

Career and Technical Education

MADISON COUNTY HIGH SCHOOL
2021-2022

CTE Faculty

Agriculture: Mr. Taylor Pippins

Building Trades: Mr. Travis Knight

Business and IT: Mr. Larry Helmick / Mrs. Cheryl Paramore /
Ms. Sharon Taylor

Engineering: Mr. Peter Faloon

Family and Consumer Sciences: Mrs. Krista Tanner

Health and Medical Sciences: Mrs. Jackie Kemp

Marketing: Ms. Sharon Taylor

Simulated Workplace

Each content area offers opportunities for students to participate in a Simulated Workplace Program (SWP).

SWP experiences mirror those of real-world workplace environments. Students develop the skills necessary to acquire a job and be successful in their careers through the development of “soft skills:” communication, organization, negotiation, networking, etc.



Agriculture

Intro to Animal Systems

Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students also learn agricultural mechanics applicable to animal systems.

Intro to Plant Systems

Students develop competencies in each of the major areas of the Plant Systems career pathway, including applied botany, plant propagation, and plant care and selection.

Horticulture Sciences

Instruction includes safety in the horticulture industry, the science of horticulture and nursery plant production, greenhouse operation and management, landscape design, and turf management.

Agricultural Production Technology

Provides instruction in plant and animal science for students interested in career pathways related to agricultural production. Course content also includes safety, mechanics, soil science, precision agriculture, and business.



Building Trades



Building Trades I

Introduces students to skills in the four core areas of residential construction: masonry, carpentry, electricity, and plumbing. Students emphasize safety by earning the Occupational Safety and Health Administration (OSHA) 10 card as they build or repair residential structures, using a variety of materials and tools. Students will also learn current residential building codes associated with the trades.



Building Trades IIA and IIB

Building Trades II teaches students advanced skills in masonry, carpentry, electricity, and plumbing. The class prepares students to synthesize these valuable skills to build or repair residential structures, using a variety of materials and tools. Students will also learn current residential building codes associated with the trades.

Business and IT



College Credit Courses

Dual Enrollment Introduction to Business

A broad study of how businesses are started and operated successfully in a free market economy.

Dual Enrollment Principles of Supervision

Anticipated new course for next year. This course prepares students for leadership and supervisory roles in the workplace.



High School Credit Courses

Business Law

A study of the origin of the U.S. legal system, with particular emphasis on Virginia state law and how it pertains to teens.

Economics and Personal Finance

This core class helps students understand how to manage money and make wise financial decisions now and in the future.

Business and IT

High School Credit Courses in IT

Information Technology Fundamentals

Introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and IT certifications. Students investigate career opportunities and technologies in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development and Interactive Media. Students will evaluate the impact of IT on other career clusters. Students also explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability.

Computer Information Systems (CIS)

Students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies. Students will prepare for Microsoft Office Specialist (MOS) exam for PowerPoint to receive industry certification.

Business and IT

High School Credit Courses in IT

Advanced CIS

Students apply problem-solving skills to real-life situations through advanced integrated software applications, including printed, electronic, and Web publications. Students build upon basic knowledge in Microsoft Office programs (Word, Excel, PowerPoint and Access) learning advanced techniques and preparing for MOS testing. Students work individually and in groups to explore advanced computer maintenance activities, programming, networking, emerging technology, and employability skills. Students work in MOS Practice Software preparing for MOS Certifications.

Advanced Design & Multimedia

Students develop advanced skills in creating interactive media with the use of PowerPoint presentations, movie creation software, digital imaging software, web sites, and publications for print and electronic distribution. Students work with sophisticated hardware and software applying skills learned to real-world projects. Student oral presentations and group participation are essential in this class. Professionalism in all advanced projects is expected of each student and with using expensive cameras and equipment in classroom projects.

Engineering

Technical Drawing and Design

Focuses on the basics of design using CAD with intro to 3d printing.

Engineering Drawing and Design

Takes the student farther into design using more powerful CAD and more complex 3d printing.

Architectural/Civil Engineering

Focuses on design in Architecture and Civil Engineering with 3d printing.

Family & Consumer Sciences



Integrated Leadership

The student will learn valuable leadership skills and develop characteristics that will increase their confidence to plan and implement projects and activities that promote a positive climate.

Nutrition & Wellness

The study of nutrition and learning how to live so that all areas of your life are working together to live a happy, healthy and confident lifestyle.

Service Learning

This is an opportunity to work within our school division with teachers/specialist. The typical student will travel to our primary and elementary schools to be a role model and mentor to our youngest Mountaineers!

Health and Medical Sciences



In these courses we explore healthcare careers. We study the anatomy and physiology of the body systems and the pathophysiology of disease. We use simulations and scenarios to make the class realistic and fun!



Health and Medical Sciences

Nursing Assistant I and II

Nursing Assistant I and II are taken together in preparation for the Virginia State Board of Nursing Nurse Aide certification exam. These courses include 40 hours of clinical experience providing patient care.



Marketing

Marketing



Students learn how products are developed, branded, and sold to businesses and consumers. Students analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Topics include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace.

Students operate their own business through SWP: nextGEN Business Consulting, providing marketing services to local businesses and organizations.



**Thanks for your interest in
MCHS CTE! We look forward to
seeing your bright and smiling
faces in our classes this fall!**