

COMMUNITY HIGH SCHOOL



2019-2020
Course Catalog

Tennessee Graduation Requirements

TOTAL CREDITS REQUIRED: 22

ENGLISH: 4 Credits

MATH: 4 Credits

Including Algebra I, Algebra II, Geometry, and a fourth higher level math course

SCIENCE: 3 Credits

Including Biology I, Chemistry or Physics, and a third lab course

SOCIAL STUDIES: 3 Credits

Including World History and Geography, US History, US Government, and Economics

PHYSICAL EDUCATION AND WELLNESS: 1.5 Credits

Including Lifetime Wellness

PERSONAL FINANCE: .5 Credits

FOREIGN LANGUAGE: 2 Credits

FINE ARTS: 1 Credit

May be waived for students not going to a University to expand and enhance the elective focus

ELECTIVE FOCUS: 3 Credits

Fine Arts, Math & Science, Humanities, Physical Fitness & Safety, Business Management & Administration, Agriculture, Human Services, and STEM

COMMUNITY HIGH SCHOOL
Elective Focus Areas

Fine Arts--3 **additional** credits to the one required

Theater Arts I, II, III, IV
Visual Arts I, II, III, IV
Instrumental Music I, II, III, IV
Vocal Music I, II, III, IV
Music Appreciation
Music History
Theory & Harmony
Chamber Winds

Math & Science—3 **additional** credits to those required

Biology II
Anatomy & Physiology
Physics
Agriscience
Calculus
Math or science courses available through distance learning and/or Motlow dual enrollment opportunities

Humanities—3 **additional** credits to those required

Journalism (multiple credits)
Creative Writing
Speech
Select courses through online and/or Motlow dual enrollment (e.g., Foreign Language, Ancient History, Psychology, and Sociology)

Physical Fitness & Safety—3 **additional** credits to those required

Physical Education (multiple credits)
Advanced Strength & Conditioning (multiple credits)
Driver's Education (1/2 credit)
First Aid & Safety (1/2 credit)
Sports Nutrition (1/2 credit)
CrossFit (multiple credits)

Plans are being refined to offer distance learning opportunities in additional courses to the Community High School curriculum

During the 11th & 12th grade years, dual enrollment opportunities may be available through Motlow State Community College or Tennessee College of Applied Technology (any other should be approved by administration prior to enrolling)

Career Technical Education (CTE) Areas

Business Management & Administration--3 credits

Introduction to Business and Marketing/ Computer Applications
Accounting I
Business Management
Business Entrepreneurship
Work Based Learning

Agriculture, Food, and Natural Resources—3 credits (some courses alternating years)

Agriscience
Applied Environmental Science
Plant & Soil Sciences
Small Animal Science
Large Animal Science
Veterinary Science
Work Based Learning

Human Services—3 credits (some courses alternating years)

Introduction to Human Studies	Found of Fashion Design
Nutrition Across the Lifespan	Fashion Design I
Nutrition Science and Diet Therapy	Advanced Fashion Design
Human Services Practicum	
Work Based Learning	

STEM (Science, Technology, Engineering, and Math)—3 credits

STEM I
STEM II
STEM III
STEM IV
Work Based Learning

During the 11th & 12th grade years, dual enrollment opportunities may be available through the Tennessee College of Applied Technology—Shelbyville

Course Descriptions

English

English I—A study of grammar, writing, and literature according to the state-mandated guidelines. Grammar and writing will include usage of basic parts of speech and correct punctuation used correctly in sentences, then effectively in paragraphs and passages. Literature will include studies of short stories, novels, poetry, essays, and plays. Authors studied included Edgar Allan Poe, William Shakespeare, Homer, and others. In addition to daily assignments, there will be book reports, a research paper, some memory work, and special projects assigned. (A TN Ready test is associated with this class.)

English I Honors—This class includes all of the above with a stronger concentration on writing and research. Also there will be more outside reading to cover several of the novels on the required reading list. (A TN Ready test is associated with this class.)

English II—This class includes a study of grammar, literature, and writing according to the state-mandated guidelines. Grammar includes effective usage and writing skills. Literature includes the study of short stories, poetry, essays, novels, and plays. There will be some special projects and occasional memory work. (A TN Ready test is associated with this class.)

English II Honors—This class includes all of the components of English II with more extensive study and projects. (A TN Ready test is associated with this class.)

English III—This class focuses extensively on grammar, vocabulary, writing, and early American literature. A term paper/Power Point presentation is part of the first semester curriculum. (A TN Ready test is associated with this class.)

English III Honors—This course involves intensive training in grammar, writing, vocabulary, and early American literature. The works of Edgar Allan Poe, Arthur Miller, Ambrose Bierce and others are studied with an eye toward a deep understanding of their impact on early American culture and their importance in today's society. (A TN Ready test is associated with this class.)

English IV—This course prepares students for life after high school. This is accomplished via a study of British literature and composition in which discussions and analysis include the relation between classic authors and the modern era. Students will read and analyze works of world literature from a variety of authors and genres, contrasting literary forms, techniques, and themes to the major issues of the historical era. Emphasis in the writing process is on the essay, research paper, analysis of literary themes, and creative expression. This course will reinforce spelling, mechanics, and grammar as the student advances in the writing process and the processes of creative, critical thinking.

English IV Honors—In addition to English IV coursework, this course provides extensive opportunities for problem solving experiences and critical thinking through imagination, critical analysis, and application.

English IV Honors Dual Enrollment—This is a set of college courses (ENGL 1010 and 1020) offered by Motlow State Community College on the Community High School campus that can be taken to fulfill the senior English IV requirement while also getting two college credits (**both semesters must be taken to satisfy one credit of high school senior English**). The first half of the course focuses on essay writing using a variety of expository patterns and emphasizes critical reading and discussion of selected essays, logical thinking, and an introduction to incorporation and documentation of material from primary sources. The second half of the course emphasizes critical thinking, argumentative essay writing, discussion of selected fiction, poetry, and drama, in-depth extended research, and literary criticism to include incorporation and documentation of material from primary and secondary sources. **There is a cost associated with this course (book cost). Students must have subscores of at least an 18 in English and a 19 Reading on the ACT to qualify to take this course.**

Creative Writing—This course is designed to give students an opportunity to pursue special studies in aspects of creative writing not otherwise offered. Students will write persuasive, expository, descriptive, and narrative prose; various poetic forms; and drama.

Journalism—Introduces students to various facets of the journalist’s craft including reporting, writing, designing, graphics, photography, advertising, marketing, and time management. Students gain these skills by producing and selling a yearbook for student body.

Speech—This course is designed for those students desiring to develop skills in public speaking and to become more proficient speakers. It includes a study of organizing, researching, and developing speeches to be presented in class.

Foreign Language

Spanish I—Students will attain proficiency in the four skills of listening, speaking, reading, and writing. They will be introduced to cultural and grammatical concepts that make learning a language a meaningful activity.

Spanish II—Students will be required to use more Spanish, and much of the classroom instruction will be in Spanish. Students will continue to attain proficiency in the four skills of listening, speaking, reading, and writing.

Math

Algebra I—This course is the foundation for high school mathematics courses. It is the bridge from the concrete to the abstract study of mathematics. Topics include simplifying expressions, evaluating and solving equations and inequalities, and graphing linear and quadratic functions and relations. Real world applications are presented within the course content and a function’s approach is emphasized. (A TN Ready test is associated with this class.)

Algebra I Honors—In addition to the topics included in regular Algebra I, the honors class covers more in depth study and extensive projects. (A TN Ready test is associated with this class.)

Geometry—This course develops a structured mathematical system employing both deductive and inductive reasoning. It includes plane, spatial, coordinate, and transformational geometry. Algebraic methods are used to solve problems involving geometric principles. (A TN Ready test is associated with this class.)

Geometry Honors—In addition to the topics included in regular Geometry, the honors class covers more in depth study and extensive projects. (A TN Ready test is associated with this class.)

Algebra II—This course extends the topics first seen in Algebra I and provides advanced skills in algebraic operations. Additionally, linear and quadratic functions and relations, conic sections, exponential and logarithmic functions, and graphing will be explored. (A TN Ready test is associated with this class.)

Algebra II Honors—In addition to the topics included in regular Algebra II, the student may expect more in depth study and extensive projects. (A TN Ready test is associated with this class.)

Bridge Math—This course is a summary of Algebra I, II, and Geometry. It is intended for those students that make less than a 19 in Math on the ACT or for those who are not ready to move on from Algebra II and learn new material in Pre-Calculus. This course helps prepare students for college level mathematics courses by reviewing previous concepts with a new approach.

Bridge Math-SAILS—This course covers the same material as the regular Bridge Math course but in an online/computer-based format. The pacing is more independent to the individual student taking the course. This option is intended for the self-motivated student.

Dual Credit Pre-Calculus Honors—This course extends and integrates concepts from Algebra and Geometry. It includes a study of polynomial, rational, exponential, logarithmic and trigonometric functions, inverse and second-degree relations and their graphs. Other topics include complex numbers, polar coordinates, vectors, sequences and series. There is a statewide test associated with this course that must be passed in order to receive dual credit for college.

Calculus Honors—This course includes differential and integral calculus with applications of previous math courses. The intent is preparation for college. Topics include: limits of a function, continuity, maxima and minima, area, volume, and other applications.

Science

Physical Science—This course explores the relationship between matter and energy. Students should learn Physical Science through the process of inquiry. Hands-on laboratory investigations, individual studies, and group activities should constitute a major portion of the learning experience. Using available technology, students will investigate forces and motion, the chemical and physical properties of matter, the ways in which matter and energy interact within the natural world, and the forms and properties of energy. Conservation of matter and energy is an underlying theme throughout the entire course. Physical Science provides the knowledge, prerequisite skills, and habits of mind needed for problem solving and ethical decision-making about matters of scientific and technological concern. Physical Science offers a basic foundation for advanced studies in Chemistry and Physics.

Physical Science Honors—Students in this section complete additional projects, readings, and laboratory activities.

Biology—This course introduces students to the world of living things, including basic life processes at the molecular, cellular, systemic, organismal, and ecological levels of organizations within the biosphere; interdependence and interactions within the environment to include relationships, behavior, and population dynamics; cultural and historical scientific contributions of men and women; evidence that supports biological evolution; and current and future technologies. Students will investigate the world around them and will develop the knowledge, prerequisite skills, and habits of mind needed for daily living and ethical decision making on issues including biotechnology and the environment, as well as provide a background for advanced biological students and personal career choices. (An End of Course test is associated with this class.)

Biology Honors—In addition to the above description, students will have more in-depth study, projects, labs, and student presentations. (An End of Course test is associated with this class.)

Chemistry—An introductory study of the composition and properties of matter. Topics such as atomic structure, electron structure, chemical compositions, equations and quantitative relationships are studied. The course approaches these topics through classroom discussion, research and reporting techniques, and laboratory experiments. (An End of Course test is associated with this class.)

Chemistry Honors—In addition to the description above, this course requires additional out of class research. (An End of Course test is associated with this class.)

Biology II Honors—This course is designed to reinforce the concepts of Biology I to the student who will eventually enter college. Basic biological principles and concepts are reviewed with more in depth facts being introduced.

Anatomy & Physiology—This course is an overview of the body structures and systems and how they function.

Physics Honors—A study of matter and energy and their relationship to each other. A broad introduction to motion, electricity, optics, graphing and analyzing data, forces, work, power, fluids, nuclear energy, sound and light, mirrors and lenses, heat, kinetic and potential energy. The student should have a working knowledge of solving formulas algebraically and the use of law of cosines. (Suggested pre-requisite is Algebra II and at least a “B” average and preferably Advanced Algebra.)

Agriscience—This course content includes ecology, biological processes, sexual and asexual reproduction and a study of the chemical and physical laws that govern life processes. This course helps students understand the important role agricultural science serves as industry moves into the 21st century.

Social Studies

World History and Geography—In this course, students study people, places, and environments at local, regional, national, and international levels from the spatial and ecological perspectives of geography, as well as the history of humankind with a more concentrated focus from 1750 to present day.

World History and Geography Honors—In addition to the above description, students will do a more in-depth analysis of concepts, as well as projects and presentation.

U.S. History and Geography—A comprehensive study of the United States from Reconstruction to the present. (An End of Course test is associated with this class.)

U.S. History Honors Dual Enrollment—This is a set of college courses (HIST 2010 and 2020) that are offered by Motlow State Community College on the Community High School campus that can be taken to fulfill the U.S. History requirement (**both semesters must be taken to satisfy one credit of high school U.S. History**). The first half of the course covers the history of the United States from the beginning of English settlement in North America through the Revolution, early national period, disruption of the Union, Civil War and Reconstruction periods. This course ends with the events of 1876. The second half of the course traces the political, economic, diplomatic, and social development of the United States from the Reconstruction period to the present. Attention is given to contemporary problems and the place of the United States as a world power. **There is a cost associated with this course (book cost). Students must have at least a 3.00 GPA and counselor/principal recommendation to qualify to take this course.** (NO End of Course test is associated with this class.)

U.S. Government—A comprehensive study of national, state, and local government, with an additional focus on law, economics, and contemporary issues. (1/2 credit, one semester)

Economics—The study of how people, businesses, and governments use resources in the day-to-day function of society. (1/2 credit, one semester)

Personal Finance

Personal Finance—A course designed to inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics include income, money management, spending and credit, as well as saving and investing. (1/2 credit, one semester)

Psychology

Introduction to Psychology—Motlow Dual Enrollment—PSCY 1030—3 cr. hrs. This is an introductory survey course focused on the scientific study of behavior and mental processes. Topics include the history of psychology, critical thinking and research methods in psychology, the biological and psychological bases of consciousness, sensation perception, memory, learning, cognition, development across the lifespan, motivation, emotion, sexuality, stress and health, social psychology, personality, psychological disorders, and psychological therapies. (1/2 credit)

Lifetime Wellness

Lifetime Wellness A—This course helps students gain an understanding of the principles of health and the functioning of the human body, as well as to gain an appreciation for the types of activities that promote a healthy lifestyle. Activities in the classroom and gymnasium incorporate emotional, social, intellectual, and physical dimensions of the individual. Topics include physical fitness, nutrition, emotional health, and mental health. (1/2 credit, one semester)

Lifetime Wellness B—This course focuses on the same dimensions of an individual as Lifetime Wellness “A”. Topics include body systems, healthy interpersonal relationships, and first aid & CPR. (1/2 credit, one semester).

Physical Fitness & Safety

(some courses may not be offered every year)

Physical Education—The intent of this course is to create a lifelong appreciation for physical activity by incorporating various strength and conditioning activities designed for all grade levels (9-12) including stretching, weightlifting, power lifting, and cardio. (1/2 or full credit available)

Driver’s Education—This course is designed to offer instruction of the Tennessee Driver’s Manual and hands-on-driving experience. Approximately six weeks is devoted to classroom instruction. After classroom instruction, students are required to drive a minimum of five class periods. The car is specially equipped with a brake and steering wheel on the passenger side of the car. A driver’s permit is not required to participate. (1/2 credit, one semester; a nominal fee is assessed)

First Aid & Safety—Introduces various safety and life saving skills in an emergency situation. Recognizing these situations while building confidence through techniques such as CPR, bandaging, medical emergency, common injuries, and choking victims. (1/2 credit, one semester)

Sports Nutrition—Sports Nutrition is the study of nutrition and diet as it relates to an athlete and their athletic performance. Different types and quantities of fluid and food taken in by an athlete are discussed. This class also deals with nutritional needs of vitamins, minerals, carbohydrates, proteins, fats, and supplements for participation in a variety of athletic activities. (1/2 credit, one semester)

CrossFit—This course is a strength and conditioning program with the aim of improving, among other things, muscular strength, cardio-respiratory endurance, and flexibility. It incorporates a varied mix of aerobic exercise, gymnastics (body weight exercises), and Olympic weight lifting. (1/2 or full credit available)

Advanced Strength & Conditioning—Basketball athletes and managers may take this course for multiple credits.

Fine Arts

(some courses may not be offered every year)

Visual Art I—A core introduction course that covers the elements and principles of art through drawing, color theory, painting, clay, and sculpture. Students work in pencils, color pencils, charcoal, pastel, tempera, watercolor, paper, clay, and wire. Students expand creativity, knowledge, discipline through the making of art, observation, discussion, research and critiquing of various works including their own. (1 credit)

Visual Art II/III/IV—An intermediate course designed to build on the core elements of Visual Art I. A higher level of artistic expression and craftsmanship is expected. More advanced methods with all mediums are explored. Still life, landscape, portraiture, paper mache', pen and ink, markers, paper art, and 3-D art will be further explored. Students expand and develop critical thinking skills, art theory as well as art from a historical perspective. Portfolios are developed for those students majoring in visual arts. (This class may be taken for multiple credits.)

Theater Arts I—The beginning course for drama specializes in fundamentals of acting, stagecraft, lighting, movement, make-up, and stage combat. Several modern era scripts are read and studied. A brief film project is incorporated. (1 credit)

Theater Arts II/III/IV—This course will include advanced acting assignments including monologue, duet, and directorial grades. (Theater Arts I is a highly recommended prerequisite. This class may be taken for multiple credits.)

Vocal Music I/II/III/IV—Choir is a non-auditioned ensemble that sings outstanding choral works of many styles, genres, and eras. Repertoire includes short and medium-length works. (No previous musical study is required. The course may be taken for multiple credits.)

Music Appreciation—A general introductory course designed to enhance listening enjoyment and ability. Emphasis is placed on the elements of music, the characteristic styles of major historical periods, and the lives and works of key composers within the Western musical traditions. The course includes in-class demonstrations and attendance at outside musical events. (No previous musical study is required.)

Music Theory— Music Theory is a one year course. Students acquire a basic understanding of the structure of tonal music through analysis of harmony and counterpoint. In addition to analyzing music, students will develop and strengthen sight-reading skills. Students are required to be able to read music before entering the course. (1 credit)

Instrumental Music I/II/III/IV—This course provides musical performance and study for students in grades 9–12. This plan allows for four years of instrumental music classes. Through the mediums of band, the course is designed to develop proficiency in musical performance, and understanding of the art of music, and an appreciation of the creative and intrinsic values of music that result in a life-long avocation. Prerequisite is satisfactory completion of a junior band program or special permission. (This course may be taken for multiple credits.)

Instrumental Chamber Music—This course is for preparation and performance of music for groups or individuals. Previous musical study is required. (This course may be taken multiple times for credit.)

Business Management & Administration

Introduction to Business and Marketing/Computer Applications— This course helps students prepare for the growing complexities of the business world by examining basic principles of business, marketing, and finance in addition to exploring key aspects of leadership, ethical and social responsibilities, and careers. Students' academic skills in communications, mathematics, and economics are reinforced with activities modeled in the context of business topics. This foundational course is also intended to teach students the computing fundamentals and concepts involved in the use of common software applications. (1 credit)

Accounting I— This course helps students develop skills to analyze business transactions, journalize, post, and prepare worksheets and financial statements, and apply financial analysis to business processes. Additionally, students receive exposure to the ethical considerations that accounting professionals must face and the standards of practice governing their work, such as the GAAP (generally accepted accounting procedures) standards. (1 credit; suggested prerequisite is Algebra I).

Business Management—This course 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. (1 credit)

Business & Entrepreneurship Practicum—This course is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous Business and Marketing courses within a simulated startup environment or authentic business setting. The course is structured to allow students the creativity to develop, launch, and market original business ideas. It is ideal for students who wish to pursue careers as future business owners or entrepreneurs. Practicum activities can take place around student-led startups under the supervision of the instructor, or in collaboration with a local business incubator. The standards in this course can also be used to promote student participation in a work-based learning (WBL) experience through an internship or other off-campus arrangement. (1 credit)

Work Based Learning: Career Practicum (WBL)—This is a capstone course intended to provide students with opportunities to apply the skills and knowledge learned in previous CTE and general education courses within a professional work environment. The course allows students to earn high school credit for select models of work-based learning, which allow students to interact with industry professionals in order to extend and deepen classroom work and support the development of postsecondary and career readiness knowledge and skills.

Human Services

(some courses are offered on alternating years)

Introduction to Human Services—This course is a foundational course for students interested in becoming a public advocate, social worker, dietician, nutritionist, counselor, or community volunteer. This course covers the history of counseling, career investigation, stress management, mental illness, communication, and the counseling process. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. (1 credit)

Nutrition Across the Lifespan—This course is for students interested in learning more about becoming a dietitian, nutritionist, counselor, or pursuing a variety of scientific, health, or culinary arts professions. This course covers human anatomy and physiological systems, nutrition requirements, as well as social, cultural, and other impacts on food preparation and integrity. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. (1 credit)

Nutrition Science and Diet Therapy—This course is an applied knowledge course in nutrition for students interested in the role of nutrition in health and disease. Upon completion of this course, proficient students will be able to develop a nutrition care plan as part of the overall health care process, use methods for analyzing the nutritional health of a community, and understand the relationship of diet and nutrition to specific diseases. The course places emphasis on the role of diet as a contributor to disease and its role in the prevention and treatment of disease. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study. (1 credit)

Foundations of Fashion Design introduces students to the rich history of the fashion industry and the basic design principles that are integral to its operation. This course studies the history of the fashion industry, elements and principles of design, textile history and composition, as well as basic construction principles. Upon completion of this course, proficient students will be able to demonstrate basic garment production and will create artifacts for inclusion in a portfolio, which will continue to build throughout the program of study. (1 credit)

Fashion Design is an applied-knowledge course intended to prepare students to pursue careers in the fashion industry. Building on the knowledge acquired in Foundations of Fashion Design, this course places special emphasis on apparel manufacturing and merchandising, marketing applications, and product and service management. In addition, students will explore trends in fashion design and engage with industry-specific technologies used to produce a variety of fabrics, garments, and accessories. Upon completion of this course, proficient students will have created an original fashion collection. (1 credit)

Advanced Fashion Design is the capstone course in the Fashion Design program of study. This course is designed to prepare students for further education and careers in the fashion industry. Through exposure to crucial business activities such as project management and product promotion, students will acquire advanced skills related to business professionalism, ethics, policies, and communication in the fashion industry. In addition, students complete a capstone project during the course and they will create artifacts to include in a professional portfolio. While not required, student internships can provide an alternative route for students to master required course standards. Students who have the opportunity to participate in internships may be responsible for the following tasks: assisting in client presentations, resource updating and vendor management, assisting designers, and participating with design teams. Upon completion of this course, proficient students will have artifacts of original fashion designs in a portfolio and will understand basic project management skills. (1 credit)

Human Services Practicum—This course is a capstone course in the human services cluster that provides a practicum experience for students as they develop an understanding of professional and ethical issues. The capstone course will be based on the knowledge and skills from previous courses in the human services cluster. Upon completion of the course, students will be proficient in components of communication, critical thinking, problem solving, information technology, ethical and legal responsibilities, leadership, and teamwork. Instruction may be delivered through school-based laboratory training or through work-based learning arrangements such as cooperative education, mentoring, and job shadowing. (1 credit)

Work Based Learning: Career Practicum (WBL)—This is a capstone course intended to provide students with opportunities to apply the skills and knowledge learned in previous CTE and general education courses within a professional work environment. The course allows students to earn high school credit for select models of work-based learning, which allow students to interact with industry professionals in order to extend and deepen classroom work and support the development of postsecondary and career readiness knowledge and skills.

Education

Introduction to Education—Motlow Dual Enrollment—EDUC 1010—3 cr. hrs. This course is a survey of education in America, including the history of education, the rewards and challenges of teaching, current trends and issues, philosophies of education, teaching in a diverse and global society, the use of technology in teaching and learning, and education reforms. Students are required to complete 10 hours of classroom observation in order to receive credit for the course. Students will need to obtain a background check. (1/2 credit)

Agriculture, Food, & Natural Resources
(some courses are offered on alternating years)

Agriscience—This course content includes ecology, biological processes, sexual and asexual reproduction and a study of the chemical and physical laws that govern life processes. This course helps students understand the important role agricultural science serves as industry moves into the 21st century. (In some cases, may satisfy a science credit.) (1 credit)

Applied Environmental Science—This course focuses on the knowledge, information, and skills related to the fundamental science and management of ecosystems as well as careers, leadership and history of the industry. This course covers principles of environmental impacts, energy consumption, and ecosystem management. (1 credit)

Plant & Soil Science—This is an applied-knowledge course focusing on the science and management of plants and soils with special attention given to current agricultural practices that support the healthy and sustainable cultivation of major crops. Students in this course will be exposed to a range of careers associated with the science and management of plants and soils and will develop the essential skills and knowledge to be successful in science- or agriculture-related occupations. (1 credit)

Small Animal Science—This course is an applied 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 anatomy and physiological systems of different groups of small animals, as well as careers, leadership, and history of the industry. (1 credit)

Large Animal Science—This course is an applied course in veterinary and animal science 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 anatomy and physiological systems of different groups of large animals, as well as careers, leadership, and history of the industry. (1 credit)

Veterinary Science—This course is an advanced 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 principles of health and disease, basic animal care and nursing, clinical and laboratory procedures, and additional industry-related career and leadership knowledge and skills. (Course is for elective credit only and does not count toward the Program of Study.) (1 credit)

Work Based Learning: Career Practicum (WBL)—This is a capstone course intended to provide students with opportunities to apply the skills and knowledge learned in previous CTE and general education courses within a professional work environment. The course allows students to earn high school credit for select models of work-based learning, which allow students to interact with industry professionals in order to extend and deepen classroom work and support the development of postsecondary and career readiness knowledge and skills.

STEM (Science, Technology, Engineering, and Math)

STEM I: Foundations—This course is 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. (1 credit)

STEM II: Applications—This course is a project-based learning experience for students who wish to further explore the dynamic range of STEM fields introduced in STEM I: Foundation. Building on the content and critical thinking frameworks of STEM I, this course asks students to apply the scientific inquiry and engineering design processes to a course-long project selected by the instructor with the help of student input. Instructors design a project in one of two broad pathways (traditional sciences or engineering) that reflects the interest of the class as a whole; the students then apply the steps of the scientific inquiry or the engineering design process throughout the course to ask questions, test hypotheses, model solutions, and communicate results. In some cases, instructors may be able to design hybrid projects that employ elements of both the scientific inquiry and the engineering design process. (1 credit)

STEM III: STEM in Context—This course is an applied course in the STEM career cluster which allows students to work in groups to solve a problem or answer a scientific question drawn from real-world scenarios within their schools or communities. This course builds on STEM I: Foundation and STEM II: Applications by applying scientific and engineering knowledge and skills to a team project. (1 credit)

STEM IV: Practicum—This course is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous STEM Education courses within a professional, working environment. In addition to developing an understanding of the professional and ethical issues encountered by STEM professionals in the workplace, students learn to refine their skills in problem solving, research, communication, data analysis, teamwork, and project management. The course is highly customizable to meet local system needs: instruction may be delivered through school laboratory training or through work-based learning arrangements such as internships, cooperative education, service learning, mentoring, and job shadowing. (1 credit)

Work Based Learning: Career Practicum (WBL)—This is a capstone course intended to provide students with opportunities to apply the skills and knowledge learned in previous CTE and general education courses within a professional work environment. The course allows students to earn high school credit for select models of work-based learning, which allow students to interact with industry professionals in order to extend and deepen classroom work and support the development of postsecondary and career readiness knowledge and skills.