

2007 Wisconsin 4-H Project Guide

Welcome to Wisconsin 4-H

Did you know . . . 4-H is the youth development part of University of Wisconsin-Extension. So, when you participate in 4-H, you are part of the UW System!

The 4-H pledge: “I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, my health to better living for my club, my community, my country and my world.”

The four “H’s” represent the four points of the pledge: clearer thinking (head), greater loyalty (heart), larger service (hands) and better living (health).

4-H is open to any youth eligible for 4-H membership regardless of race, color, creed, religion, sex, national origin, disability, ancestry, sexual orientation, pregnancy, marital or parental status.

How old do you need to be to join 4-H? You are eligible when you’re in first grade. First and second graders participate as Cloverbuds, though some counties extend Cloverbud membership to kids in kindergarten. You are eligible through the next 4-H year *after* graduation from high school. (Wisconsin 4-H membership policies are located at: www.uwex.edu/ces/4h/resources/policies/documents/WI4HYouthDevelPolicies.pdf)

In its early years, 4-H was a program just for farm kids. Today 4-H is for everyone. Boys and girls in towns cities can enjoy 4-H as much as youth on farms rural areas. Over half of 4-H participants now live in larger cities, over one fourth live in towns and rural areas, and less than one fourth live on farms.

This year 4-H will reach nearly 250,000 Wisconsin youth from all 72 counties. They are involved in 2,100 clubs in community, school and after-school settings, as well as in camps, school enrichment programs, special interest groups, and independent study. There are many exciting ways that you can be part of 4-H and UW-Extension. Check with your county 4-H office (www.uwex.edu/ces/cty/) to see which kinds of opportunities are available to you.

This project guide lists some 70 different statewide project areas that you can enjoy. But besides 4-H projects, you can get involved in 4-H events and activities throughout the year, including drama festivals, style revues, animal judging contests, camps, county and state fairs, community services, tours, sports, exchanges, speeches, demonstrations, and more

There is lots to do in 4-H for older members. Many teen counselors are staff members at 4-H camps. About 500 teens exchange ideas and make new friends each June during State 4-H and Youth Conference at UW-Madison. Many enjoy 4-H educational trips to Washington D.C. and exchanges with 4-H families in other states. Some travel overseas for 4-H international experiences.

About 25,000 adult and youth volunteers give their time and talent to 4-H each year. The average volunteer donates about 200 hours each year to 4-H.

4-H-type programs are truly international. Over 80 countries have similar programs that reach 4 million youth.

This is your guide . . . A 4-H project is an area that you want to learn more about during the year. There are projects on just about any topic you would like to study and explore, from art to woodworking, from computers to rabbits, from clothing to small engines.

The projects and literature listed in this guide are only *recommendations* from statewide project committees. Not all of these projects may be offered in your county. Your county may also use different literature for the

projects you select.

So how do you know what projects are available to you? Your club organizational leader or enrollment coordinator can tell you what projects and resources are offered in your county.

Don't forget to check out the project pages on the Wisconsin 4-H Web Site at www.uwex.edu/ces/4h/onlinpro/index.cfm. On these pages, you'll find descriptions for these statewide projects, Internet resources and links of interest, county fair exhibit suggestions, state specialist contacts, and other suggested 4-H resources.

And remember, you'll learn more than "subject matter" as you complete your projects. You'll learn many "life" skills that you'll use every day of your life, such as, understanding yourself, communicating better, solving problems, making decisions, and working with others.

Good luck in your project selections. Have a great 4-H year!

How to Select 4-H Projects

4-H members . . . First, make a list of the things you like to do or want to learn more about. Talk over your list with your parents, leaders and friends. They may recognize some special things you are good at that you don't even realize you do well.

Then compare your list with the projects described in this guide and any other project list you may receive from your county. Ask yourself if you have the equipment, money and time to do the projects that sound interesting.

Your club organizational leader or enrollment coordinator will give you a form when you're ready to sign up for projects. You'll notice that each project has a computer code number assigned to it. Mark that code number on the form. (Don't use the "leader" project codes unless you're signing up as a youth leader for that project.)

Some projects have more than one level, such as, beginning, intermediate and advanced. If you've had a lot of experience in an area, you may want to skip the first or beginning level of a project. Some projects also have grade recommendations. These are only recommendations.

If this is your first year in 4-H, concentrate on only two or three projects. Usually you can spend more than one year in a project unit because there are enough ideas there to span two or three years. Most 4-H'ers take the levels in order, but what you decide to take as part of your project work is up to you.

4-H leaders . . . If you are a 4-H adult or youth leader, notice that some project code numbers are just for you. For example, if you are a leader for all of the Shooting Sports project units, you'll use code 630.

If there are several units within a project and you are a leader for only one of these units, then use the project code number for that unit. For example, if you are a Shooting Sports leader for just archery, use code 631. You'll need to make more than one entry if you are a leader for more than one project unit. For example, if you are a Shooting Sports leader for archery *and* air pistol, use codes 631 *and* 632.

2007
4-H Project Guide
Projects and Literature List

LEADERSHIP

100 Organizational Leader (club general leader)

4-H23, Say It with Posters

4-H350, Getting Started in 4-H Leadership

4-H351, Sing Along Songbook

4-H500, I'm a 4-H Project Leader: Now What Do I Do?

101 Co-organizational Leader (club general co-leader)

See project code 100 for possible list of literature

102 Assistant Organizational Leader (an assistant helping the general leader of the club)

See project code 100 for possible list of literature

104 Adult Advisor to Other Leaders

105 Board Member (member of advisory board, advisory council, executive committee or board of directors within the county)

106 Key Leader (leader with countywide responsibilities for a project)

Literature will vary with the project; see project code 100 for possible list of other literature

107 Club Enrollment Leader (leader responsible for club enrollments)

4-H218, 2007 Wisconsin 4-H Project Guide

108 Club Activity Leader (leader responsible for 4-H activities)

Literature will vary with the activity; see project code 100 for possible list of other literature

109 Parent Advisory Board Member

120 Youth Leadership Leader

BU7903, Leadership Mentor Guide for Grades K-5

BU7904, Leadership Mentor Guide for Grades 6-12

4-H71A, So You're the Club President

4-H71B, So You're the Club Vice President

4-H71C, So You're the Club Secretary

4-H71D, So You're the Club Treasurer

4-H71F, So You're the Club Reporter

4-H71G, So You're the Club Recreation Leader

121 Youth Leadership 1

This beginning project is aimed at grades 3-5. During this activity-driven project, assess your leadership skills, explore what's important to you, put yourself in someone else's shoes, understand self-responsibility, practice effective communication skills, organize your personal

belongings, make an action plan to complete a project, set goals, make an invention, resolve conflicts, and plan a group event.

BU7905, My Leadership Workbook for Grades 3-5

122 Youth Leadership 2

This intermediate project is aimed at grades 6-8. During this-activity driven project, assess your leadership skills, learn what motivates you, explore how leaders are different and alike, build trust in yourself and others, explore self-responsibility, give a speech, develop a multimedia presentation, set and achieve team goals, identify talents in people around you, practice teamwork and group etiquette at a meeting, handle conflicts in a group, and make group decisions.

BU7906, My Leadership Journal for Grades 6-8

123 Youth Leadership 3

This advanced project is aimed at grades 9-12. During this activity-driven project, assess your leadership skills, build trust in a group, explore how people are different and alike, assess your own strengths and weaknesses, build relationships and partnerships, participate in an interview, write vision and mission statements, role play conflict scenarios, explore an issue and develop recommendations, contribute to a group project, plan and organize meetings, and identify various leadership styles.

BU7907, My Leadership Portfolio for Grades 9-12

YOUNGER MEMBERS

130 Exploring Leader

BU8172, Exploring the Treasures of 4-H Activity Guide

BU6350, Exploring Farm Animals Group Activity Guide

131 Exploring

This project is aimed primarily at youth in grade 3; however, check with your county 4-H office on its specific grade policy and project materials for the Exploring Project. Find a “treasure hunt” of activities where you’ll discover new things about yourself and 4-H. Sample a variety of projects offered in 4-H, from animals to arts, from gardening to woodworking, from fishing to foods, and more.

BU8171, Exploring the Treasures of 4-H

135 Cloverbuds Leader

Besides the resources listed below, Cloverbud leaders will want to check out some of the other 4-H projects written for younger members: Aerospace 1, Bicycling 1, Computers 1, Latino Cultural Arts, and Palette of Fun. Cloverbuds won’t be able to sign up for these projects until they’re in grade 3, but there are some fun activities in these project areas that you could use now with your Cloverbuds.

4-H414, Cloverbuds Leader Guide-Helping Youth Grow into 4-H

4-HMI5560S, Cloverbuds-4-H Discovery Program for 6-8 Year Olds

136 Cloverbuds 1

This project is aimed at grades 1 and 2. Choose from a number of fun activities: meet my pet, create a critter, sketching skills, flag fun, puppets with pizzazz, snack attack, smart shopping,

bike driving skills test, birds I have seen, trees are tree-mendous, my family tree, a walk in my neighborhood, make a terrarium, my cup of soil, chemistry and cake, and my weather log.

4-HMI5561F, Cloverbuds – Activity Sheets

4-HMI5562B, Cloverbuds – Program Record

4-HMI5563A, Cloverbuds – Participation Summary

SERVICE LEARNING AND CITIZENSHIP

175 Service Learning Leader

BU8184, Service Learning Helper’s Guide

175A Service Learning 1

Make the world a better place by giving back to your community, in this new project aimed at grades 5-8. Become a “special opportunity agent” as you follow a series of exciting activities that will engage you in your community and allow you to reflect on your experiences. Identify community needs, plan a service project, and execute your idea.

BU8182, Agents of Change

175B Service Learning 2

See how you can make the world a better place in this new project aimed at grades 9-12. This project will engage you as a young leader. Voices of other real young people engaged in service will inspire you and connect you to others who have made an impact. Plan and implement your own service project.

BU8183, Raise Your Voice

180 Citizenship Leader

BU8154, Citizenship Guide’s Handbook

181 Citizenship

Improve the world around you through Public Adventures, the 4-H Citizenship project aimed at grades 4-12. Discover public issues that are important to you and others. Plan a project that will create, change or improve something that’s valuable to your community. Throughout the process, keep a journal of your thoughts, decisions, and actions.

BU8153, Citizenship Adventure Kit

SELF-DETERMINED

190 Self-Determined Leader

191 Self-Determined

This project gives you the freedom to create your own project or expand a traditional one. Select your project, outline a plan, identify resources, carry out and evaluate your plan. Do what *you* want to do!

4-H272, Designing Your Own Project

ANIMAL SCIENCES

210 Beef Leader

BU8146, Beef Group Activity Guide
492XX, Beef Resource Handbook

211 Beef 1

This beginning project is aimed at grades 3-5. It's not necessary that you own an animal. Identify breeds and body parts, judge beef cattle, halter-break a calf, fit a steer, show a calf, recognize a healthy animal, select feed ingredients, shop for beef and beef byproducts, and more.

BU8143, Bite into Beef
4-H450, Judging Breeding & Market Cattle
MA, Meat Animal Project Record

212 Beef 2

In this intermediate project aimed at grades 6-8, present oral reasons during judging and learn about feed ingredients, behavior, nose printing, parasites, fitting, ethical issues, beef carcass composition, retail meat cuts, and more.

BU8144, Here's the Beef
MA, Meat Animal Project Record

213 Beef 3

In this advanced project aimed at grades 9-12, explore selection and judging, feeds, careers, health, reproduction, meats and marketing, and more.

BU8145, Leading the Charge
MA, Meat Animal Project Record

215 Dairy Goats Leader

BU8355, Dairy Goat Helper's Guide

216 Dairy Goats 1

This revised beginning project is aimed at grades 3-5. Whether you own a dairy goat or are just curious about goats, these activities provide enjoyable, hands-on experiences to introduce you to goats. Emphasis is on selection, feeding, management, fitting, showing, and responsible goat ownership.

BU8352, Getting Your Goat

217 Dairy Goats 2

This revised intermediate project is aimed at grades 6-8 who own a goat. Explore how to keep your goat healthy, feed it for maximum production, prepare for kidding, develop judging skills, milk a goat properly, and more. Exciting activities for teams and individuals are included.

BU8353, Stepping Out

218 Dairy Goats 3

This revised advanced project is aimed at grades 9-12 who own a goat. Delve into genetics, careers, national industry issues, diseases, biosecurity, body condition scoring, linear appraisal, breeding programs, pedigrees, dystocia, quality assurance, and leadership opportunities.

BU8354, Showing the Way

219 Meat Goats Leader

BU7912, Meat Goat Helper's Guide

219A Meat Goats 1

This beginning project is aimed at grades 3-4. It's not necessary that you own a meat goat to get started. Activities include identifying meat goat breeds, identifying parts of a meat goat, selecting a good project animal, feeding and caring for goats, designing a safe goat facility, developing a budget for a meat goat project, preparing a goat for show, exhibiting good sportsmanship in the ring, keeping records on your project animal, comparing meat and dairy goats, and more.

BU7909, Just Browsing

219B Meat Goats 2

This intermediate project is aimed at grades 5-7. Learn to recognize meat goat diseases, select a veterinarian, select foundation breeding stock, protect meat goats from poisonous plants and predators, evaluate the body condition of your project animal, handle manure properly, understand the reproductive cycle of goats, keep animal records, fit and show meat goats, and more.

BU7910, Get Growing with Meat Goats

219C Meat Goats 3

This advanced project is aimed at grades 8-12. Learn to control goat parasites and reproductive diseases, understand biosecurity and prevention measures, organize a goat judging clinic, choose sires to improve your meat goat herd, formulate rations for your project animal, evaluate goat pastures, understand and practice livestock show ethics, study land use issues, educate the public about meat goats, learn about marketing meat goat products, and more.

BU7911, Meating the Future

220 Dairy Leader

BU8164, Dairy Cattle Group Activity Guide

221 Dairy 1

This beginning project is aimed at grades 3-5. It's not necessary that you own an animal. Identify dairy breeds, select calves, identify cow parts, recognize desirable traits, identify stages of calving and care, pack a show box, groom and show a calf, and more.

BU8161, Cowabunga!

CANADA1, Showmanship. . . Leading To Win

CANADA2, Preparing to Lead

Dairy Cattle Judging Made Easy – Interactive CD

LDR, Lifetime Dairy Record

MPA, Wisconsin 4-H Managerial Project Agreement

222 Dairy 2

In this intermediate project aimed at grades 6-8, learn about housing, hay quality, milking, keeping animals healthy, parasites, behavior, and food safety. Explore ethical decision making, judging, careers, and more.

BU8162, Moving Ahead

MPA, Wisconsin 4-H Managerial Project Agreement
NCR593, Learning About Dairy Resource Manual
The Rules are Black and White – And they apply to all breeds

223 Dairy 3

In this advanced project aimed at grades 9-12, practice mastitis detection, balancing a ration, pregnancy detection, delivery of a calf, body condition scoring, selecting cattle through records, promoting dairy products, exploring career opportunities, and more.

BU8163, Rising to the Top

HMR, Wisconsin 4-H Dairy Heifer Management Record

MPA, Wisconsin 4-H Managerial Project Agreement

230 Horse/Horseless Leader

BU8058, Horse Group Activity Guide

231 Horses 1

In this beginning project, you don't have to own a horse or pony. You just need a desire to learn about horses, including horse behavior, terms, breeds, identification, body parts, selection, grooming, saddling, bridling, safety, and more.

BU8053, Giddy Up & Go

CO200, Horses & Horsemanship

CO201, Horse Science

4-H180, Pleasure Riding

232 Horses 2

Learn about horsemanship, judging, oral reasons, selection, unsoundness, tack, training, showing, trail riding, riding skills, parasites, feeding, and more.

BU8054, Head, Heart & Hooves

233 Horses 3

Explore horse breeding, genetics and heredity, horse diseases and prevention, controlling parasites, fencing and pasturing, housing, horse careers, and more.

BU8055, Stable Relationships

233A Horses 4

Learn beginning riding skills and everything you need to know before you get on a horse for the first time. Activities include training a horse, round pen workout, English and Western style bridles, understanding equitation and riding style, riding in a group, basic horse riding skills, and more.

BU8056, Riding the Range

233B Horses 5

Discover the ins and outs of showing your horse. Activities include setting goals, comparing costs of show clothing, pre-show fitting techniques, understanding and using the Quarter System for presenting horses in showmanship classes, rating your showmanship skills, evaluating ethics in competitive situations, and more.

BU8057, Jumping to New Heights

234 Horseless Horse 1

In this beginning project, you don't have to own a horse or pony of your own. You just need a desire to learn about horses. Explore horse behavior, terms, breeds, identification, body parts, selection, grooming, saddling, bridling, safety, equipment, and more.

BU8053, Giddy Up & Go

4-H266, Horses Are Fun

235 Horseless Horse 2

In this intermediate project, learn about horsemanship, judging, oral reasons, selection, unsoundness, tack, training, showing, trail riding, riding skills, parasites, feeding, and more.

BU8054, Head, Heart & Hooves

236 Horseless Horse 3

In this advanced project, explore horse breeding, genetics and heredity, horse diseases and prevention, controlling parasites, fencing and pasturing, housing, horse careers, and more.

BU8055, Stable Relationships

238 Clothes Horse

Learn how to make your own riding apparel and horse equipment, develop sewing and other creative skills, understand textile selection and care, and more.

4-H360, 4-H Clothes Horse Activity Guide

4-H374, Additional Patterns for Clothes Horse

4-H389, Horse & Riding Attire

240 Swine Leader

BU8068, Swine Group Activity Guide

490XX, Swine Resource Handbook

241 Swine 1

In this beginning project, identify swine breeds, feeds and parts of a pig's digestive system; complete a pig examination; practice judging market hogs; complete a budget; design a hog facility; identify pork cuts; practice fitting and showing, and more.

BU8065, The Incredible Pig

4-H412, Judging Breeding & Market Swine

MA, Meat Animal Project Record

242 Swine 2

In this intermediate project, learn to make a swine health care plan, identify symptoms of swine diseases, plan and pack a show box for the fair, hold a pork tasting party, complete a plan for a new pork product, plan and organize a facility expansion, explore careers in the swine industry, and more.

BU8066, Putting the Oink in Pig

MA, Meat Animal Project Record

243 Swine 3

In this advanced project, learn to make decisions on breeding and possibly culling a sow, judge a class of breeding gilts, design a preventive herd health program, manage the feeding of a market hog, plan and design a swine unit, manage baby pigs, analyze your personal career

preferences, prepare a personal résumé, and more.

BU8067, Going Whole Hog

MA, Meat Animal Project Record

250 Poultry Leader

BU6366, Poultry Group Activity Guide

251 Poultry 1

This beginning project is aimed at grades 3-5. It's not necessary that you own an animal. Activities include identifying poultry breeds, parts of a bird, and parts and functions of eggs; cooking eggs; designing a brooding arrangement for chicks; handling poultry; selecting pullets; fitting and showing poultry; and more.

BU6363, Scratching the Surface

CIR878, From Egg to Chick

MA, Meat Animal Project Record

252 Poultry 2

This intermediate project is aimed at grades 6-8. Learn to observe a healthy flock, identify parts and functions of a bird's skeleton, discover how an egg is formed, select and judge broilers, determine peck order, select hens for egg production, imprint with chicks, prevent poultry diseases, and more.

BU6364, Testing Your Wings

4-H281, Poultry for Fun & Food

A2880, Chicken Breeds & Varieties

MA, Meat Animal Project Record

253 Poultry 3

This advanced project is aimed at grades 9-12. Learn to organize a judging clinic, manage a laying flock, mount a chicken skeleton, discover qualities of eggs, handle poultry products safely, process a chicken, explore poultry-related careers, and more.

BU6365, Flocking Together

MA, Meat Animal Project Record

254 Waterfowl

Learn about waterfowl breeds and parts, brooding and rearing, handling, sexing waterfowl, selecting and preparing waterfowl for market, selecting and managing breeder flocks, incubating and exhibiting waterfowl, and more.

A3311, Raising Waterfowl

MA, Meat Animal Project Record

255 Turkeys

Learn about buying poultry, preparing a brooding area, rearing range turkeys, feeding and watering, lighting, preventing diseases, marketing and processing turkeys, and more.

NCR060, Raising a Small Turkey Flock

MA, Meat Animal Project Record

256 Bantams

Discover the value and purpose of bantams, and their characteristics, breeds, and varieties. Learn how to get started raising bantams, secure breeding stock, select and mate bantams, incubate and rear their young, feed and house them, protect them from diseases and parasites, fit and show them at your county fair, and more.

NCR209, Bantams

MA, Meat Animal Project Record

257 Pigeons

Learn about the buying, behavior, feeding, banding, record keeping, housing, handling, training, grooming and exhibiting of pigeons, and more.

4-H135, Pigeons

260 Sheep Leader

BU8373, Sheep Helper's Guide

496XX, Sheep Resource Handbook

261 Sheep 1

This revised beginning project is aimed at grades 3-5. Whether you own sheep or are just curious about them, you'll learn about sheep parts, breeds, and sheep care through hands-on experiences.

BU8370, Lambs, Rams and You

4-H421, Judging Breeding & Market Sheep

MA, Meat Animal Project Record

262 Sheep 2

This revised intermediate project is aimed at grades 6-8 who own sheep. Explore how to keep your sheep healthy, feed them for optimal production, prepare for lambing, develop judging skills, and more.

BU8371, Shear Delight

MA, Meat Animal Project Record

263 Sheep 3

This revised advanced project is aimed at grades 9-12. Develop your leadership and teaching skills, while you create a business plan. Explore genetics, careers, and national industry issues.

BU8372, Leading the Flock

MA, Meat Animal Project Record

265 Cats Leader

BU8151, Cat Group Activity Guide

266 Cats 1

This beginning project is aimed at grades 3-5. It's not necessary that you own a cat. Select a cat, identify breeds, name the parts of a cat, handle and groom a cat, care for its health, budget for its care, and more.

BU8148, Purr-fect Pals

267 Cats 2

In this intermediate project aimed at grades 6-8, learn about cat senses, meanings of cat sounds, tricks you can teach a cat, signs of illness and health, emergency situations, feeding, special diets, traveling with a cat, showing a cat, and more.

BU8149, Climbing Up!

268 Cats 3

In this advanced project aimed at grades 9-12, explore veterinary procedures, cat body systems, diseases, reproduction, genetics, older cat needs, behavior, showmanship, community laws, animal welfare, and more.

BU8150, Leaping Forward

270 Dogs Leader

BU8169, Dog Group Activity Guide

271 Dogs 1

This beginning project is aimed at grades 3-5. It's not necessary that you own a dog. Learn basic skills for dog care and training, identify breeds, select a dog, learn the body parts of your dog, keep it healthy and groomed, train it, and more.

BU8166, Wiggles and Wags

4-H436, The Basics of Training Your Dog

4-H458, 4-H Dog Judging Guidelines

272 Dogs 2

In this intermediate project aimed at grades 6-8, explore more about dog health, nutrition, care, genetic problems, population control, showmanship, training, ethics, budgeting, and more.

BU8167, Canine Connection

4-H439, Dog Obedience – Novice & Beyond

273 Dogs 3

In this advanced project aimed at grades 9-12, investigate responsible breeding, diseases, caring for geriatric dogs, training, service dogs, dog roles, careers related to dogs, and more.

BU8168, Leading the Pack

4-H437, A Guide to Showmanship

275 Rabbits Leader

BU8083, Rabbit Group Activity Guide

276 Rabbits 1

In this beginning project, learn about selecting and handling rabbits, rabbit breeds and body parts, feeding, management, equipment, health conditions, breeding, kindling, and more.

BU8080, What's Hopping?

277 Rabbits 2

In this intermediate project, learn to select, judge, give oral reasons, show rabbits (all 16 steps), tattoo, keep records, detect diseases, and more.

BU8081, Making Tracks

278 Rabbits 3

In this advanced project, learn about breeding, genetics, culling, designing a rabbitry, marketing rabbits, teaching others, preventing diseases, registering a rabbit, and more.

BU8082, All Ears

280 Veterinary Science Leader

BU8051, Veterinary Science Group Activity Guide

4-H192, Veterinary Science

4-H323, The Normal Animal

281 Veterinary Science 1

In this beginning project, learn different breeds of animals, interpret animal behavior, meet animal basic needs, identify feed nutrients, describe animal life stages and systems, improve biosecurity in your home or farm, make your home safe for pets, learn what veterinarians do, and more.

BU8048, From Airedales to Zebras

4-H334, Adventure Notebook

4-H131, The Normal Animal

282 Veterinary Science 2

In this intermediate project, create health records on your animal, investigate body systems and proper environments for animals, discover the importance of immunity and biosecurity, conduct a food safety experiment, examine disease topics, explore veterinary specialties, consider ethics and animal welfare, and more.

BU8049, All Systems Go

4-H048, Animal Disease

283 Veterinary Science 3

In this advanced project, investigate the importance of genetics, normal and abnormal systems, diseases that spread from animals to humans, animal population control, preparation for college, diversity of veterinary careers, and more.

BU8050, On the Cutting Edge

4-H133, Animal Health

290 Pets Leader

BU6362, Pet Group Activity Guide

291 Pets 1

This beginning project is aimed at grades 3-5. It's not necessary that you own an animal.

Explore your favorite pet, identify pet body parts, select a pet, handle your pet, provide a safe environment, design your pet's space, observe its behavior, explore the costs of pet ownership, and more. When signing up for this project, indicate type of pet on your enrollment form.

BU6359, Pet Pals

292 Pets 2

This intermediate project is aimed at grades 6-8. Explore animal digestion, consider the pet population issue, feed pets, shop for pet supplies, determine a pet's sex, explore animal health, study pet behavior, explore pet communication, photograph pets, take care of newborn animals,

identify animal bones, and more. When signing up for this project, indicate type of pet on your enrollment form.

BU6360, Scurrying Ahead

293 Pets 3

This advanced project is aimed at grades 9-12. Explore pet products, classify animals, teach others about pets, understand how genetics work, keep a pet healthy, explore animal welfare issues, explore pet-related careers, and more. When signing up for this project, indicate type of pet on your enrollment form.

BU6361, Scaling the Heights

ARTS & COMMUNICATION

300 Photography Leader

301 Photography 1

In this new beginning project aimed at grades 3-5, explore the camera and the basics of lighting and good photo composition. All activities can be done with a point-and-shoot camera. Learn how to use your camera properly; use different types of light from natural to flash; take trick and black-and-white photos; shoot well-composed photos that tell a story; save and share your photos in albums and scrapbooks; and more.

PC1, Focus on Photography

302 Photography 2

In this new intermediate project aimed at grades 6-8, learn more about camera adjustments, lighting and photo composition. All activities require a camera with adjustable features. Learn about film speed, shutter speed, aperture and depth of field. Compare and take photos under various lighting conditions. Take silhouettes, candid, action shots, panning shots, close-ups, panoramas, montages, special effects photos, and more.

PC2, Controlling the Image

303 Photography 3

In this new advanced project aimed at grades 9-12, continue to learn more about photo equipment and photo-taking techniques. All activities require a camera with adjustable features. Learn about wide-angle and telephoto lenses, filters, infrared film, light meters and studio lighting. Experiment with more special effect photos, as well as underwater and astrophotography. Take still life photos, portraits, and photos that emphasize shapes, patterns, and textures. Learn to communicate effectively through your photos.

PC3, Mastering Photography

304 Videography

“Motion” pictures are what you see on movie and TV screens. Whether your camera uses videotape or movie film, the same techniques apply. In this project, learn storytelling, editing, planning, lighting, camera handling, making titles, recording sound, showing and reviewing your production, and more.

IS401, Action! Making Videos & Movies

311 Speaking

Plan, practice, and present an effective speech or demonstration. Gain confidence in your ability to speak in public.

COMM02, 4-H Public Speakers Handbook

COMM06, 4-H Public Speaking Opportunities – A Parent’s Handbook

312 Communications Leader

BU8159, Communications Helper’s Guide

COMM04, Voices From the Past

COMM05, It’s All in the Family

COMM07, Communication Activities for 4-H Clubs

312A Communications 1

In this new beginning project for grades 3-5, engage in nonverbal, verbal, and written activities that stretch and strengthen your personal communication skills. Encrypt codes, write songs, give directions, deal with bullies, make a statement through art, and more.

BU8156, Picking up the Pieces

312B Communications 2

In this new intermediate project for grades 6-8, become a confident communicator as you present oral reasons, plan and present speeches, communicate assertively, practice making a good first impression, mentor others, and more.

BU8157, Putting It Together

312C Communications 3

In this new advanced project for grades 9-12, polish your communication skills and develop a public presence by speaking in public, exploring communication careers, writing résumés, interviewing for a job, developing presentations, dealing with anxiety, and more.

BU8158, The Perfect Fit

313 Creative Writing

Explore the importance of language and creative expression. Enjoy fun ideas, tips and special projects to stimulate your creativity and self-expression. Join a discussion group as you enrich your life-long joy of book reading.

COMM01, Creative Wordworking

COMM03, Crazy About Books Reading Circle

330 Arts & Crafts Leader

BU7597, Palette of Fun Helper’s Guide

331A Palette of Fun

Designed for grades K-6, this project will help you learn art through cutting and pasting, drawing, painting, printing, sculpting, and constructing with fibers and other materials.

23112, Elements and Principles of Design Card

4-H472, Palette of Fun Member Sheet and Introduction

331B Sketchbook Crossroads

In this advanced visual arts project for grades 7-12, explore art techniques; art history and

culture; the science behind the art; artistic challenges in drawing, fiber arts, and sculpting; and more.

BU8140, Advanced Visual Arts: Sketchbook Crossroads

331C Portfolio Pathways

In this advanced visual arts project for grades 7-12, explore art techniques; art history and culture; the science behind the art; artistic challenges in painting, printing, and graphic design techniques; and more.

BU8141, Advanced Visual Arts: Portfolio Pathways

333 Leathercraft

Learn about the characteristics and uses of leather, tools and equipment; making patterns; original designs; leathercraft techniques; and more.

4-H149, Adventures in Leathercraft Members Guide

CIR006, Adventures in Leathercraft Leaders Guide

335 Block Printing

Design and cut blocks from different materials, print these designs on cloth and paper materials, and create your own original designs.

4-H156, Block Printing Members Guide

CIR008, Block Printing Leaders Guide

336 Metal Enameling

Learn how to enamel earrings, pins, cuff links and other jewelry; attach fasteners; create original designs and patterns; and more.

4-H158, Metal Enameling Members Guide

CIR009, Metal Enameling Leaders Guide

337 Drawing & Painting

Learn to draw with pencil, chalk, crayon, pen and ink; blend and shade; draw from nature; make surface rubbings; paint with watercolor, poster paint, oil and acrylics; use the brush; mix colors; and mat and frame your art.

4-H169, Drawing & Painting

340 Folk Arts Leader

NCR534, Folk Arts Leader Guide

341 Folk Arts

Explore traditional folk arts while learning more about your family and community. Folk arts can range from storytelling to polka dancing, egg decorating to basket making, and hair braiding to doll making.

347 Latino Cultural Arts

In this project for grades K-8, understand the rich Latino culture by exploring its many traditional art forms. Make Latino instruments, jewelry, weavings, murals, masks, mosaics, yarn art, and more. Celebrate Latino holidays, sample Latino foods, and tell stories from around the Latino world.

BU8180, ¡QuéRico! La Cultura Bilingual Helper's Guide

360 Theatre Arts Leader

BU8073, Theatre Arts Group Activity Guide

361 Theatre Arts 1

Study acting, from sound, movement, voice and speech, to characterizations, play building, and playing a scene. Try your hand at pantomime, clowning, improvisation, monologues, tableaux (stage pictures), and more.

BU8070, Play the Role

362 Theatre Arts 2

Become a puppeteer! Investigate the history of puppets, types of puppetry and puppet characters. Construct puppets and make them come alive, plan and present a puppet show, use puppets for community service, and more.

BU8071, Become a Puppeteer!

363 Theatre Arts 3

Study costumes, makeup, stage sets, props, sound, lighting, stage management, and theatre appreciation. Create sound effects and disguises, flood the stage with color and music, make up your own character, and more.

BU8072, Set the Stage

365 Clowning

Discover the history of clowning while developing your own clown character, complete with makeup and costume. Study famous clown acts. Create your own clown props, including slapsticks, toys and musical instruments.

4-H265, Enter the Clowns

373 Computers Leader

BU8349, Teens Teaching Tech Advice for Unplugged Leaders and Adult Helpers

374 Computers 1

This revised project is designed for beginners with little or no experience who want to know how computers work. Get introduced to computer hardware, components, software, programs, applications, and other features through an interactive Internet site.

BU8346, Newbie Know-How: Getting Started with Computers

375 Computers 2

In this revised intermediate project, build and repair computers, identify components inside a computer, enhance connectivity potential, and explore how components work together. Maintain peripherals, upgrade and create connections, install operating systems, and create a “dream machine.” The CD included with this guide provides hands-on practice with an operating system.

BU8347, Inside the Box: Building and Repairing Computers (With CD)

376 Computers 3

In this revised advanced project, discover how to create and manage networks. Explore the issues of responsible computer use. Make decisions about network management, security issues,

and trouble shooting.

BU8348, P2P – Peer to Peer: Creating and Managing Networks

FAMILY, HOME & HEALTH

400 Intergenerational Programs Leader

NCR548, Walk in My Shoes

401 Intergenerational Programs

Learn to understand older people better by sharing their experiences. Learn what it feels like to grow older, what happens to our bodies as we age, and what is true and false about aging and older people.

NCR591, Walk in My Shoes

410 Child Development Leader

BU8078, Growing All Together

411 Child Development 1

This beginning project is aimed at grades 3-4. Find out how *you* grow and how babies develop into toddlers. See how others are like you in so many ways but so different, too. Learn to get yourself ready in the morning, help your family and make toys safe for small children.

BU8075, Growing On My Own

412 Child Development 2

This intermediate project is aimed at grades 5-6. Learn how to take care of yourself and your brothers and sisters. See what makes your family so special. Find out how to select toys appropriate for different age groups, define the traits you want in a friend, develop family rules, prepare healthy meals, check out your home and neighborhood for safety hazards, contribute to a team effort, and more. At the end of this project, you'll be ready for the Red Cross Babysitter's Training course.

BU8076, Growing With Others

413 Child Development 3

This advanced project is aimed at grades 7-10. Explore how to be an effective parent, carry out a community service project, gain experience as a teacher or coach, understand the perspectives of others, make baby-sitting and first aid kits, and make playgrounds safe in your neighborhood. Check out child development careers and the effects of TV on children.

BU8077, Growing in Communities

420 Clothing Leader

BU8063, Sewing Expressions Group Activity Guide

421 Clothing 1

In this beginning project, identify sewing tools and sewing machine parts, stitch on a serger, thread a sewing machine, identify types of fibers and fabrics, identify types of seam finishes, select and purchase a pattern, sew and clip a curved seam, sort clothes for laundry, remove stains, donate a sewn project, and more.

BU8060, Under Construction

MI7198, Let's Sew!

422 Clothing 2

In this intermediate sewing project, enhance your sewing skills beyond the basics. Identify types of fabric construction, natural and man-made fibers, and types of fabric coloration; make a patch pocket, insert a lapped zipper, sew buttonholes and different seam finishes; use pressing tools and thread a serger; read International Care Symbols; research different laundry products; set a price for textile products; plan and organize a community service project; and more.

BU8061, Fashion Forward

423 Clothing 3

In this advanced sewing project, use specialized sewing tools or equipment; combine patterns to create a design; create outdoor wear; design and embellish a garment; sew with fabric containing spandex; identify clothing styles that enhance figures; use a computer to print on fabric; plan and conduct a style revue; study careers that work with fibers and textiles; and more.

BU8062, Refine Design

430 Crocheting Leader**431 Crocheting**

Explore what to consider when buying yarn, thread, and equipment. Learn crocheting and finishing techniques, how to care for crocheted items, and more.

CC1403, Crochet Made Easy

440 Foods & Nutrition Leader

BU7730, Fantastic Foods Series Helper's Guide

441 Foods & Nutrition 1

This beginning project is aimed at grades 3-4. Learn what's good to eat and how to fix foods, such as, pizza pockets, fruit kabobs, granola bars, pancakes, cookies, muffins, stuffed potatoes, churritos, ice cream, and watermelon slushes. Find out why calcium is important to your diet, understand TV commercial messages about food, decode food labels, and compare costs of foods. Learn how to store and handle your food safely. Practice measuring liquid and dry ingredients. Identify careers in the food industry.

BU7144, Level A, Six Easy Bites

442 Foods & Nutrition 2

This intermediate project is aimed at grades 5-6. Make main dishes, Swedish meatballs, whole-wheat biscuits, muffins, vegetable salads, pasta, pretzels, cocoa mixes, and yogurt. Learn to change recipes, reduce the fat content in foods, make healthy food decisions, and compare food prices. Learn how to store fruit, vegetables and pizza, and how to reheat leftovers.

BU7146, Level B, Tasty Tidbits

443 Foods & Nutrition 3

This intermediate project is aimed at grades 7-9. Learn to evaluate nutrition information and fad diets. Develop your own exercise program. Learn how to cook less tender cuts of meat and divide family packs of ground meat. Make banana bread, tea rings, oven-baked chicken dinners, chicken curry, Maori bread, breadsticks, and stir-fried vegetables. Compare homemade foods to

box mixes and develop a snack product. Make salsa, strawberry freezer jam, and pickle relish. Understand the role of food preservatives, emulsions, and yeast.
BU7148, Level C, You're the Chef

444 Foods & Nutrition 4

This advanced project is aimed at grades 10-12. Make a bean burrito, turkey, oven-roasted chicken, meat loaf, apple pie, Greek baklava, and Mexican flan. Learn how to can snap beans, make jelly, bake fish, and marinate meat. Conduct a food activity with young children, identify food assistance programs, “precycle” before shopping, divide recipes, plan menus with various budgets, compare costs of eating out, and plan and cater a party.
BU7150, Level D, Foodworks

450 Foods Preservation Leader

451 Foods Preservation

This beginning project introduces you to the basics of preserving fruits, vegetables and meats safely. Select publications from the UW-Extension Safe Food Preservation Series for the foods that you want to preserve.

B0430, Canning Fruits Safely

B1159, Canning Vegetables Safely

B2267, Homemade Pickles and Relishes

B2605, Tomatoes Tart and Tasty

B2909, Making Jams, Jellies and Fruit Preserves

B3278, Freezing Fruits and Vegetables

B3345, Canning Meat, Wild Game, Poultry and Fish Safely

B3570, Canning Salsa Safely

465 Personal Finance Leader

BU7712, Financial Champions Helper's Guide

465A Personal Finance 1

This new project is aimed at grades 7-9. Learn money management skills and how to live within a spending plan.

BU7710, Financial Champions: Money FUNdamentals

465B Personal Finance 2

This new project is aimed at grades 7-9. Learn about wants and needs, values, goal setting, communications, ways to use and save money, benefits and drawbacks of credit, advertising influences, consumer decision making, and how to select financial services.

BU7711, Financial Champions: Money Moves

466 Entrepreneurship Leader

BU8036, Entrepreneurship Helper's Guide

466A Entrepreneurship 1

This new project is aimed at grades 7-12. Explore what it takes to be an entrepreneur and whether you have “The Right Stuff” to meet the challenges. Practice the skills needed to function successfully as an entrepreneur. Explore types of businesses, products and pricing,

marketing, partnerships, agreements, and contracts. Create a business plan and start your own business.

BU8035, Entrepreneurship: Be the E

467 Workforce Readiness Leader

BU8192, Get in the Act! Take 1 Helper's Guide

467A Workforce Readiness 1

This new project is aimed at grades 6-9. Explore what it takes to get your first “paying” job as you recognize your own learning styles and personal qualities. Make “real life choices” using video scenarios in an on-the-job choices game. Discover how to assess job possibilities in the community and create job scenarios.

BU8191, Get in the Act! Take 1 (With CD)

470 Home Environment Leader

BU8343, Changing Spaces Helper's Guide

471 Home Environment 1

This new beginning project is aimed at grades 3-5. Discover how the principles and elements of design relate to personal space. Do creative hands-on activities, from decorating a room and arranging furniture to landscaping.

BU8340, Changing Spaces: Design Detective

472 Home Environment 2

This new intermediate project is aimed at grades 6-8 who want to learn how to decorate with flair. Focus on space, lighting, the value in “second time around” items, home and garden construction, and more.

BU8341, Changing Spaces: Designer in Me

473 Home Environment 3

This new advanced project is aimed at grades 9-12. Investigate the artistic use of design for indoor and outdoor living spaces. Explore your interests in planning community projects. Discover design careers through professionals, the Internet, and video.

BU8342, Changing Spaces: Designer Studio

480 Knitting Leader

481 Knitting

Discover what to consider when buying yarn and knitting equipment. Learn knitting and finishing techniques. Correct knitting errors and care for knitted items.

CC1402, Knitting Made Easy

485 Consumer Savvy Leader

BU8033, Consumer Savvy Group Activity Guide

486 Consumer Savvy 1

In this beginning project, understand your shopping style, find goods and services in the Yellow Pages, know the difference between your needs and wants, write savings and spending plans,

keep a spending diary, compare prices, make consumer choices, give a gift using your own resources, start a service project in your community, start a savings account, and more.
BU8030, The Consumer in Me

487 Consumer Savvy 2

In this intermediate project, identify your personal values, make decisions based on your personal values, understand advertising appeal and the value of advertising, compare advertisements, see how peer pressure can influence your purchases and how to deal with it, understand the risks of shopping on the Internet and your consumer rights, and more.
BU8031, Consumer Wise

488 Consumer Savvy 3

In this advanced project, define consumer responsibilities and ethics, understand your consumer rights, identify advertising targets, use comparison-shopping to save money, understand the impact of money spent on the global economy, use reliable information on the Internet, identify agencies that assist consumers with complaints, write a letter of complaint and explore legal action to resolve complaints, understand the costs of owning a vehicle, explore the importance of work in your life, and more.
BU8032, Consumer Roadmaps

490 Health Leader

491 Health 1

In this beginning project aimed at grades 3-5, practice first aid skills to treat cuts, scrapes, nosebleeds, and bee stings. Learn how to respond to someone who is choking or has broken a bone, assemble a first aid kit, interview members of the medical profession, and more.
BU8174, First Aid in Action

492 Health 2

In this intermediate project aimed at grades 6-8, use a self-assessment tool to identify your personal talent areas; explore hygiene, nutrition, and physical activities; share what you discover; and more.
BU8175, Staying Healthy

493 Health 3

In this advanced project aimed at grades 9-12, design your own personal fitness plan and track it using your own fitness file. Through interviews and personal experiences, discover the benefits of being fit.
BU8176, Keeping Fit

MECHANICAL SCIENCES

500 Aerospace Leader

BU6846, Flight Crew

501 Aerospace 1

This younger member project is aimed at grades K-2. Build a rocket that you can eat, compare birds and airplanes, make a space helmet, and more.
BU6842, Pre-Flight

502 Aerospace 2

This beginning project is aimed at grades 3-5. Build a straw rocket, make a paper airplane, read a map, identify types of aircraft, discover how weather affects flying, build and fly a kite, make a hot-air balloon model and paper helicopter, and more.

BU6843, Lift Off

503 Aerospace 3

This intermediate project is aimed at grades 6-8. Build, exhibit and launch model rockets, make and test a paper hang glider, make a flight simulator, demonstrate why rockets fly, organize a kite-flying contest, identify parts of a remote control, and more.

BU6844, Reaching New Heights

504 Aerospace 4

This advanced project is aimed at grades 9-12. Design and build model rockets and box kites, build an altitude tracker, plan a flight route, evaluate navigation systems, discover the effects of gravity, explore life in space and aerospace careers, and more.

BU6845, Pilot in Command

520 Bicycling Leader

BU8336, Bicycle Helper's Guide

BU7507 (Video) or DV8399 (DVD), Bicycle Fix It!

521 Bicycling 1

This revised beginning project is aimed at grades K-3. Learn the bicycling essentials for getting started safely and successfully. Begin exploring the basics toward lifelong cycling. Learn safety, road rules, and planning for a pleasant ride.

BU8334, Bicycling for Fun

522 Bicycling 2

This revised intermediate project is aimed at grades 4-6. Choose a bike that's right for you. Practice bike maintenance and road rules to make your rides safe and fun.

BU8335, Wheels in Motion

530 Electricity Leader

BU6852, Electric Helper's Guide

531 Electricity 1

This beginning project is aimed at grades 4-5. Understand how we use electricity, identify electrical materials, build a flashlight, build and test a switch, wire a simple circuit, compare open and closed switches and circuits, discover parallel and series circuits, understand magnetism, build and test a compass, build an electromagnet and galvanometer, build an electric motor, and more.

BU6848, Magic of Electricity

532 Electricity 2

This intermediate project is aimed at grades 6-7. Become familiar with electrical equipment, learn about alternating and direct current, select and use a volt-ohm meter, identify conductors

and insulators, learn to read circuit diagrams, build a circuit and measure voltages, build a parallel circuit, communicate in Morse code, explore three-way switches, solder a circuit diagram, build a burglar alarm, and more.

BU6849, Investigating Electricity

533 Electricity 3

This intermediate project is aimed at grades 8-9. Develop a basic electrical tool and supply kit, interview an electrical inspector, read an electrical meter and appliance nameplate, locate the main service panel, understand the symbols on wires and cables, evaluate different light bulbs, measure electricity usage of appliances, identify and test different receptacles, locate your home wiring system, replace a wall switch, and more.

BU6850, Wired for Power

534 Electricity 4

This advanced project is aimed at grades 10-12. Identify electrical and electronic parts and devices, then enter the world of semiconductors, diodes, resistors, capacitors, and coils. Learn how to solder and prepare parts for circuit assembly, read codes, connect a diode in a circuit, assemble a circuit using a transistor, test light emitting diodes, use a photocell to activate an alarm, build an amplifier to power a speaker, and more.

BU6851, Entering Electronics

537 Geospatial Leader

CD8358, Exploring Spaces, Going Places CD

537A Geospatial 1

The beginning level of this new project aimed at grades 4-12 is called “Getting Out.” Discover new ways of thinking about geographic positions, navigational tools (like GIS, GPS, compasses, maps and globes), identifying locations, measuring distances and more.

CD8358, Exploring Spaces, Going Places CD

537B Geospatial 2

The intermediate level of this new project aimed at grades 4-12 is called “On the Trail.” Learn how to collect data, combine the data with geographical positions, and then make your own maps . . . of school grounds, neighborhoods, farms, towns, states, and beyond!

CD8358, Exploring Spaces, Going Places CD

537C Geospatial 3

The advanced level of this new project aimed at grades 4-12 is called “Reaching Your Destination.” Use multi-layered maps to attempt to solve complex problems in your community, such as reducing traffic congestion, pinpointing pollution sources, boosting tourism, reducing disease, and controlling crime.

CD8358, Exploring Spaces, Going Places CD

538 Robotics Leader

BU8366, Robotics COACH Helper’s Guide

CD8368, Robotics and You CD

538A Robotics 1

In the beginning level of this new project aimed at grades 4-8, explore programming concepts using the RoboLab language. Learn what a robot is, how to build one, and how to program the robot to use sensors to interact with its environment.

BU8364, Robotics EXPLORER

538B Robotics 2

Learn more advanced topics in both programming and mechanics. Advance your programming techniques, use subroutines and variables to achieve more precise movements of your robots, and build your own custom functions. Practice and develop creative thinking, decision making, and leadership skills!

BU8365, Robotics PROBE

550 Small Engines Leader

BU8189, Small Engines Group Activity Guide

551 Small Engines 1

In this beginning project aimed at grades 3-5, focus on the basics of small engines, external engine parts, tools, what makes small engines work, uses of small engines, safety issues, and more.

BU8186, Crank It Up!

552 Small Engines 2

In this intermediate project aimed at grades 6-8, explore the internal parts of engines, engine sizes, compression ratios, seasoning an engine, safety issues, jobs related to small engines, possibilities of starting your own business, and more.

BU8187, Warm It Up!

553 Small Engines 3

In this advanced project aimed at grades 9-12, tear down and rebuild an engine, use diagnostic tools, research rules and regulations about using small engine machines, select replacement engines, and more.

BU8188, Tune It Up!

560 Scale Models Leader

561 Scale Models

Assemble and create scale models of trains, trucks, cars, ships, motorcycles, submarines, and tanks. Learn how to obtain the materials you need, paint your model, put on the decals, display your model, and judge it.

4-H424, Guidelines for Building Scale Models

570 Tractors Leader

571 Tractors 1

This new beginning project aimed at grades 3-4 is designed for youth with little or no prior agricultural tractor and equipment experience. Learn parts of a tractor, tractor maintenance,

different fuels, engine cooling systems, safety with augers, and more.
4H961, Starting Up: Getting to Know Your Tractor, Level A

572 Tractors 2

This new project aimed at grades 5-6 builds upon what you learned in Level A. It's designed for youth with little or no prior agricultural tractor and equipment experience. Learn farm and tractor safety, tractor maintenance, mechanics of the engine, accessory equipment, and functions of different operational systems.

4H962, Tractor Operations: Gearing Up for Safety, Level B

573 Tractors 3

This new intermediate project aimed at grades 7-9 is designed for youth with some prior agricultural tractor and equipment experience. Learn about farm safety, tractor maintenance, types of oil systems, fuel safety, PTO hooking, and more.

4H963, Moving Out: Learning about Your Tractor and Farm Machinery, Level C

574 Tractors 4

This new advanced project aimed at grades 10-12 is designed for youth with some prior agricultural tractor and equipment experience. Focus on safety, maintenance, mechanics, operational systems, equipment, and more.

4H964, Learning More: Learning About Agricultural Tractors & Equipment, Level D

580 Woodworking Leader

BU6879, Woodworking Helper's Guide

581 Woodworking 1

This beginning project is aimed at grades 2-4. Learn safety practices, identify woodworking tools, observe the qualities of different woods, measure and mark boards, use a hammer and handsaw, identify different types of nails, connect wood with glue, construct a butt joint, sand and paint a piece of wood, and more.

BU6875, Measuring Up

582 Woodworking 2

This intermediate project is aimed at grades 4-6. Identify the functions of various tools, practice safety techniques, use a bill of materials, select a project to build (birdhouse, letter holder, or foot stool), understand differences among species of lumber, use a screwdriver and combination square, make a miter cut, use a pad sander, select a proper finish, select and care for a brush, and more.

BU6876, Making the Cut

583 Woodworking 3

This intermediate project is aimed at grades 6-8. Compare different types of hinges, use clamps and a T-bevel, make dowel and dado joints, use various stains, enlarge scale-drawn woodworking plans, use a hand plane, build a laminated cutting board, compare different grades of plywood, study woodworking careers, and more.

BU6877, Nailing it Together

584 Woodworking 4

This advanced project is aimed at grades 9-12. Start your own woodworking business; use a table saw, router, powered circular saw, and power sander; make dovetail, as well as mortise and tenon joints; evaluate exotic and veneer woods; create inlays and overlays; test various adhesives; use chemical strippers; and more.

BU6878, Finishing Up

NATURAL RESOURCES AND ENVIRONMENTAL EDUCATION**600 Naturespace Leader**

4-H384, Naturespace Key Leader Orientation Packet

PUB-CE-456, Education Connection

PUBL-ER-001, Wisconsin Endangered & Threatened Species Laws & List

601 Introduction to Naturespace

Select your own “Naturespace” and conduct an inventory of its environmental and ecological features. Explore habitats, populations and relationships through a variety of fun, hands-on activities.

4-H391, Introduction to Naturespace

4-H335, 4-H Naturespace Activities Guide

602 Birds

Learn about the birds in your community: how birds live, migrate and defend their territory; how to watch, identify, band and photograph birds; how to build bird feeders and bluebird houses; and more.

4-H340, Getting to Know Birds

605 Forestry Leader

BU8041, Forestry Group Activity Guide

605A Forestry 1

In this beginning project, identify forest types, forest products, tree and leaf parts; distinguish between deciduous and conifer trees; age trees by counting rings; identify organisms that depend on trees for survival; describe root systems; understand the processes of transpiration and photosynthesis; understand forest competition; recognize communities of trees; describe how leaves affect rainfall; find a state forest; research tree-related careers; and more.

BU8038, Follow the Path

605B Forestry 2

In this intermediate project, learn how trees move water from soil to canopy; diagram a leaf; describe a tree’s life and decode its rings; understand major forest changes and the impact of invasive species; identify infectious and noninfectious tree diseases; identify and record insect damage to trees; analyze fire risk; understand forest densities and how to estimate the volume of a standing tree; understand why trees are necessary for human life; select urban tree planting sites, understand types of organism habitats; and more.

BU8039, Reach for the Canopy

605C Forestry 3

In this advanced project, identify an unknown tree using a tree key, make bark rubbings, recognize different tree fruits, determine the history of a neighborhood tree, create a community forest map, identify major forest biomes by continent, identify how different cultures use forests, identify benefits and requirements of urban trees, determine ownership of forests, decide how different values and needs influence forest uses, make harvest decisions, identify forestry jobs, and more.

BU8040, Explore the Deep Woods

606 Wildflowers

Learn about the wildflowers in your community: how to identify wildflowers; how and where wildflowers grow; how to collect, label, and mount wildflowers. Discover how humans affect wildflowers, how they enrich our lives, and more.

4-H392, Wildflowers

610 Adventures Leader

4-H443, 4-H Adventure Project

611 Introduction to Adventures

Learn how to camp safely in all weather conditions, investigate camping equipment and clothing, build a campfire, cook a meal outside, tie knots, practice first-aid, use a map and compass, and more.

4-H444, Introduction to Adventures

612 Backpacking & Hiking Leader

BU8046, Outdoor Adventures Group Activity Guide

612A Backpacking & Hiking 1

In this beginning project, plan a day hike, including selecting the items, planning the food, organizing and packing a backpack; select appropriate outdoor clothing; prepare a first aid kit; prevent and care for blisters; study Leave No Trace principles; use a compass; prepare for potentially dangerous weather conditions; identify outdoor safe shelters; observe plants and animals; and more.

BU8043, Hiking Trails

612B Backpacking & Hiking 2

In this intermediate project, plan a camping trip, including selecting equipment, selecting backpacking gear as a team, selecting an appropriate camping shelter, planning a camping cuisine menu, and selecting food preparation supplies; learn knot tying and the use of tools; practice Leave No Trace principles while hiking and picnicking; study types of organism habitats; select an appropriate cook stove; examine and purify water; dispose of waste using Leave No Trace techniques; describe the relationship between animals and plants; and more.

BU8044, Camping Adventures

612C Backpacking & Hiking 3

In this advanced project, plan a backpacking trip, including selecting and adjusting a backpack, selecting group backpacking gear, selecting and using a backpacking tent, and planning the meals and menu; design a non-tent backpacking shelter; share responsibilities for campsite

tasks; research various environments; conduct a backpacking pyramid; develop a personal conditioning program; orient a map and use triangulation; provide vital information to a rescue team; and more.

BU8045, Backpacking Expeditions

613 Winter Travel

Discover the joys of silent winter travel on cross-country skis and snowshoes. Select and take care of your equipment and clothing, experience a winter overnight campout, see how plants and animals prepare for winter, track animals in the snow, design a cross-country ski conditioning program, make a winter shelter, and more.

4-H448, 4-H Adventure Project – Winter Travel

614 Canoeing

Learn how and where to canoe safely, select and care for equipment, explore aquatic environments with all your senses, plan a canoe camping trip, design and build your own paddle, canoe a river, practice canoeing ethics, and more.

4-H447, 4-H Adventure Project – Canoeing

615 Bicycling

Learn how and where to bicycle safely, select and care for equipment, explore the environment with all your senses, plan a bicycle camping trip, design and build a bicycle obstacle course, conduct a bike maintenance check, enter a bicycle rodeo, practice bicycling ethics, and more.

4-H446, 4-H Adventure Project – Bicycling

620 Entomology Leader

BU6856, Entomology Group Helper's Guide

621 Entomology 1

This beginning project is aimed at grades 3-5. Learn about insects, their behavior, and their life history. Discover the parts of an insect's body, collect and compare insects, record insect observations, explore ways that insects communicate, describe how insects view the world, explore insect behavior, study insect controls, explore how insects move, and more.

BU6853, Creepy Crawlies

622 Entomology 2

This intermediate project is aimed at grades 6-8. Learn how an insect protects itself, explore insect habitats, collect and identify insects, survey pest levels, investigate entomology careers, create an insect display, conduct a test on bee taste preferences, observe an insect change its stages, collect insects at night, build an insect extractor, read insect control labels, and more.

BU6854, What's Bugging You?

623 Entomology 3

This advanced project is aimed at grades 9-12. Raise and study mealworms and mosquitoes, observe a colony of ants, manipulate bee behavior, organize an insect club, make an insect identification key, plant a butterfly garden, compare insect mouth types, collect spider webs, make a collection of insect wings, record insect stories in a journal, collect aquatic insects and monarch butterflies, and more.

BU6855, Dragons, Houses and Other Flies

630 Shooting Sports Leader

Goals of the 4-H Shooting Sports program are to give youth thorough instruction in gun safety, provide proper training in the use of firearms, create an appreciation of natural resources, and develop self-confidence and responsibility. Wisconsin county leaders must participate in a shooting sports workshop sanctioned by the state before offering 4-H Shooting Sports as a project. Workshops are held each year. Check with your county 4-H office for times and locations, or consult the Wisconsin 4-H web site www.uwex.edu/ces/4h/onlinpro/shooting/index.cfm. According to state policy, 4-H youth ages 8-11 cannot operate any powder-burning firearm. This includes, but is not limited to, .22 handgun or rifle, muzzleloading handgun or rifle, or shotgun.

4-H428, 4-H Shooting Sports Program

631 Archery

Learn the fundamentals of archery marksmanship and safety, making archery equipment, shooting form, shooting with sights, shooting compound bows, target archery games, and more.

4-H429, 4-H Shooting Sports-Basic Archery

632 Air Pistol

This project is an introduction to air pistols, including safety, marksmanship, and shooting procedures.

4-H431, 4-H Shooting Sports-Basic Air Pistol

633 Rifle

This project is an introduction to the air rifle and .22 rifle on dry firing; sighting; shooting for scores; scoring targets; and standing, kneeling, sitting, and prone positions. (According to state policy, 4-H youth ages 8-11 cannot operate any powder-burning firearm, including a .22 rifle. Youth ages 8-11 can participate in the 4-H air rifle discipline.)

4-H432, 4-H Shooting Sports-Basic Rifle

634 Hunting

This project is an introduction to the history, philosophy, and laws of hunting. Learn how to plan and equip yourself for a safe hunt. (According to state policy, 4-H youth ages 8-11 cannot operate any powder-burning firearm. This includes, but is not limited to, .22 handgun or rifle, muzzleloading handgun or rifle, or shotgun.)

4-H434A, 4-H Shooting Sports-Basic Hunting

635 Shotgun

This project presents basic shotgun knowledge on safe shotgun handling, shotgun-shooting fundamentals, firing the first shots, and caring for your shotgun. (According to state policy, 4-H youth ages 8-11 cannot operate any powder-burning firearm, including a shotgun.)

4-H433, 4-H Shooting Sports-Basic Shotgun

636 Muzzleloading

Learn about muzzleloading history, muzzleloaders and accessories, muzzleloading safety, and shooting and cleaning muzzleloading rifles and shotguns. (According to state policy, 4-H youth ages 8-11 cannot operate any powder-burning firearm, including a muzzleloading handgun, rifle, or shotgun.)

4-H430, 4-H Shooting Sports-Basic Muzzleloading

645 Recycling

This project presents a series of fun recycling activities. Learn about solid waste and how it can be handled to reduce the negative impact on our environment.

4-H362, Recycling for Reuse

650 Water Leader

4-H850 Give Water A Hand

651 Water

Become a water quality detective. Identify water conservation and pollution issues in your home, school, farm, or community. Select an issue to focus on and then develop and implement a service project or activity to help address the problem.

4-H855, Give Water A Hand-Action Guide

680 Sportfishing Leader

BU7601, Sportfishing Helper's Guide

681 Sportfishing 1

This beginning project is aimed at grades 3-5. Tie fishing knots, cast a fishing lure accurately, rig your tackle to fish on the bottom, identify types of tackle, organize a tackle box, take proper care of your tackle, use shelter and temperature information to locate fish, identify different types of baits, identify fish in your area, take proper care of your catch, identify parts of a fish, and more.

BU7598, Take the Bait

682 Sportfishing 2

This intermediate project is aimed at grades 6-8. Find fishing information on the Internet, cast a spinning rod and reel, cast a plug for accuracy, cast a fly, tie fishing knots, select a recipe and cook a fish, clean a shoreline, research state fishing regulations, decorate a lure, make a fly wallet, tie an artificial fly, collect and analyze aquatic life, test water for oxygen and microscopic animals, research fish body shapes, and more.

BU7599, Reel in the Fun

683 Sportfishing 3

This advanced project is aimed at grades 9-12. Take a friend fishing, reassemble a fishing reel, make artificial flies and lures, modify fishing equipment, refurbish old fishing equipment, conduct water temperature experiments, collect aquatic insects using a kick net, identify insects that fish eat, learn about ethical angling, investigate sportfishing careers, keep a field journal about fishing, teach others how to identify fish, and more.

BU7600, Cast into the Future

PLANT & SOIL SCIENCES

700 Crops Leader

701 Corn

One of the tallest members of the grass family, corn is a valuable crop and interesting to grow.

Learn about variety selection, germination, planting, nutrients, harvesting, and storage. Explore many uses and marketing strategies for corn.

4-H355, 4-H Corn Project Manual

4-H440, Marketing Your 4-H Crops

4-H441, Is Direct Marketing for My Project?

RS1, Record Sheet-Crops Management

702 Forage

Alfalfa is Wisconsin's most important forage crop. Establish and manage a forage crop; scout your fields for such pests as insects, weeds, diseases, and nutrition shortages; and take an accurate forage sample. Decide what forage growing techniques you want to learn more about, then request the most recent UW-Extension publications.

4-H349, Pest Scouting Alfalfa

4-H440, Marketing Your 4-H Crops

4-H441, Is Direct Marketing for My Project?

RS1, Record Sheet-Crops Management

703 Small Grains

Learn about other members of the grass families, such as wheat, oats, barley, and rye. Explore growing conditions, nutrients, integrated pest management, production costs, marketing strategies, and more.

4-H356, 4-H Small Grains Manual

4-H440, Marketing Your 4-H Crops

4-H441, Is Direct Marketing for My Project?

RS1, Record Sheet-Crops Management

710 Fruits Leader

711 Fruits

Produce fruits from apples to grapes and select the best fruit cultivar for your home garden. Decide what fruit you want to learn more about, then consult the most recent UW-Extension publication on the topic.

A1597, Growing Strawberries in Wisconsin

A1610, Growing Raspberries in Wisconsin

A1656, Growing Grapes in Wisconsin

A1960, Growing Currants, Gooseberries, and Elderberries in Wisconsin

A2072, Growing Pears in Wisconsin

720 Vegetables Leader

BU7156, 4-H Horticulture Leader's Guide

721 Vegetables 1

This beginning project is aimed at grades 3-5. Identify plant parts and their functions, explore germination, start a plant from a cutting, grow vegetables in containers, plan an outdoor garden, compare vegetable varieties, prepare a vegetable exhibit for show, make a compost column, interview people who grow plants, and more.

BU7153, Budding Gardeners

4-H395, Organically Grown – Handbook

4-H409, Nature's Herbs
A3306, Exhibiting & Judging Vegetables

722 Vegetables 2

This intermediate project is aimed at grades 6-8. Learn about plant needs and soil testing, start new plants, grow transplants, explore hydroponics, build a compost pile, use mulches, examine plants for insect damage, keep records, judge a vegetable exhibit with oral reasons, and more.
BU7154, Branching Out

723 Vegetables 3

This advanced project is aimed at grades 9-12. Grow plants in a coldframe, take a tour of a horticulture business, make a site analysis and landscape plan, conduct a gardening clinic, design a plant experiment, compare organic and chemical fertilizing and insect control, explore horticulture careers, and more.
BU7155, Digging Deeper

730 House Plants Leader

BU7156, 4-H Horticulture Leader's Guide

731 House Plants 1

This beginning project is aimed at grades 3-5. Identify plant parts and their functions, grow house plants, start a plant from a cutting, make a dish garden, prepare a house plants exhibit for show, and more.

BU7153, Budding Gardeners
4-H328, Propagating and Growing House Plants

732 House Plants 2

This intermediate project is aimed at grades 6-8. Learn about plant needs and soil testing, select and start new plants, grow transplants, plant a terrarium, examine plants for insect damage, keep records, judge a house plants exhibit with oral reasons, and more.
BU7154, Branching Out

733 House Plants 3

This advanced project is aimed at grades 9-12. Take a tour of a horticulture business, design a plant experiment, teach others how to grow an herb garden, compare organic and chemical fertilizing and insect control, present an illustrated talk about house plants, develop a marketing plan to sell horticulture products, explore horticulture careers, and more.
BU7155, Digging Deeper

735 Plant Crafts Leader

736 Plant Crafts

This project covers harvesting, drying, and using plant materials. Learn how to make dried arrangements, collages, potpourri, and other plant crafts.

4-H330, Plant Crafts
4-H453, Plant Crafts Supplement

740 Flowers Leader

BU7156, 4-H Horticulture Leader's Guide

741 Flowers 1

This beginning project is aimed at grades 3-5. Identify flowers parts and their functions, plant flowers, make a flower arrangement, give a presentation on flowers, prepare a flower exhibit for show, and more.

BU7153, Budding Gardeners

4-H1301A, Forcing Spring Flowering Bulbs

A2935, Evaluating & Judging Flowers & Indoor Plants

742 Flowers 2

This intermediate project is aimed at grades 6-8. Learn about plant needs and soil testing, select and start new plants, grow transplants, examine plants for insect damage, make a mass flower arrangement, keep records, judge a flowers exhibit with oral reasons, and more.

BU7154, Branching Out

743 Flowers 3

This advanced project is aimed at grades 9-12. Take a tour of a horticulture business, design a plant experiment, make a site analysis and landscape plan, teach others how to make a line-mass flower arrangement, write instructions on how to force bulbs, compare organic and chemical fertilizing and insect control, design a presentation on how to propagate perennials, explore horticulture careers, and more.

BU7155, Digging Deeper

750 Home Grounds Leader

751 Home Grounds 1

Learn about seeding, lawn care, maintenance, fertilization, and responsible pesticide management.

4-H321, 4-H Lawn Care

752 Home Grounds 2

Learn about the importance of planting new trees, shrubs and cultivars. Explore variety selection, and appropriate placement and maintenance techniques, including pruning, fertilization, and pest management.

A3067, Selecting, Planting & Caring for Shade Trees

A1730, Evergreens – Planting & Care

753 Home Grounds 3

This project explores landscape planning: putting the plan on paper; selecting, placing, and planting trees and shrubs; and maintaining the home grounds.

G1923, Planning & Designing Your Home Landscape

INTERNATIONAL PROGRAMS

915 International Leader

4-H812, And My World

916 International 1

In this project for grades 3-12, explore the world around you. Use maps to identify places. Investigate the importance of nature's balance and the importance of our water supply. Track weather in various parts of the world. Conduct a global hunger buffet to experience world hunger. Make a family tree. Explore the issue of immigration and learn to appreciate the diversity in your community. Discover the meanings behind geographic names. Understand pressing global issues, such as, basic human needs, interdependence, stereotypes, economics, and food distribution. Meet important global figures. Experience the lifestyles and concerns of families and youth from around the world, as well as family histories and traditions. Sample other cultures, including their communication symbols, expressions, personal greetings, foods, houses, costumes, and art. Make your own culture kits.

4-H812, And My World

Isn't It Time for You to Be a 4-H Leader?

Isn't it time to be a 4-H volunteer leader? All you need is the desire to help youth. Previous 4-H experience is *not* necessary.

Many volunteers help by leading 4-H projects for a local year-round club or short-term 4-H group. But there are many other ways to get involved.

You could lead a workshop, a one-time program where you share your knowledge with people. 4-H groups need chaperones for trips. If you like to travel or guide tours, 4-H can match you with a group that needs help. At the county level, you can help plan and conduct events, recruit other volunteers, develop and evaluate 4-H programs, or promote 4-H in general. The possibilities are endless!

When you volunteer to be a 4-H leader, there are many resources to get you started and keep you going, including leader manuals and training sessions.

If you are a parent, 4-H is a great opportunity to become involved in your child's development as a 4-H leader and as a home helper.

The hours that your child is involved in 4-H working in group settings are important. You can multiply this involvement as a 4-H home helper by helping your child go further and have fun doing 4-H things at home. Many 4-H projects and activities are natural family activities.