



Bridges Career Academy

Agriculture

Pierz-Healy High School

Introduction to agricultural and natural resources careers. Explore animal care, both large and small animals, the workings of the natural resources and the plants, fish and animals that reside in the environment. Conduct animal research understand the breeding, origin and judging of large animals and their nutritional needs. Hands-on projects and real-world experiences in landscaping.

Academic Courses

- Introduction to Agriculture
- Water, Woods, & Wildlife
- Fall Greenhouse Management
- Spring Greenhouse Management
- Large Animal Care
- Companion Animals
- Horse/Vet Science
- Landscaping


Career Experiences

- Tour local businesses
- Listen to industry speakers
- Participate in fieldwork identification
- Attend the Bridges Career Exploration Day or other regional career fairs

Completion Standards

COMPLETE

4 of 8 courses

GRADES **B** 

Earn a **certificate** and **green cord** at graduation



MINNESOTA STATE
CAREERwise Education

Log in to learn more

Explore types of careers

www.careerwise.minnstate.edu/careers

Review the local job outlook

www.careerwise.minnstate.edu/jobs

Find postsecondary programs

www.careerwise.minnstate.edu/education

Job Skills

In addition to having technical skills, employers expect workers in this industry to have these skills:

- Active listening and speaking skill
- Problem solving and critical thinking
- Ability to work in teams
- Apply current business practices



Agriculture Career Academy

Pierz-Healy High School

The Agriculture Academy provided students an introduction to the agricultural and natural resources careers in the diverse natural science careers of today. Students will have the opportunity to explore the animal care, both large and small animals, the workings of the natural resources and the plants, fish and animals that reside in the environment. The opportunity to conduct animal research, understand the breeding, origin and judging of large animals and their nutritional needs are an essential element of this academy. Hands-on projects and real-world experiences in landscaping are also part of this Academy. For those interested in working in the natural world, this Academy is for them.

ACADEMY COURSES

Introduction to Agriculture — 1 High School Credit

Students participating in the *Introduction to Agriculture* course experience hands-on activities, projects, and problems. Student experiences involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. While surveying the opportunities available in agriculture and natural resources, students learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. For example, students work in groups to determine the efficiency and environmental impacts of fuel sources in a practical learning exercise.

Water, Woods, & Wildlife — 1 High School Credit and/or 3 College Credits

This class is designed to give students hands on and applied learning experience with many different resource areas in our community. Students will study fish and wildlife management and practices and apply these practices by evaluating wildlife habitat, planting food and nesting habitat plots and studying game hunting quotas. Students will study Skunk River and Fish Lake and determine water quality using sample tests. Student will study orienteering skills by using compasses, maps, and handheld GPS units.

Fall Greenhouse Management — 1 High School Credit and/or 1 College Credit

Floriculture consists of flower designs, so in this class we will create corsages and centerpieces. We will also talk about Plant Morphology. Is a sweet potato a root or stem? Is a tomato a fruit or vegetable? This class will teach you how to identify the differences. Learning how to propagate plants and aquaculture/hydroponics are also included in this course.

Spring Greenhouse Management — 1 High School Credit and/or 1 College Credit

This course will focus largely on greenhouse management and landscaping. Students in this class will participate in planning the school garden, running the spring plant sale and do light landscaping around the school or near area. Students will get a light introduction and review of plants in the beginning of the course and then most of the course work is outdoors. Students should expect to do some math calculations to determine profit/loss on sales both in the greenhouse and in the garden.

Large Animal Care — 1 High School Credit

The course investigates the livestock industry in Morrison County and the sheep, swine, equine, poultry, beef, and dairy industries. Students learn to evaluate and identify breeds and species of animals, students will apply their skills to calculate appropriate rations and manage livestock herds, gain knowledge of livestock anatomy, digestion, reproduction, genetics, diseases, and treatment.

Companion Animals — 1 High School Credit

This class focuses on animal care, nutritional needs and identification in dogs, cats, rabbits, and as time allows other domesticated pets. We will explore the different breeds and how to match the characteristics of breeds to the needs of their owners. Basic diseases and basic care of each species is covered.

-MORE-



Agriculture Career Academy

Pierz-Healy High School

Horse/Veterinary Science — 1 High School Credit

Students will learn the history and evolution of horses, including the different breeds and the genetic makeup of the breeds. There will be focus on the different rodeo events along with the major horse races. Horses' nutritional needs as well as anatomy and physiology will be a part of this unit. In the veterinary science part of the course, students will learn about the different types of injections, sutures and medical dose rates as well as look at language pertaining to vet science. We will look at basic animal systems, parasites and diseases and animal health. Students will cover special areas such as animal welfare, consumer concerns of Ag production and technology used in the industry.

Landscaping — 1 High School Credit

This "hands-on" will expose students to different techniques of landscaping--retaining walls, pavers, design, and installation. Students will identify common plants, tools and techniques used in landscape design, along with slope, soil and water issues. Students will analyze landscapes to determine effectiveness of techniques used. We will be outside, weather permitting, for a large amount of this class

COMPLETION STANDARD

Students wishing to receive a certification for this academy must complete four of eight courses and maintain at a minimum of 'B-' grade (80%).

CAREER EXPERIENCES

Students will tour local businesses and attend Bridges Career Exploration Day. Students will listen to guest speakers and will include ranchers, farmers, animal trainers, and veterinarians. Presentations include the 'Jaw to Bone Identification', fieldwork identification and tours of local landscape, nursery, farm, and ranch.

JOB SKILLS

In addition to having technical skills, employers expect their workers to have other skills such as:

- Active listening and speaking skills
- Problem solving and critical thinking
- Ability to work in teams
- Apply current business practices

CAREER OPTIONS: www.careerwise.minnstate.edu/careers

JOB OUTLOOK: www.careerwise.minnstate.edu/jobs

POSTSECONDARY PROGRAMS: www.careerwise.minnstate.edu/education

