2021-2022 RHEA COUNTY HIGH SCHOOL
COURSE DESCRIPTIONS

GENERAL EDUCATION COURSE LEVEL EXPLANATIONS:

Standard Courses: Standard level courses are designed to prepare the student for high school graduation and college level entry.

Honors Courses: Students will be offered honors classes upon review of test scores, teacher recommendations and administrative approval. Honors level courses are designed to challenge students with higher-level academic skills; students will complete more complex reading and writing activities.

Dual Enrollment (DE): Classes provide both high school and college credits through Chattanooga State Technical Community College and/or Bryan College. Students must meet and maintain the enrollment standards set by Chattanooga State/Bryan College to enroll in these courses. DE students must be 15 years of age, obtain a minimum score of 19 on the ACT or PLAN, have and maintain a minimum 3.0 grade point average. A grant is available each semester for juniors and seniors.

CTE Level Courses: Approved waivered students only. Completing CTE level courses will prepare students for entry into the work force, technical training, and/or a junior level college curriculum program.

CTE Articulation: Students who take appropriate vocational offerings may receive credit in post secondary education. This process is known as Articulation. The Articulation process saves students time and money as well as creating clear career training paths. Rhea County High School currently articulates with Chattanooga State in Welding, Transportation, and Health Sciences.

NCAA - Requirements for Division I College Athletes Division I and II College requirements are listed below and total sixteen core courses. You may also contact your head coach or guidance counselor. For additional information students/parents may visit the official website at: www.eligibilitycenter.org. To request a copy of your ACT to be sent to NCAA, use ACT test code # 99999.

- 4 years of English (Standard or Higher)
- 4 years of mathematics (Algebra I or higher)
- 2 years of natural/physical science (two must be lab sciences)
- 1 year of additional English, math or science
- 2 years of social studies
- 4 years of additional core courses (from any area listed above, or from foreign language, non-doctrinal religion or philosophy)

NAIA – playnaia.org Check with your college coach for which organization their college uses. The NCAA and NAIA are two separate clearinghouse organizations with two separate fee schedules.

ENGLISH

#000G01H09 English 9 Standard Block: Standard English will prepare you for college. It is appropriate for all students' post high school plans. 1 CREDIT

#001G01H09 English 9 Honors Block: Students will be placed in these courses subject to principal approval after reviewing previous test scores and grades. This course is designed to challenge students. Students will do more reading and writing. 1 CREDIT

#000G01H10 English 10 Standard Block: This class is a survey of different types of literature and a continuation of the writing skills begun in the freshmen class. 1 CREDIT

#001G01H10 English 10 Honors Block: Students will be registered for this class upon reviewing test scores, teacher recommendations and with administrative approval. This class is a survey of different types of literature and a continuation of the writing skills begun in the freshman class. This class will cover more material and involve more writing assignments. 1 CREDIT

#000G01H11 English 11 Standard Block: This class surveys American literature and reviews writing and grammar skills. 1 CREDIT

#001G01H11 English 11 Honors Block: Students will be registered for this class upon reviewing test scores, teacher recommendations and with administrative approval. This class is a survey of American literature with a review of writing and grammar skills. This class will cover material in a more in-depth fashion and involve more creative writing. 1 CREDIT

#000G01H13 English 12 Standard: This class is a survey of English literature with a review of writing and grammar skills. 1 CREDIT

#001G01H13 English 12 Honors: Students will be registered for this class upon reviewing test scores, teacher recommendations and with administrative approval. This class is a survey of English literature with a review of writing and grammar skills. This course will cover the material in a more in-depth fashion and will involve more writing assignments. 1 CREDIT

#002G01H13 Dual Enrollment English 12: This course provides both high school and college credit. Students must meet the enrollment requirements for Chattanooga State Technical Community College before enrolling in this course. College English credit includes; English Composition I & II. (6 hours) 1 CREDIT

MATH

#000G02H00 Algebra I Block Standard: This course contains the topics of a traditional algebra course such as the study of algebraic terminology and properties, linear functions, exponents and radicals, understanding polynomials, rational expressions, and quadratic functions. Students will earn elective credit only for Algebra 1-Extended Scheduling Part 1 in the fall. A full Math credit will be awarded with the Algebra 1 (Part 2) Course in the spring. Students must complete BOTH parts 1 and 2 in the same academic year. 2 CREDITS

#001G02H00 Algebra I Honors Block: Honors courses will exceed the content standards, learning expectations, and performance indicators of standard level classes. Honors courses encourage the interchange of ideas among students; the appropriate use of technology, independent study as well as self-directed research and learning. 2 CREDITS

#000G02H03 Algebra 1A: This course contains the topics of a traditional algebra course such as the study of algebraic terminology and properties, linear functions, exponents and radicals, understanding polynomials, rational expressions, and quadratic functions. Students with qualifying disabilities as documented in their IEP may take Algebra 1A. 1 CREDIT

#000G02H04 Algebra 1B: This course contains the topics of a traditional algebra course such as the study of algebraic terminology and properties, linear functions, exponents and radicals, understanding polynomials, rational expressions, and quadratic functions. Students with qualifying disabilities as documented in their IEP may take Algebra 1B. 1 CREDIT

#000G02H05 Algebra II Standard Block: This course continues the development in mathematical topics begun in Algebra I. This course introduces matrices and complex numbers. 1 CREDIT

#001G02H05 Algebra II Honors Block: Honors courses will exceed the content standards, learning expectations, and performance indicators of standard level classes. Honors courses encourage the interchange of ideas among students; the appropriate use of technology, independent study as well as self-directed research and learning. 1 CREDIT

#000G02H42 Applied Mathematical Concepts: Applications and modeling using mathematics are the primary foci of this course. This class will cover many other topics such as: Counting, Combinatorics, and Probability. Compound interest (comparing payments, interest rates, length of loan period, investments, etc.), Computing taxes, Computing paychecks, Comparing insurance plans, Annuities and other Financial Math concepts will be taught. The class will also cover Linear Programming. 1 CREDIT

#000G02H41 Bridge Math: Students who take the ACT their junior year and score less than a 19 in Math are required to take the Bridge Math course their senior year. Students learn mathematics best by being introduced to concepts that they have previously studied in a new approach. The concepts in this section appear in a manner that emphasizes their basic definition. This presentation of each concept is based upon the format that would be a "best practice" of introducing the particular concept. 1 CREDIT

#001G02H41 SAILS Math: This course is taught through Chattanooga State's SAILS **(Seamless Alignment and Integrated Learning Support)** program. In SAILS, in addition to earning their HS bridge math credit, these students can complete the college Learning Support Math program, eliminating their need for developmental math in college. Students may then register for a college-level math course upon entering college. 1 CREDIT

#000G02H11 Geometry Standard Block: This course includes an emphasis on two-and three-dimensional concepts. This course should increase attention to coordinate and transformation approaches, to the development of short sequences of theorems, to deductive arguments expressed orally and in sentence or paragraph form, and to real-world applications and modeling. 1 CREDIT

#**001G02H11 Geometry Honors Block:** Honors courses will exceed the content standards, learning expectations, and performance indicators of standard level classes. Honors courses will encourage interchange of ideas among students: independent study, self-directed research and learning, and appropriate use of technology. 1 CREDIT

#000G02H14 Geometry A: This course includes an emphasis on two-and three-dimensional concepts. This course should increase attention to coordinate and transformation approaches, to the development of short sequences of theorems, to deductive arguments expressed orally and in sentence or paragraph form, and to real-world applications and modeling. Students with qualifying disabilities as documented in their IEP may take Geometry A. 1 CREDIT

#000G02H15 Geometry B: This course includes an emphasis on two-and three-dimensional concepts. This course should increase attention to coordinate and transformation approaches, to the development of short sequences of theorems, to deductive arguments expressed orally and in sentence or paragraph form, and to real-world applications and modeling. Students with qualifying disabilities as documented in their IEP may take Geometry B. 1 CREDIT

#002G02H23 Pre-Calculus Dual Enrollment (ECHO): Students must enroll in Chattanooga State Community College and meet all their requirements for enrollment. Semester I (Math 1710) will cover equations and inequalities, functions and graphs, liner and quadratic functions, equation systems, polynomial and rational functions, and logarithmic and exponential systems (3 college credits). Semester II (Math 1910) will cover limits derivatives and integrals of algebraic trigonometric exponential and logarithmic functions their graphs and applications. This course is taught through ECHO (Early College Hybrid Online), and facilitated by RCHS faculty (4 college credits). 1 CREDIT

#000G02H23 Pre-Calculus: This course will cover numbers and quantity as detailed in the Tennessee State Standards. It will cover Advanced Algebra, Advanced Geometry, Statistics, and Probability. Building functions, interpreting functions as well as building and graphing Trigonometry Functions will be covered in this class also. 1 CREDIT

#000G02H37 Statistics: This course will cover exploring data, probability, probability distributions, sampling, and experimentation according to the Tennessee State Mathematics Standards. 1 CREDIT

#002G0H49 Statistics Dual Enrollment: Students must enroll in Chattanooga State Community College and meet all their requirements for enrollment. Semester I (Math 1510) will cover sampling, data organization, variability and central tendency; probability distributions, hypothesis testing, and confidence intervals (3 college credits). Semester II (Math 1520) will cover hypothesis testing, confidence intervals, independence of two variables, simple analysis of variance, analysis of regression, and intro to non-parametric statistics. This course is taught through ECHO (Early College Hybrid Online), and facilitated by RCHS faculty (3 college credits). 1 CREDIT

SCIENCE

#000G03H03 Biology I Standard Block: The course is an introductory study of life and using the simplest examples from the plant and animal kingdoms. Laboratory exercise, the dissection of several plants and animals are included. Topics covered are microbiology, cell structure, ecology, genetics, and the origin of life. 1 CREDIT

#001G03H03 Biology I Honors Block: Students will be offered honors classes upon reviewing test scores, teacher recommendations and subject to administrative approval. It is designed for the academically advanced student. The course is an exploration of the study of life, which studies all five life kingdoms (monera, protista, fungi, animalia, and plantae). Independent study, laboratory exercises, and the dissection of plants and animals are included. Topics covered are microbiology, cellular respiration, photosynthesis, cell structure, ecology, genetics, and the origin of life. 1 CREDIT

#000G03H09 Biology II: Biology II is an advanced lab course for the student who is pursuing a career in medical science or for the student who just enjoys biology. Course work includes in-depth labs, independent study, project work, use of computers, and library research. The human body systems are explored in depth in conjunction with the appropriate dissections of the eye, brain, heart of the frog and sometimes the cat. 1 CREDIT

#000G03H12 Chemistry I Standard Block: Chemistry is the study of the structure of matter. The course will cover atomic structure, the periodic law, chemical bonding, chemical equations, chemical solutions, acids and bases. Laboratory work is used to demonstrate textbook processes and principles. This course will fulfill one of the three science credits required for graduation. Students taking this course should have successfully completed a high school level course in algebra and will be expected to use mathematical concepts and skills. 1 CREDIT

#001G03H12 Chemistry I Honors Block: Honors courses will exceed the content standards, learning expectations, and performance indicators of standard level classes. Honors courses will encourage interchange of ideas among students: independent study, self-directed research and learning, and appropriate use of technology. Chemistry is the study of the structure of matter. The course will cover atomic structure, the periodic law, chemical bonding, chemical equations, chemical solutions, acids and bases. Laboratory work is used to demonstrate textbook processes and principles. This course will fulfill one of the three science credits required for graduation. Students taking this course should have successfully completed a high school level course in algebra and will be expected to use mathematical concepts and skills. 1 CREDIT

#000G03H15 Chemistry II: Chemistry II is a laboratory science course that builds on topics introduced in Chemistry I. This course investigates chemical bonding and how the kinetic molecular theory and intermolecular theory forces explain the physical and chemical characteristics of matter. Additional aspects of chemical reactions including limiting reactants, percent yield, equilibrium, reaction rates, and thermo-chemistry are considered. Students explore chemistry concepts through an inquiry-based approach such as Structure of Matter, States of Matter, and Reactions. Chemistry I and Algebra II are prerequisites. 1 CREDIT

#000G03H02 Ideas and Issues in Science: This course will use a historical approach to introduce student to the process of critically thinking through new advances and theories that have occurred over the last 1,000 years in science. The students will study historical development in science and technology, perform research, create models, do experimental test and interpret data, and write laboratory reports and position papers on related topics. Students will use the engineering model to design, test, evaluate, modify, and retest constructed devices and structures for improved design and materials. 1 CREDIT

#000G03H20 Physics: Physics is a laboratory science course that examines the relationship between matter and energy and how they interact. This course will have a strong emphasis in the mathematics of physics. Students explore physics concepts such as Mechanics, Thermodynamics, Waves and Sound, Light and Optics, Electricity and Magnetism and Atomic & Nuclear Science. Students must have completed Algebra II. 1 CREDIT

#000G03H00 Physical Science Block: This course is taken by freshmen and will fulfill one of the three science credit requirements for graduation. Students will study the basic physical process of the natural world with emphasis on the application of these processes to everyday life. This course includes the study of measurements, simple machines, the laws of motion, the different forms of energy, basic chemical principles, and simple nuclear processes. 1 CREDIT

#001G03H00 Physical Science Block Honors: Same as physical science, but this class moves at a faster pace and covers topics in a more in-depth manner. Students will only be registered for this course with principal approval after previous test scores and grades have been reviewed. 1 CREDIT

SOCIAL STUDIES

#000G04H11 United States History Block: The study of American history, like history itself, is an ever-evolving process. Students will explore the evolution of American life starting with the study of the Native Americans and continuing through the twentieth century. Their journey will enable them to appreciate the importance of cultural diversity, geography, values, economics, global reactions, and technology in the shaping of America's past, present, and future. 1 CREDIT

#001G04H11 United States History Block Honors: Students will be registered for this class upon reviewing test scores, teacher recommendations and administrative approval. This course deals with U. S. history on a higher level than standard U.S. History. It covers the same materials, but this course goes into more depth and detail. 1 CREDIT

#000G04H13 Economics: This course provides students with an understanding of the legal framework in which American business functions. The students will evaluate the influence of the free enterprise system in a democratic society on daily decisions. Students will analyze the alliance between capitalism and democracy and be better prepared to influence the future decisions in the public and private sectors of the United States of America. ½ CREDIT

#000G04H12 U.S. Government: This course focuses on the United States' founding principles and beliefs. Students will study the structure, functions, and powers of government at the national, state and local levels. Instruction will include essential content and the integration of social studies standards and knowledge as applied to the U.S. Government. ½ CREDIT

#000G04H10 World History: World History is a comprehensive study of world events that occurred between 1789 and the present. Students will be introduced to the French Revolution, the Industrial Revolution, the Age of Imperialism, the world wars, and transitional societies through the use of a variety of instructional strategies. 1 CREDIT

#000G04H36 Personal Finance: This class is designed to inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending credit, as well as saving and investing. ½ CREDIT

FINE ARTS

 # 000G05H08 Art I: Art I is a foundations class for students interested in developing art skills and understanding various art forms and techniques. 1 CREDIT

#000G05H09 Art II: Art I is a pre-requisite. This class concentrates on developing skills in drawing, painting, printmaking and sculpture. Portfolio-building for college, competition and employment is emphasized. 1 CREDIT

#000G05H10 Art III: This course offers students an opportunity to build on skills developed in previous Art I & II classes. Personal styles as well as styles and trends in art history are explored. Students participate in exhibits and competitions in school and in the community. 1 CREDIT

#000G05H38 Band Percussion: This class is a fall semester class for band percussion students only. 1 CREDIT

#000G05H40 Chorus: This is a yearlong course for freshmen, sophomore, junior, and senior students interested in furthering their singing abilities. Students will sing, alone and with others, while improvising melodies, variations, and accompaniments. Students will read and notate music, and also evaluate music and music performances. 1 CREDIT

#000G05H36 Concert Band: This is a yearlong course for freshmen, sophomore and junior students interested in furthering their musical abilities by providing music for school, civic, and service-related activities. Band students participate in Marching Band and Concert Band, and have the opportunity to play in small ensembles, including the Jazz Band. Members will have opportunities to attend various instrumental clinics, and selected to participate in the All-East Tennessee Band. 1 CREDIT

#000G05H37 Symphonic Band: This band by audition only. This is a yearlong, competitive course for students interested in further challenging and expanding their musical abilities by providing music for school, civic, and service-related activities. Band students participate in Marching Band and Concert Band, and have the opportunity to play in small ensembles, including the Jazz Band. Members will have opportunities to attend various instrumental clinics, and selected to participate in the All-East Tennessee Band. 1 CREDIT

#000G05H11 General Music: General music students study the music of many different cultures, as well as different types, of music including classical (from medieval to modern), blues, jazz, and rock. Other areas of study include basic music theory, music notation and electronic music. 1 CREDIT

#**000G05H16 Theatre Arts I:** Encourages experimentation by students in the creation and presentation of theatre for audiences of all ages. Staged productions become the laboratory for testing new ideas and methods. Students study both theory and practice of all aspects of theatre, which will result in a stimulating theatrical experience as well as expansion of their creative talents.
1 CREDIT

#000G05H17 Theatre Arts II: Instructor approval required. Will expand upon the skills students learned in Theatre Arts I.
1 CREDIT

#000G05H18 Theatre Arts III: Instructor approval required. Will expand upon the skills students learned in Theatre Arts II.
1 CREDIT

FOREIGN LANGUAGE

#**000G24H29 German I: NOT AVAILABLE 2021-2022.** This course focuses on the pronunciation, structure, vocabulary, and grammar of classical languages. Since classical languages are the bedrock of many modern Western languages, an understanding of how classical languages were used to communicate is vital to a thorough knowledge of language and culture. 1 CREDIT

#000G24H30 German II: This course continues the study of German language, enabling students to acquire knowledge and gain perspective on societies that formed the basis for all of Western culture. Students need to understand the world views, patterns of behavior, and ways of life of those cultures that drew the blueprint for modern-day democracies and republics. 1 CREDIT

#000G244H04 Spanish I: The primary goal of the Spanish I course is to help students develop proficiency in the four basic skills: listening, speaking, reading, and writing in Spanish. At the same time, it aims to increase the student's knowledge and appreciation of the diverse cultures of the countries whose language they are learning. 1 CREDIT

#000G24H05 Spanish II: This course continues the study of Spanish language, enabling students to acquire knowledge and gain perspective on societies that formed the basis for all of Western culture. Students need to understand the world views, patterns of behavior, and ways of life of those cultures that drew the blueprint for modern-day democracies and republics. 1 CREDIT

#001G24H05 Spanish II Honors: Students will be registered for this class upon reviewing test scores, teacher recommendations and administrative approval. This course is for the outstanding Spanish student who wants to go beyond the standard level Spanish II curriculum studies. 1 CREDIT

HUMANITIES

#000G25H02 TN Student Success: This course is designed to prepare high school students for college and to equip them with the skills needed to succeed, such as time management, study skills, and organizational tools. High School seniors will also work weekly on ACT preparation in order to improve scores. This course will also help aid students in applying for scholarships, financial assistance, and colleges. Seniors will also receive the opportunity to visit 1-2 college campuses and tour their facilities. ½ CREDIT

#001G01H25 Bible History Old Testament: The history of the Jewish nation as recorded in the Old Testament will be emphasized. The writings and poetry of the Bible will also be studied. ½ CREDIT

#000G01H25 Bible History New Testament: The life of Christ and the geography of the Biblical lands will be emphasized. The missionary work of the apostles will also be covered. ½ CREDIT

#000G04H17 Contemporary Issues: In Contemporary Issues, students study various dynamic issues facing today's society enabling them to discover their values and responsibilities as citizens. Students will utilize different learning methods to research, discuss, debate and formulate opinions on those contemporary issues. 1 CREDIT

#000G01H16 Creative Writing I: The student will be given the opportunity to develop a creative outlet through additional writing experiences. Students often have the opportunity to experience expository writing in the classroom but have little time to develop imaginative writing. Creative Writing allows them to promote self-expression, to explore various writing styles, and to strive for variety in diction, sentence structure, and format. ½ CREDIT

#001G01H16 Creative Writing II: This course is a continuation of Creative Writing I and will earn students interested in writing a second half credit. ½ CREDIT

#000G01H15 Journalism/Yearbook: Students must have the approval of the yearbook sponsor to enroll in this class. Students in this class learn yearbook production skills and produce the annual yearbook for Rhea County High School. 1 CREDIT

#000G01H02 Journalism/Yearbook II: This class builds off the skills learned in first year Journalism/Yearbook. 1 CREDIT

#000G01H74 Mythology I: Greek & Roman: This is a semester course that deals primarily with Greek and Roman mythology. Students will study the main gods, characters, and tales of the Greek and Roman myths. They will also read portions of the 3 classical

epics, **The Odyssey, The Illiad, and the Aeneid,** as well as some drama. Students will study how this field has impacted modern literature and language. ½ CREDIT

#000G01H01 Mythology II: Norse, Egyptian, Indian, etc.: This is a semester course that will cover the remaining mythology groups. Students will study the main gods, characters, and tales of these other mythology groups. ½ CREDIT

#000G04H15 Psychology: This is the study of the development of the individual and the personality. This study of human culture encompasses similarities and differences among people, including their beliefs, knowledge, changes, values, and tradition. Students will explore these elements of society to develop an appreciation and respect for the variety of human cultures. ½ CREDIT

#000G04H07 World Geography: Students study people, places, and environments at local, regional, national, and international levels from the spatial and ecological perspectives of geography. The six social studies standards of essential content knowledge and four process skills are integrated for instructional purposes. 1 CREDIT

PHYSICAL EDUCATION/WELLNESS

#000G08H03 Driver's Education: Students MUST have a driver's permit in order to take this course. This course helps prepare students to get their driver's license. Six weeks of classroom study is followed by four weeks on the driving range where driving skills are taught. Eight weeks will be spent doing roadwork that includes city, country, and highway driving. ½ CREDIT

#000G08H04, #000G08H05, #000G08H06, #000G08H07 JROTC I, II, III, IV: Two years of ROTC will substitute for 1 year of wellness and ½ P.E.; three years substitute for ½ U.S. Government and ½ Personal Finance. These courses are for the purpose of teaching leadership. Books and uniforms are free. The curriculum includes wellness, citizenship, and techniques of communication, marksmanship, personal finance, map reading, physical fitness, and motivation. Extracurricular activities include Rifle Team, Rangers, Drill Team, and Color Guard. Students may take JROTC for four years in high school. Students will have the opportunity to excel physically, mentally, and spiritually. Students are in no way obligated to the military as a result of taking this course, however, if they elect to join the military after high school they will enter at an advanced rank. 1 CREDIT

#002G08H00 Physical Education: This is a required semester physical education and fitness class for all H.S. graduates. ½ CREDIT

#001G08H00 Physical Education I Weights and Agility (9 Grade): This course is designed for student athletes to promote strength and agility through specific exercises and weight training as well as teaching athletes the proper nutrition before and after practice and games. 0 CREDIT

#001G08H00 Physical Education II Weights and Agility (10 Grade): This course is designed to continue to promote strength and agility through specific exercises and weight training as well as teaching athletes the proper nutrition before and after practice and games. 0 CREDIT

#000G08H00 Team Sports: This class includes sports training, work outs, nutrition, ethics, and safety. 1 CREDIT

#000G08H01 Strength and Conditioning: This class includes fitness training, anatomy, physiology, and kinesiology. 1 CREDIT

#000G08H02 Wellness: This class is generally taken by freshmen and fulfills the state requirement for wellness. This class covers the seven strands of wellness including a twelve-week physical fitness unit, units on first aid and safety, drugs and nutrition. 1 CREDIT

CAREER TECHNICAL EDUCATION PROGRAM COURSES - CTE

#C2H08 Career Exploration: This course will focus on personal/social skill development, study and test taking, skills, career exploration, and literacy to facilitate the personal and academic success of incoming 9th grade students. 1 CREDIT

#C20H17 Work Based Learning: Available to all level 4students with aligned POS. Students must have a recommendation from the POS teacher and the CTE Administrator.

AGRICULTURE, FOOD, and NATURAL RESCOURCES

#000C18H19 Agriscience: This is an introductory laboratory science course that prepares students for biology, subsequent science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology serves in the 21st century. In addition, it serves as the first course for the programs of study in the Agriculture, Food and Natural Resources Cluster. 1 CREDIT

#000C18H30 Principles of Plant Science and Hydroculture: This course focuses 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. 1 CREDIT

#000C18H17 Greenhouse Management: Greenhouse Management is 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. It provides students with the technical knowledge and skills

needed to prepare for further education and careers in horticulture production. 1 CREDIT

ARCHITECTURE & CONSTRUCTION

#000C17H15 Fundamentals of Construction: This class will introduce students to basic skills and knowledge applicable to all construction trades. Topics covered include safety, construction drawings, site layout, hand and power tools, linear and angular measurements, and application of algebraic and geometric principles to construction problems. 1 CREDIT

#000C17H26 Structural Systems I: This is a course that will introduce students to basic skills and knowledge related to residential carpentry. Topics covered include wood, metal, and concrete building materials; fasteners; hand and power tools; fabrication based on construction plans; and framing of platform and post-and-beam structures, in both wood and metal. This course gives students an introduction to the skill and knowledge base typically required for apprentice carpenters. 1 CREDIT

#000C17H27 Structural Systems II: This is a course in which students will extend their skills and knowledge related to residential carpentry. Topics covered include stairs, installation and trim of windows and doors, installation and repair of gypsum wallboard, advanced site layout, exterior finish work, thermal and moisture protection, and an introduction to welding. This course gives students a substantial skill and knowledge foundation typically required for apprentice carpenters. 1 CREDIT

#000C17H23 Mechanical, Electrical and Plumbing Systems (MEPS): This course 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. 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. *Must take Fundamentals of Construction first.* 1 CREDIT

#000C17H27 Electrical Systems I: This course will provide basic skills and knowledge related to residential and commercial electrical systems. Course content includes leadership development, safe practices, Ohm's law, installing conduit, conductors, residential and commercial electrical systems, and services according to National Electrical code (NEC) and local codes. This course gives students an introduction to the skill and knowledge base typically required for apprentice electricians. 1 CREDIT

ADVANCED MANUFACTURING

#000C13H05 Principles of Manufacturing: Students will learn basics skills and knowledge related to cutting and welding applications. Course content includes safe practices, career research, leadership development, and basic arc welding and thermal cutting skills. Combined with the second and third year courses, *Basic Principles of Welding* and *Welding Applications and Certification*, the student should be prepared for *Entry Level Welder* Certification, as defined by American Welding Society QC10. 1 CREDIT

#000C13H12 Welding I: This course is designed to follow *Introduction to Welding*, in which students will learn more advanced skills and knowledge related to cutting and welding applications. Development of welding and cutting skills will be continued in the context of a series of projects. Combined with the third year course, *Advanced Welding Applications and Certification*, the student should be prepared for *Entry Level Welder* Certification, as defined by American Welding Society QC10. 1 CREDIT

#000C13H10 Welding II: This course is designed to follow *Basic Principles of Welding*, in which students will learn more advanced techniques and skills related to cutting and welding applications. Welding and cutting skills developed in *Introduction to Welding* and *Basic Principles of Welding* will be used to satisfactorily complete a series of industry certification tests. Following the completion of this course, including successful passage of the industry certification tests, the student should be certified as an *Entry Level Welder* as defined by American Welding Society QC10. 1 CREDIT

ARTS, A/V TECHNOLOGY, & COMMUNICATIONS

#000C05H07 Digital Arts and Design I: This course provides a foundation in visual communication concepts and design strategies. Course content is designed to foster skills and understanding that are essential in modern digital graphics, motion graphics, publishing, Web, film/video, photography, and animation graphic industries. Focus will be on developing understanding of key design concepts and strategies, along with design challenges that translate into creative communication solutions which accurately and effectively reach targeted audiences. Along with study of design principles, conceptualization processes and techniques, students will explore various applications of design through extensive study of typography, style, composition, visual elements, color, creative technical software and various problem-solving tasks, that encourages higher order thinking. Exploration of career opportunities, development of leadership, teamwork, collaborative and technical skills requisite in many aspects of life**.** 1 CREDIT

#000C05H08 Digital Arts and Design II: This is the first in a series that prepares students for gainful employment and/or entry into post-secondary education in the printing industry. Content provides the opportunity to acquire marketable skills by examining both the industry and its career opportunities and by developing leadership, teamwork, and industry skills. Laboratory facilities and experiences simulate those found in the printing industry. 1 CREDIT

#000C05H09 Digital Arts and Design III: This is the second level course and it prepares students for work-related skills and advancement into graphic design and digital imaging and for gainful employment and/or entry into post-secondary education in the Graphic Communications Industry. Content provides students the opportunity to acquire marketable skills in both theory and practical

application. Advanced knowledge and skill in the printing industry will be enhanced in a laboratory setting that duplicates the printing industry and offers school/work based learning opportunities. 1 CREDIT

HEALTH SCIENCE

#000C14H14 Health Science Education: This is an introductory course designed to prepare students to pursue careers in the fields of biotechnology research, therapeutics, health informatics, diagnostics, and support services. Upon completion of this course, a student proficient in Health Science Education 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 healthcare skills. 1 CREDIT

#000C14H09 Anatomy And Physiology: This is an upper level course designed to develop an understanding of the structures and functions of the human body, while relating those to knowledge and skills associated with pathophysiology. Upon completion of this course, proficient students will be able to (1) apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (2) identify the organs and structures of the support and movement systems, (3) relate the structure and function of the communication, control, and integration system, and (4) demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems. 1 CREDIT

#000C14H03 C.N.A.: This is a capstone course designed to prepare students to pursue careers in the field of nursing. Upon completion of this course, a proficient student will be able to implement communication and interpersonal skills, maintain residents' rights and independence, provide care safely, prevent emergency situations, prevent infection through infection control, and perform the skills required of a nursing assistant. At the conclusion of this course, if students have logged 40 hours of classroom instruction and 20 hours of classroom clinical instruction, and if they have completed 40 hours of site-based clinical with at least 24 of those hours spent in a long-term care facility, then they are eligible to take the certification examination as a Certified Nursing Assistant (CNA).Prior to beginning work at a clinical site, students must be certified in Basic Life Support (BLS) Cardiopulmonary Resuscitation (CPR), and deemed competent in basic first aid, body mechanics, Standard Precaution guidelines, and confidentiality. 1 CREDIT

#000C14H15 Medical Therapeutics: Medical Therapeutics is an applied course designed to prepare students to pursue careers in therapeutic services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments. The student will incorporate communication, goal setting, and information collection skills to be successful in the workplace. 1 CREDIT

HOSPITALITY & TOURISM

#000C16H06 Culinary Arts I: This is the first level of Culinary Arts and prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Designed to introduce students to food preparation concepts, terminology and practices in the modern commercial kitchen, the content provides students the opportunity to acquire marketable skills by examining both the industry and its career opportunities and by developing food preparation and service and interpersonal skills. Fundamental techniques and skills are taught with an emphasis on safety, sanitation, and proper equipment operation and maintenance. Laboratory facilities and experiences, which simulate commercial food production and service operations, offer school-based learning opportunities. 1 CREDIT

#000C16H07 Culinary Arts II: This is the second level of Culinary Arts and prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides students the opportunity to acquire marketable skills by demonstrating the principles of safety and sanitation, food preparation skills, and teamwork to manage an environment conducive to quality food production and service operations. Laboratory facilities and experiences, which simulate commercial food production and service operations, offer school-based learning and work-based learning opportunities. 1 CREDIT

#000C16H08 Culinary Arts III: This is the third level of Culinary Arts and it serves as a capstone course. It, too, prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides students the opportunity to apply the marketable culinary arts skills they have acquired by assuming increasingly responsible positions including participation in a cooperative education experience. 1 CREDIT

LAW, PUBLIC SAFETY, CORRECTIONS AND SECURITY

#000C15H10 Criminal Justice I: This is the first level of study of criminal justice careers. It will prepare students for work-related knowledge and skills for advancement into the second level of criminal justice careers. Course content focuses on areas comprised of the three components of the criminal justice system, the police, courts, and corrections. The course is an overview of the criminal justice system and builds a better understanding of the development of laws and history on the state and federal levels. New technology and career opportunities in criminal justice are an integral part of the course content. 1 CREDIT

#000C15H11 Criminal Justice II: This course will offer an in-depth study of criminal justice in which current criminal justice careers issues will be discussed and debated. Local, state, federal, and international laws will be analyzed. Subject matter will include a comparison of the criminal justice careers in the United States with other countries. Students will have opportunities to participate in mock trials and field trips with criminal justice careers emphasis. Course content will introduce new technology, effects of forensic analysis, and career opportunities. The course content will include information for planning, managing, and providing judicial, criminal justices. 1 CREDIT

#000C15H12 Criminal Justice III – Investigations: This is the final course designed to equip students with the knowledge and skills to be successful in the sciences of criminal investigations. Students will learn terminology and investigation skills related to the crime scene, aspects of criminal behavior, and applications of the scientific inquiry to solve crimes. By utilizing the scientific inquiry method, students will obtain and analyze evidence through simulated crime scenes and evaluation of case studies. Upon completion of this course, proficient students will be able to identify careers forensic science and criminology, summarize the laws that govern the application of forensic science, and draw key connections between the history of the forensic science system and the modern legal system. 1 CREDIT

STEM: ENGINEERING

#000C21H04 Principles of Engineering and Technology: Principles of Engineering and Technology is a foundational course in the STEM cluster for students interested in learning more about careers in engineering and technology. This course covers basic skills required for engineering and technology fields of study. Upon completion of this course, proficient students are able to identify and explain the steps in the engineering design process. They can evaluate an existing engineering design, use fundamental sketching ad engineering drawing techniques, complete simple design projects using the engineering design process, and effectively communicate design solutions to others. 1 CREDIT

#000C21H05 Engineering Design I: This is a fundamental course in the STEM cluster for students interested in developing their skills in preparation for careers in engineering and technology. The course covers essential knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to describe various engineering disciplines, as well as admissions requirements for postsecondary engineering and engineering technology programs in Tennessee. They will also be able to identify simple and complex machines; calculate various ratios related to mechanisms; explain fundamental concepts related to energy; understand Ohm's Law; follow the steps in the engineering design process to complete a team project; and effectively communicate design solutions to others. 1 CREDIT

#000C21H06 Engineering Design II: This is an applied course in the STEM cluster for students interested in further developing their skills as future engineers. This course covers knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to explain the differences between scientists and engineers, understand the importance of ethical practices in engineering and technology, identify components of control systems, describe differences between laws related to fluid power systems, explain why material and mechanical properties are important to design, create simple free body diagrams, use measurement devices employed in engineering, conduct basic engineering economic analysis, follow the steps in the engineering design process to complete a team project, and effectively communicate design solutions to others. 1 CREDIT

TRANSPORTATION

#000C20H09 Maintenance and Light Repair I: Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals, and basic technician skills. 1 CREDIT

#000C20H10 Maintenance and Light Repair II: Students study automotive general electrical systems, starting and charging systems, batteries, lighting, and electrical accessories. 1 CREDIT

#000C20H11 Maintenance and Light Repair III: Students study and service suspension and steering systems and brake systems. Upon completing all of the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. 1 CREDIT

MISCELLANEOUS

#000G04H37 Community Service/CDC-PT: This class is for seniors and consists of working with severely challenged students. Peer Tutors are hand-picked by the Counseling Department and the CDC teacher. Attitude and personality are important. The peer tutors work one on one with each student. 1 CREDIT

#000G04H37 Community Service/Office: Requires pre-approval from the secretary in the specific office. This is for seniors who want to serve as an assistant in the Main Office, School Counseling Office, Library, Attendance, Special Education Office, or Career Technical Education Office. 1 CREDIT

#000G04H37 Community Service/Technology: Students must apply for this class and be approved by the technology staff. This class is for seniors who are technology proficient and wish to work with our technology staff. 1 CREDIT

 # Teacher Assistant: This is for juniors and seniors who want to assist teachers in their classroom. Prior approval from Mr. Ruehling is required. 0 CREDIT