Course Descriptions

CTE Electives

STEM 1: a foundational course in the STEM cluster for students interested in learning more about careers in science, technology, engineering and mathematics. This course covers basic skills required for STEM fields of study. Upon completion of this course, proficient students are able to identify and explain the steps in both the engineering design and the scientific inquiry processes. They conduct research to develop meaningful questions, define simple problem scenarios and scientific investigations, develop fundamental design solutions, conduct basic mathematical modeling and data analysis, and effectively communicate solutions and scientific explanations to others.

AG MECHANICS 1: an intermediate course introducing students to basic skills and knowledge in construction and land management for both rural and urban environments. This course covers topics including project management, basic engine and motor mechanics, land surveying, irrigation and drainage, agricultural structures, and basic metalworking techniques. Upon completion of this course, proficient students will be prepared for more advanced coursework in agricultural mechanics.

SMALL ANIMAL CARE: an intermediate course in animal science and care for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers the anatomy and physiological systems of different groups of small animals, as well as careers, leadership, and history of the industry. Upon completion of this course, proficient students will be prepared for more advanced coursework in veterinary and animal science.

HYDROPONICS: focus on essential knowledge and skills related to the science of plant growth. This course covers principles of plant health, growth, reproduction, and biotechnology, as well as fundamental principles of hydroponics and aquaponics. Upon completion of this course, proficient students will be prepared for more advanced coursework in horticulture science.

GREENHOUSE: an applied-knowledge course designed to prepare students to manage greenhouse operations. This course covers principles of greenhouse structures, plant health and growth, growing media, greenhouse crop selection and propagation, and management techniques. Upon completion of this course, proficient students will be equipped with the technical knowledge and skills needed to prepare for further education and careers in horticulture production. Greenhouse Management is a dual credit course with statewide articulation.

LANDSCAPE MANAGEMENT: an applied course designed to provide challenging academic standards and relevant technical knowledge and skills needed for further education and careers in landscape design, maintenance, and turf management. Content includes site analysis and planning, principles of design, and plant selection and care techniques. Upon completion of this course, proficient students will be prepared to pursue advanced study of landscaping and turf science at a postsecondary institution.

FLORAL DESIGN: is designed to identify and demonstrate the principles and techniques related to floral design as well as develop the skills needed to manage floral enterprises. This course covers the analysis of artistic floral styles, historical periods, and diverse cultures. Upon completion of this course, proficient students will be equipped with the technical knowledge and skills needed to prepare for further education and careers in floral design.

CONSTRUCTION CORE: a foundational course in the Architecture & Construction cluster covering essential knowledge, skills, and concepts required for careers in construction. Upon completion of this course, proficient students will be able to describe various construction fields and outline the steps necessary to advance in specific construction careers. Students will be able to employ tools safely and interpret construction drawings to complete projects demonstrating proper measurement and application of mathematical concepts. Standards in this course also include an overview of the construction industry and an introduction to building systems and materials. Students will begin compiling artifacts for inclusion in their portfolios, which they will carry with them throughout the full sequence of courses in their selected program of study. Required course to continue in Construction courses.

STRUCTURAL SYSTEMS 1: prepares students for careers in residential and commercial carpentry. Upon completion of this course, proficient students will be able to demonstrate knowledge and skill in framing buildings. Students will be able to frame floors, walls, ceilings, roofs, and stairs while safely employing tools and interpreting construction drawings to complete projects. Emphasis is placed on demonstrating proper measurement and application of mathematical concepts. Standards in this course also include principles of the construction industry and business and project management. Students will continue compiling artifacts for inclusion in their portfolios, which they will carry with them throughout the full sequence of courses in this program of study.

MEPS 1: prepares students for electrical, plumbing, and HVAC careers by introducing students to the physical principles of these systems and the fundamental skills needed to work with them. Upon completion of this course, proficient students will be able to follow safety procedures and use tools to perform basic operations with electrical circuits, as well as demonstrate understanding in fundamental concepts of electricity theory (i.e. Ohm’s Law). Students will be able to apply proper tools and procedures to perform basic operations with plastic piping, including measuring, cutting, and joining pipe. Furthermore, students will be able to apply mathematics concepts to solve HVAC, electrical, and plumbing problems. Standards in this course also include principles of the construction industry and business and project management. Students will continue compiling artifacts for inclusion in their portfolios, which they will carry with them throughout the full sequence of courses in this program of study.

BUSINESS MANAGEMENT 1 & 2: focuses on the development of the planning, organizing, leading, and controlling functions required for the production and delivery of goods and services. This applied knowledge course addresses the management role of utilizing the businesses' resources of employees, equipment, and capital to achieve an organization's goals. Students will participate in a continuing project throughout the course in which, individually or in teams, they will present recommendations to improve an existing business. Local business partnerships are encouraged to provide resources for faculty and students.

MAINTENANCE AND REPAIR 1: prepares students for entry into the automotive service industry with an ASE Student Certification. Students study and service automotive HVAC systems, engine performance systems, automatic and manual transmission/transaxle systems, and practice workplace soft skills. Upon completion of this program of study, students will be equipped with the knowledge and skills to be a successful automotive service technician, have satisfied course requirements to meet the National Automotive Technicians Education Foundation (NATEF) standards, and be prepared to pursue further study at a Tennessee College of Applied Technology or other postsecondary institution.

CULINARY 1: equips students with the foundational knowledge and skills to pursue careers in the culinary field as competent entry-level quick service and fast-food employees. Throughout the course, students will gain experience in commercial food production and service operations, while preparing for further training in the culinary arts program of study at the secondary and postsecondary levels. Upon completion of this course, proficient students will know the components of commercial kitchen safety and sanitation, history of the foodservice industry, hospitality careers, nutritional concepts, recipe basics, proper kitchen tools and equipment, and kitchen staples. Students will create artifacts to include in a portfolio that they will maintain throughout the course sequence. In addition to implementing the following standards, the course should include a suggested 30 hours in a commercial kitchen laboratory

CRIMINAL JUSTICE 1: the first course in Criminal Justice and Correction Services program of study. It serves as a comprehensive survey of how the law enforcement, legal, and correctional systems interact with each other in the United States. Upon completion of this course, proficient students will understand the context of local, state, and federal laws, the concepts of crime control and the judicial process, and the importance of communications and professionalism in law enforcement.

HEALTH SCIENCE 1: an introductory course designed to prepare students to pursue careers in the fields of public health, therapeutics, health services administration, diagnostics, and support services. Upon completion of this course, a proficient student will be able to identify careers in these fields, compare and contrast the features of healthcare systems, explain the legal and ethical ramifications of the healthcare setting, and begin to perform foundational health care skills. This course will serve as a strong foundation for all of the Health Science programs of study as well as the Health Services Administration program of study.

REHAB THERAPY: an applied course designed to prepare students to pursue careers in rehabilitation services. Upon completion of this course, a proficient student will be able to identify careers in rehabilitation services, recognize diseases, disorders or injuries related to rehabilitation services and correlate the related anatomy and physiology then develop a plan of treatment with appropriate modalities.

Fine Arts

MARCHING BAND: help students develop techniques for playing brass, woodwind, and percussion instruments and their ability to perform a variety of concert band literature styles. These courses may emphasize rehearsal and performance experiences in a range of styles (e.g., concert, marching, orchestral, and modern) and also include experiences in creating and responding to music.

CONCERT BAND: designed to promote students' technique for playing brass, woodwind, and percussion instruments and cover a variety of band literature styles, primarily for concert performances and also include experiences in creating and responding to music.

VOCAL MUSIC: provide students with an understanding of music and its importance in their lives. Course content focuses on how various styles of music apply musical elements to create an expressive or aesthetic impact. Students also have the ability for informal music performance and creation within the classroom. Instruction may include music theory, music history, and other studies in music.

INTRO TO THEATER: provide an overview of the art, conventions, and history of the theater arts. Although the courses sometimes include experiential exercises, they emphasize learning about theater processes rather than theatrical production and performance. Course topics include one or more of the following: basic techniques in acting, major developments in dramatic literature, major playwrights, the evolution of theater as a cultural tradition, and critical appreciation of the art and craft of the theater profession.

DRAMA 1: students experience and develop skill in one or more aspects of theatrical production. Introductory courses provide an overview of theatrical elements including acting, set design, stage management, directing, playwriting, and production. Advanced courses concentrate on extending and refining dramatic technique, expanding students' exposure to different types of theatrical styles, genres, and traditions, and increasing their participation in public productions.

VISUAL ARTS:: Comprehensive courses enable students to explore one or several art forms (e.g., drawing, painting, two- and three-dimensional design, and sculpture) and to create individual works of art. Initial courses emphasize observations, interpretation of the visual environment, visual communication, imagination, and symbolism. Courses cover the language, materials, media, and processes of a particular art form and the design elements used. Advanced courses encourage students to refine their skills while also developing their own artistic styles following and breaking from traditional conventions. Courses may also include the study of major artists, art movements, and styles.

SKINNY OFFERINGS:

BOOK CLUB: discuss books students have all read, fostering a community around shared literary experiences and providing a space for thoughtful discussion and engagement with literature.

ADVANCED BAND: offers students the opportunity to extend beyond the beginning levels of instrumental performance.

EQUINE SCIENCE: designed to introduce students to the history and domestication, scientific principles of breeding and husbandry of horses, including the production, care, and management of horses. Upon completion of this course, proficient students will be equipped with the technical knowledge and skills needed to prepare for further education and careers in the equine industry.

NATURAL RESOURCE MANAGEMENT: an applied course for students interested in learning more about becoming good stewards of our environment and natural resources. This course covers major types of natural resources and their management, public policy, and the role of public education in managing resources, as well as careers, leadership, and history of the industry. Upon completion of this course, proficient students will be prepared for further study and careers as an environmental scientist, conservationist, forester, or wildlife manager

CREATIVE WRITING: involves using language imaginatively and artistically to craft original works like stories, poems, plays, and screenplays, focusing on narrative, character development, and emotional impact, rather than adhering to strict rules of factual or academic writing.

MODERN HISTORY: traces the history of the United States from the beginning of the 20th Century to the present.

APPALACHIAN HISTORY THROUGH TECHNOLOGY: explores the region's cultural traditions, history, ecology, and other facets from a cross-disciplinary perspective, aiming to provide a nuanced perspective and dispel common myths and stereotypes, often while encouraging critical thinking with the use of technology.

HISTORY THROUGH HOLLYWOOD: analyzes how popular films depict and shape our understanding of historical events, examining their accuracy, influence, and role as cultural artifacts.

GENRE LITERATURE: explores different literary types (e.g., fiction, poetry, drama), analyzing their characteristics, conventions, and impact, while also encouraging students to engage with the writing process through original work.

SOCIOLOGY: explores social life, human behavior, and social structures, examining how individuals interact and are shaped by society, including topics like social inequality, culture, and social change.