

CTE Course Descriptions

School to work

Our mission is to sponsor and support community-based partnerships that nurture self-awareness, knowledge and respect, while bringing about new growth and making a difference in our community. Students are able to leave and work at a placement location during the school day to learn employment skills in areas that they are interested in.

Careers

This course is designed to assist students in identifying and creating a plan to meet individual education and career goals. Students learn about career paths and how career options may help accomplish goals. My goal is to help you gain an understanding of how your interests, values and goals relate to a future career.

This course is laid out to discover your interests and areas of strength and then work through areas that fit with you as an individual person. Careers will cover areas of learning such as educational level, careers in cluster areas, educational training, and hear from those that are professional experts in their areas. Students will be encouraged to have an open mind in this class to look at all options and to explore all topics. Students will create a final project throughout the semester that will be related to the 16 career clusters that we will investigate.

Floral Design

Using plants as their paints, students will be able to create basic floral arrangements and landscape designs in this class. They will focus on the concepts of flower arranging such as design elements, cut flower ID, and arranging mechanics so students can create arrangements like a bud vase, various arrangements or corsage/boutonniere's. Students will learn the aspects of running a floral shop and how the pricing works when creating a business.

Ag 9

In this course, students will investigate and explore many facets of the Agriculture industry. This course will emphasize in the areas of Animal Science, Agricultural Business, Food, Crops, and Leadership.

Ag business and Marketing

In this course, you will learn the basics needed to plan and launch your own business. Do you have what it takes to start a new business? Do you have an idea for a business but need the tools to get started? This course will provide you with the core skills you need to become successful. In this course, you will study the characteristics of successful entrepreneurs. You will also learn about self-employment and basic economic concepts related to small businesses, such as competition and production. This course will also walk you through the steps of setting

up a business, including developing a business plan, a mission and a vision, attracting investors, and marketing your company. With a unique opportunity to pair with FACS, students will also be able to create some of the items that they create a business for.

Vet Science

Are you interested in working with animals as a career, or do you just want to learn more about how to live up to your responsibility as a pet owner? In this course, students will learn how to identify common breeds of companion animals, understand the nutritional requirements of the different breeds, and gain hands-on experiences in the care of these animals. Students will also learn the internal anatomy and physiology of the animals to better understand their health needs. This course is designed to be an interactive, hands-on experience that will give you real-life experiences with each system of the body and common practices carried out in a veterinary clinic.

Animal Science

This course will cover important science concepts as they relate to Production Livestock Animals. We will focus on understanding the animal industry, genetics, learning about the digestive and reproductive systems, animal care, diseases and the uses for many of our production livestock animals. (Articulation Credit Offered)

Crop production

Provides students with an understanding of the basic principles of field crop production – tillage, soil testing, fertilization, variety selection, planting, and in-season crop management. Management practices for wheat, corn and soybean as “model” crops will be discussed to assist students in preparing for a career in agriculture or the agricultural sciences. In total, we will focus on the anatomy of the plants, Identification of the plant and seed, and look at the 10 most common crops Minnesota Produces. (Articulation Credit Offered)

Horticulture and landscape design

Spring Horticulture (Spring Hort.) is meant to prepare students for a potential career as a market gardener, produce/vegetable farmer, cut-flower farmer, everyday gardener, greenhouse production manager, etc. The class will also study landscape design concepts including plant ID and plant care. We will also make scaled landscape drawings.

Wildlife and Natural Resources

What would our lives be like without wildlife? Wildlife species add to the enjoyment of living in many ways. Some two million species of living things are on Earth. Through this course, you will learn about the management of common wildlife species in Minnesota. Students will look specific industries, build and fishing pole and fishing lure, understand water quality and look at different hunting practices.

FACS/Ag Business and Marketing

Students will begin to develop a business plan where they will learn about financing, recordkeeping, accounting and staffing. Students then move into marketing, investigating how to persuade others to buy their products and services and learning how to manage an existing business. They will also explore business-related topics in entrepreneurship, foods and agriculture. Our students will use decision making skills to address business and marketing themes. Students will focus on creativity, market solutions, critical thinking and communication skills.

Fundamentals of food preparation

This course will provide practical cooking experience for each student. Students will also learn and use the decision-making process, gain self-confidence when working in a kitchen, develop a positive attitude toward nutrition, learn ways to become better consumers while preparing various types of food, and learn to entertain guests.

Advanced Cooking

Students will learn about the fundamentals of food preparation, culinary history, serving food safely, sanitation, sauces, stocks and soups, knife skills, basic preparation, sandwiches, presentation/garnishing, careers and nutrition.

Intro to sewing

This course consists of units on clothing and society, color, design, fabric construction, clothing care, clothing selection and basic construction. Students will improve their basic sewing skills in this class.

Auto Body

This is a beginning course which introduces hands-on skills necessary for auto body repair. Students will learn tool usage, safety procedures, as well as completing projects. Students will gain knowledge in the basics of automotive body repair concepts through hands-on learning. The class covers the basics such as part removal, part installation, and the straightening of automotive body panels.

Construction 1

This course introduces the hands-on skills necessary to serve as a foundation for the skills needed in industry. Through actual planning and building, this class will design and construct a small structure. Students will learn the fundamentals of tools, safety, and building. Students will work with the basics of construction systems through activities and projects, including basic framing, window & door installation, and dry walling. Students will plan and build projects while learning the correct and safe use of basic tools and machines.

Construction 2

This course expands on the skills needed in industry. Students will receive additional hands-on learning in the fundamentals of construction, including tool usage, designing, and safety. Students will complete advanced building projects. Through actual planning and building, this class will design and construct a structure. Students will review the fundamentals of tools, safety, and building. Students will continue to work with and expand on their knowledge and use of construction systems through activities and

projects, to include framing, window & door installation, and dry walling. Students will plan and build projects while reviewing the correct and safe use of basic tools and machines.

Auto Mechanics

This is a beginning course which introduces hands-on skills necessary for auto mechanics. Students will learn tool usage, safety procedures, as well as completing projects. Students will gain knowledge in the basics of automotive maintenance and repair concepts through hands-on learning. The class covers basic maintenance, lubrication, cooling, fuel, lighting, brakes, suspension, tires, ignition system and roadside emergency procedures.

Small Engines

This hands-on course is designed to develop skills in maintenance, repair, and operation of equipment and small engines. Students will be introduced to 4-cycle and 2-cycle engines and learn the principles and theory behind the internal combustion engine. Students will study the systems of small engines: carburetion, ignition, lubrication, and cooling. Students will study basic maintenance procedures such as adjusting carburetors, repairing and adjusting ignition, overhaul and valve train adjustments. Students will perform basic engine maintenance and overhaul operations.

Woods 1

This is a beginning woodworking course which introduces hands-on skills necessary for woodworking. Students will review tool usage, safety procedures, as well as design and create woodworking projects.

During the course of the year students will be introduced to many areas of woodworking:

- Machine use, set-up, and safety
- Wood technology and wood identification
- Wood joinery – identification, construction, and uses
- Project planning, working drawings, plan of procedure, and bill of materials

Students will plan and build projects while learning the correct and safe use of basic woodworking tools and machines.

Woods 2

This course expands on the skills necessary to create woodworking projects. Students will gain additional practice with tool usage, design, and review safety procedures. Students will review the fundamentals of woodworking and work on creating more advanced projects

Students will expand on:

- Machine use, set-up, and safety
- Wood technology and wood identification
- Wood joinery – identification, construction, and uses
- Project planning, working drawings, plan of procedure, and bill of materials

Students will plan and build projects advanced and larger projects while reviewing the correct and safe use of woodworking tools and machines.