

## Mechanical Sciences:

### Computer Science

*Discovering Computer Science & Programming Through Scratch - Level 1*

*Level 1 Facilitator Guide*

*\*Discovering Computer Science & Programming Through Scratch - Level 2 (Int./Sr.)*

*\*Discovering Computer Science & Programming Through Scratch - Level 3 (Int./Sr.)*

*\*Computer Science and Coding (Int./Sr.)*

### Electricity

*Unit 1 - Magic of Electricity*

*Unit 2 - Investigating Electricity*

*Unit 3 - Wired for Power*

*\*Unit 4 - Entering Electronics (Sr. Advanced)*

### Metalworking

*Unit 1 - Introduction to Metalwork*

*Unit 2 - Metal Fabrication*

*Unit 3 - Advanced Metal Fabrication*

*Unit 4 - Large Exhibit Fabrication*

*Arcs & Sparks, Units 1-3*

### Model Rocketry

*Unit 1 - Introduction to Model Rocketry*

*Unit 2 - Construction & Flight of Model Rockets*

*Unit 3 - Intermediate*

*Unit 4 - Advanced*

*\*Unit 6 - Designer (Int./Sr.)*

### Robotics & Engineering

*Unit 1 - Give Robots a Hand*

*Unit 2 - Robots on the Move*

*Unit 3 - Mechatronics*

*Unit 4 - Robotics Platforms Beginners*

*Unit 5 - Robotics Platforms Intermediate*

*Unit 6 - Robotics Platforms Advanced*

*Unit 7 - Team Robotics*

*Youth Robotics Notebook*

*Robotics with EV3*

### Small Engines

*Unit 1 - Crank It Up*

*Unit 2 - Warm It Up*

*Unit 3 - Tune It Up*

*\*Unit 4 - Advanced Small Engines-Self-Determined (Int./Sr.)*

*Small Engines Helper's Guide*

### Woodworking

*Unit 1 - Measuring Up*

*Unit 2 - Making the Cut*

*Unit 3 - Nailing It Together*

*Unit 4 - Finishing Up*

*Woodworking Wonders Helper's Guide*

## Natural Resources:

### Beekeeping

*Unit 1 – 4-H Beekeeping Division 1*

*Unit 2 – 4-H Beekeeping Division 2*

*Unit 3 – 4-H Beekeeping Division 3*

*\*Unit 4 - Advanced Beekeeping (Int./Sr.)*

*4-H Beekeeping Helper's Guide*

### Entomology

*Teaming with Insects – Level 1*

*Teaming with Insects – Level 2*

*Teaming with Insects – Level 3*

*Teaming with Insects Facilitator's Guide*

### Gardening

*Unit 1 – See Them Sprout*

*Unit 2 – Let's Get Growing!*

*Unit 3 – Take Your Pick*

*\*Unit 4 (Sr. only) – Growing Profits*

*Gardening Helper's Guide*

### Outdoor Adventures

*Unit 1 – Hiking Trails*

*Unit 2 – Camping Adventures*

*Unit 3 – Backpacking Expeditions*

*Outdoor Adventure Helper's Guide*

### Shooting Sports

*Air Rifle*

*Archery – Basic Archery*

*.22 Rifle – 4-H Rifle*

*.22 Pistol – 4-H Pistol*

*Shotgun – 4-H Shotgun*

*Muzzleloading*

*Air Pistol*

*Outdoor Skills*

*Western Heritage – 4-H Western Heritage Project*

### Sportfishing

*Unit 1 – Take the Bait*

*Unit 2 – Reel in the Fun*

*Unit 3 – Cast into the Future*

*Sportfishing Helper's Guide*

### Wildlife

*Unit 1 – The Worth of Wild Roots*

*Unit 2 – Living Wild in an Ecosystem*

*Unit 3 – Managing in a World with You and Me*

*Wildlife Stand Alone*

## Supplemental:

### Self-Determined

#### Cloverbuds (Ages 5-7 Years):

*Cloverbuds: A 4-H Discovery Program for 6-8 Year Olds*

*Cloverbuds Activity Package*

## Learn More

Colorado4h.org

Contact your local Extension Office at

<https://extension.colostate.edu/staff-directory/>



COLORADO STATE UNIVERSITY  
EXTENSION



2023-2024

## State 4-H Project List



## 4-H Age Categories

Juniors: 8-10 years  
Intermediates: 11-13 years  
Seniors: 14-18 years

Ages are as of Dec. 31 of the current 4-H year.  
All projects may be taken by Jr., Int., and Sr.  
unless indicated by (\*).

Items in orange are new or renamed from last year.

For more information and exhibit requirements go to [Colorado4h.org](https://colorado4h.org).

Curriculum titles are in italics and may not reflect actual exhibit requirements.

## Animal Science:

### Beef

Breeding, Market  
*Beef Resource Handbook*

### Cats

*Unit 1 - Purr-fect Pals*  
*Unit 2 - Climbing Up*  
*Unit 3 - Leaping forward*  
*Cat Helper's Guide*

### Dairy Cattle

*Dairy Resource Handbook*

### Dog

*Dog Resource Handbook*

### Goats

Breeding, Market, Dairy, Fiber, Pygmy, Utility  
*Goat Resource Handbook*

### Horse

*4-H Horse Project, Horse Show Rulebook & more at Colorado4h.org*

### Horseless Horse

*4-H Horse Project*  
*Unit 1 - Making Horse Sense*  
*Unit 2 - Hooves, Health & Horsemanship*  
*Unit 3 - Breaking Ground*  
*Unit 4 - Brushing Up on Horses*

### Poultry

Breeding Chickens, Market Chickens, Show Birds,  
Breeding Turkeys, Market Turkeys, Duck, Geese,  
Pigeons & Game Birds  
*Poultry Resource Handbook & more at Colorado4h.org*

### Rabbits

Breeding/Show, Market, Companion (Pet)  
*Rabbit Resource Handbook for Breeding, Market, & Pet Rabbit Projects*

### Sheep

*Breeding, Market*  
*Sheep Resource Handbook for Market & Breeding Projects*

## Animal Science Continued:

### Swine

Breeding, Market  
*Swine Resource Handbook for Market & Breeding Projects*

### Veterinary Science

*Unit 1 - From Airedales to Zebras*  
*Unit 2 - All Systems Go!*  
*Unit 3 - On the Cutting Edge*  
*Vet Science Helper's Guide*

## Communication, Arts & Leisure Sciences:

### Ceramics

Unit 1 - Glazes  
Unit 2 - Underglazes  
Unit 3 - Overglazes  
Unit 4 - Unfired Finishes  
Unit 5 - Porcelain Dolls  
Unit 6 - Hand-Constructed with Stone or Earthenware  
*Ceramics - All Units*

### Filmmaking

Animation, Narrative, Documentary, Promotional, Voices of 4-H History  
*4-H Filmmaking Workshop DVD - Movie Magic*

### Global Citizenship

Study of Another Country, Host a Delegate from Another Country, \*Exchange Delegate to Another Country (Int./Sr.)  
*Global Citizenship*

### Leadership

*\*Leadership Skills You Never Outgrow (Jr. Only)*  
*\*Leadership Road Trip (Int./Sr.)*  
*\*Put Leadership to Practice/Club Leadership 1 (Int./Sr.)*  
*\*Refining Leadership Skills/Club Leadership 2 (Int./Sr.)*  
*\*Community Service Project/My Hands to Larger Service (Sr.)*

### Leathercraft

Unit 1 - Introduction to Leathercraft and Creative Stamping  
Unit 2 - Beginning Leather Carving  
Unit 3 - Intermediate Leather Carving  
**Unit 4 - Advanced Leather Carving**  
**Unit 5 - Advanced Stamping**  
Unit 6 - Sewing Leather  
Unit 7 - Braiding and Un-tooled Leather  
Unit 8 - Master Leathercraft  
Unit 9 - Making and Rebuilding Saddles  
*4-H Leathercraft Manual, **Leathercraft Leader Guide***

### Photography

*Unit 1 - Photography Basics*  
*Unit 2 - Photography Basics (Year 2)*  
*Unit 3 - Next Level Photography*  
*Unit 4 - Mastering Photography*  
*Unit 5 - Low Light Photography*  
**\*Unit 6 - Advanced Photography (Int./Sr.)**

### Scrapbooking

One Page Layout, Two Page Layout, Album, \*Tag Making (Jr. Only), and \*Card Making (Int./Sr.)  
*Scrapbooking*

### Visual Arts

*Portfolio Pathways - Painting and Printing*  
*Portfolio Pathways - Graphic Design*  
***Sketchbook Crossroads - Drawing***  
***Sketchbook Crossroads - Fiber and Sculpture***

## Family Consumer Science:

### Artistic Clothing\*

*Upcycle Your Style (Applied, Stitched, Combination Design)*  
Recycled Clothing  
Creative Sewing (Costumes, Other Items)  
\*Buymanship (Int./Sr.)  
\*Create Your Own (Int./Sr.)

### Cake Decorating\*

Unit 1 - Edible Cake Decorating  
Unit 2 - Single Layered Cake  
Unit 3 - Two Layered Cake with Tips  
*Cake Decorating, Units 1-3*  
Unit 4 - Character Cakes  
Unit 5 - Small Treats  
Unit 6 - Cut-Up Cakes  
*Cake Decorating, Units 4-6*  
\*Unit 7 - Flat Surface & Nail Flowers (Int./Sr.)  
\*Unit 8 - Fondant (Int./Sr.)  
\*Unit 9 - Lily Nail Flowers (Int./Sr.)  
*Cake Decorating Units 7-9*  
\*Unit 10 - Tiered Cakes (Sr. Only)  
\*Unit 11 - Molds (Sr. Only)  
\*Unit 12 - Create Your Own (Sr. Only)  
*Cake Decorating, Units 10-12*

### Clothing Construction\*

*Unit 1 - STEAM Clothing 1, FUNdamentals*  
*Unit 2 - STEAM Clothing 2, Simply Sewing*  
*\*Unit 3 - STEAM Clothing 3, A Stitch Further, 4-H Textile Experiments (Int./Sr.)*  
*Unit 4 - Sewing for Others*

### Foods and Nutrition

*Unit 1 - Cooking 101*  
*Unit 2 - Cooking 201*  
*Unit 3 - Cooking 301*  
*Unit 4 - Cooking 401*  
*4-H Cooking Helper's Guide*  
**Specialty Foods**  
*Unit 5 - Outdoor Cooking & Living*  
*\*Unit 6 - Cultural & Ethnic Foods (Int./Sr.)*  
*\*Unit 7 - Passport to Foreign Cookery (Int./Sr.)*

### Food Preservation

*Unit 1 - Drying, Unit 2 - Freezing, Unit 3 - Boiling Water Canning, \*Unit 4 - Pressure Canning (Int./Sr.)*

### Heritage Arts

*Crochet Units 1-3 - The 4-H Crochet Handbook*  
*Knitting Units 1-3 - The 4-H Knitting Handbook*  
*Misc. Fiber (Needle Arts, Weaving, Spinning, Ethnic Arts, Rug Making, Macramé, etc.)*  
*Misc. Non-Fiber (Beading, Silver Smithing, Paper Scrolling, etc.)*  
*Quilting Unit 1 - You Can Quilt*  
*Unit 2-6 - Quilting the Best Better!*

### Home Design & Décor

*Units 1-4 - Home Design & Décor Unit 1-4 Manuals*

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