

Beaver High School Agriculture Education Course Descriptions

Agriculture Science 1 (9th -10th Grade) Full Year 1 Optional Science Credit or CTE Credit

Agriculture Science 1 teaches students the basics of science using Agriculture principals and introduces them to careers in Agri-Science, Animal Science, Plant and Soil Science, Natural Resources, as well as Leadership Skills. This is a great way to learn science in a hands on way with practical applications.

Animal Science 1 (9th – 12th Grade) Full Year 1 Optional Science Credit or CTE Credit

This is an introductory course that teaches scientific principles of how an animal's body works. We will learn about several animal body systems, how to care for basic agriculture animals, as well as animal selection. This is a great hands on course for an optional science credit.

Animal Science 2 (10th – 12th Grade) Full Year 1 Optional Science Credit or CTE Credit

Animal Science 2 deals with the production of animals. How basic care is given to animals using agriculture animals as examples. We usually hatch chicks, study different animal industries and how science and animal production are incorporated together.

Agriculture System 1 (9th -12th Grade) Full Year 1 CTE Credit

This introductory course is meant for those with no or basic experience with mechanical ideas. This class will give students the experience of working with small engines, basic plumbing skills, simple construction projects as well as some basic welding skills. Again no prior knowledge is required.

Agriculture Systems 2 (10th -12th Grade) Full Year 1 CTE Credit

This is a mechanical course taught to give students further experience in hand on learning about electrical systems, cements, basic construction, basic power systems and welding.

Advance Ag Mechanics (11th -12th Grade) Full Year 1 CTE Credit

This course is designed for students to use the skills they have developed in Ag Systems 1 and 2 by giving them time to complete projects using electrical, engine, plumbing, construction, welding, and concrete skills learned in previous courses.

Biology- Agriculture Science (9th -10th Grade) Full Year 1 Required Life Science Credit

This course is a core science class where Biology is taught using Agriculture examples and experiences. This class will cover all of the state core biological science standards and give students the opportunity for hands on experiences using agriculture as examples of life science.

Equine Science (9th -12th Grade) Full Year 1 Optional Science Credit or CTE Credit

This class is for students that would like to learn about horses and the horse industry, while applying science principals. Student will learn the basic science behind the horse body systems, about feed, nutrition, horse judging, facilities, tack and equipment.

Welding Entry Level (9th -12th Grade) Full Year 1 CTE Credit

Students will learn basic welding skills using SMAW (Stick), GMAW (Wire feed), and Oxy Fuel Cutting, that will prepare them to apply technical knowledge and skill for entry level welding careers. Students will learn and practice knowledge, attitude, skills, and habits required for performing tasks autonomously, with minimum supervision.

Welding Intermediate Level (10th-12th Grade) Full Year 1 CTE Credit

Student in this course will learn a variety of welding techniques including GTAW (TIG), FCAW (Flux Core), GMAW-S (Spray Arc), as well as Plasma Arc Cutting (PAC). When required skills are completed student will have time for project construction or further skill development.

Welding Advanced Level (11th-12th Grade) Full Year 1 CTE Credit

Students in this course will use knowledge from previous courses to refine welding technique and work on out of position welds. When required skills are completed student will have time for project construction or further skill development.

Beaver High School CTE Agriculture Education Pathways

Completers will be recognized at High School Graduation as a CTE Pathway Completer if they finish the following courses.

Agriculture Science Pathway

Agriculture Science 1
and 2 of the following
Animal Science 1
Animal Science 2
Equine Science
Biology Agriculture Science

Animal Science Pathway

Animal Science 1
and 2 of the following
Animal Science 2
Equine Science
Biology Agriculture Science

Agriculture Systems Pathway

Agriculture Systems 1
Agriculture Systems 2
and 1 credit of the following
Welding Entry level
Advanced Agriculture Mechanics
Biology Agriculture Science
Agriculture Science 1

Precision Production Trades – Welding Pathway

Welding Technician Entry Level
Welding Technician Intermediate Level
and 1 Credit of the following
Welding Technician Advanced Level
Accounting 1
Business Management
Entrepreneurship
Related Work Base Learning