learn about insects, their behavior, and how to identify the insects in soil, on plants, in homes, on pets, and other places.

Environmental Science – Examine natural sciences and technology about our environment, explore ecosystems, conservation, recycling efforts, ecological footprint, and learn how water can be preserved, protected, used, and reused.

Geology – Discover types of minerals, rocks, and fossils while becoming familiar with geological formations.

Field Crops – Experiment with soil testing, grow and harvest crops, plant a wheat variety test plot, and learn about herbicides and fertilizers.

Forestry – Learn to identify trees, determine differences between trees and shrubs, learn about different trees and tree parts, grafting, health benefits of trees, forest changes and health, and forest conservation.

Horticulture – Explore when and where to plant, plant parts and identification, preventative pest controls, plant pollinations, biotechnology, and harvesting and selling your harvest.



Shooting Sports – Teaches safety and care of shooting sports equipment along with opportunities for exhibiting skills and knowledge. Members must be 8 years of age as of January 1 of the current 4-H year. Project disciplines include Air Rifle, Archery, BB Gun, Hunting Skills, and Shotgun.

Sportfishing – Provides hands-on learning for fishing skills, aquatic ecology, tackle crafting, and aquatic resource stewardship.

Wildlife – Learn about wildlife behavior, habitats, species, wildlife management, and Kansas wildlife.

Animal Science

Beef – Includes Breeding Beef, Bucket Calf, and Market Beef projects to learn about raising, caring for, and managing beef.

Dairy Cattle/Dairy Goats – Learn about caring, raising, and managing dairy animals.

Dog Care and Training – Explore caring for dogs and their training. Opportunities are available for members without dogs as well.

Horse – Learn how to handle, care for, and ride horses.

Meat Goats – Designed for learning about raising meat goats, fitting and showing, and developing knowledge for breeding stock and evaluating feed ingredients.

Pets – Includes both the Cat and Hand Pet projects for exploring how to select a pet, and their care and feeding.

Poultry – Explore chickens and other types of poultry including breeds, care, eggs, and poultry management.

Rabbits – Identify breeds, learn to care for rabbits, and how to groom and show a rabbit.



Sheep – Includes the Breeding and Market projects as an avenue to learning about the sheep industry, care and raising of sheep, and uses for sheep.

Swine – Teaches the raising, care, and management of swine in the Breeding and Market Swine project areas.

Veterinary Science – Investigate animal behavior, characteristics of different breeds, animal diseases and health, and careers in veterinary medicine.

Creative Arts

Performing Arts – Explore movement, voice, speech, acting, music, and other types of performance.

Photography – Learn about film and digital cameras, planning, composing, editing, and light usage.

Visual Arts – Teaches artistic skills and the elements and principles of design along with exploring techniques, art history, culture, and different mediums.

Family and Consumer Science

Clothing & Textiles – This area encompasses the Buymanship and Clothing Construction projects. Topics to explore include budgets, color and design, fit, sewing skills, accessories, and modeling.

Family Studies – Explores the Child Development, Consumer Skills, and Family project areas. Members will learn about how we grow and develop, building family strengths, managing a household, and financial management.

Fiber Arts – Includes the Crochet, Ethnic Arts, Knitting, Macramé, Needle Arts, Patchwork & Quilting, Rug Making, Spinning, and Weaving projects.

Foods and Nutrition – Designed to progress through basic and advanced cooking skills, food safety, consumer skills, preserving food, and recipes for a healthy lifestyle. This area includes both Foods & Nutrition and the Foods Preservation projects.

Health & Wellness – Includes Bicycle, Health/Fitness, Outdoor Adventures, and Recreation projects to explore physical activity, healthy eating, exercise, sports & recreation, and first aid.

Home Environment – Examine your home spaces, inside and out. Explore furniture & décor, color, texture, light, sound, space, and careers in interior design.



Personal Development

Civic Engagement – Find out more about yourself, family, friends, community, and world while exploring opportunities to meet others, work with groups, and learn about other countries and cultures.

Communications – Interpret verbal and nonverbal information, develop effective public speaking skills, enhance written and spoken communication, defend a point, and design presentations.

Leadership – Learn the skills to be a leader including understanding yourself, communicating, getting along with others, learning, making decisions, and managing and working with groups.

Reading – Explore libraries, specific topics, reading for pleasure, and sharing reading materials with others.

Self-Determined – This project is designed for 4-H Members to create their own project by researching and exploring a topic of interest not already included in the 4-H project listings.

STEM (Science, Technology, Engineering, and Math)

Ag Mechanics (Welding) – Emphasis on welding and smithing while exploring Ag mechanics and metallurgy from repairing or repurposing items to the fabrication of new items while learning about welding equipment, electrodes, and basic welding skills.

Architectural Block Construction – Use architectural blocks ("Legos") to construct dioramas while learning foundational architectural skills of designing in three dimensional spaces.

Astronomy – Explore the universe and night sky. Participants will learn about telescopes, astronomers, circumpolar & seasonal constellations, moon phases, navigating through the night sky, common stars, and deep sky objects.

Computer Science – Teaches concepts related to computers, hardware knowledge, software programming & applications, internet safety, building/maintenance/repair of computers, fundamental principles of computer programming, and future career opportunities.

Electric/Electronics – Develop skills related to safe practices, proper use of fuses & circuit breakers, proper lighting techniques, and proper wiring techniques.

Renewable Energy – Explore the power of wind by examining wind power, wind turbines, where & why the wind blows, and discover the wind in art and literature.

Rocketry/Aerospace – Learn about the latest in aerospace technology as well as exploring the fundamentals of rocketry such as lift, drag, and other factors affecting rocket design.

Robotics – Designed to give participants an opportunity to study robot arms/legs/wheels/under water capabilities, sensors, analog & digital systems, basic circuits, robot design, and programming.

Small Engines – Discover how small engines work and how to keep them working. Learn about identifying and discovering the function of engine parts, compression ratios, safety issues, and rebuilding.

Unmanned Aerial Systems (UAS) – Learn about the technology that makes flight possible and general aerospace fundamentals while gaining skills to pilot your drones safely and successfully.

Woodworking – Use safety practices while building, identify woodworking tools, learn measuring skills, identify lumber and select wood based on grain, and explore woodworking techniques and tools. Youth will also explore technology and career opportunities.