CREEK WOOD



2025-2026 Registration Guide

Tennessee Diploma Project 3499 Highway 47 North Charlotte, TN 37036 http://www.dcstn.org/cwhs.aspx #wearecreekwood

INTRODUCTION	GENERAL COURSE DESCRIPTIONS	CAREER-TECHNICAL EDUCATION, page 17
TENN. DIPLOMA PROJECT 2	Student Government	Advanced Manufacturing Technology/Welding18-20
General Registration2	Senior Only Courses	Agriculture20-21
Post-Registration2-3	Art6	Architecture & Construction21-22
Non-Discrimination3	English6-8	Audio/Visual Technology23
Individualized Instruction	World Language8	Business Management & Administration24-25
Calculation of GPA3	Mathematics9-10	Education and Training25-26
	Music10-11	Heath Science26-28
Advanced Classes 3	Science/Science & Mathematics Focus 11-12	Digital Technology28-30
Graduation Requirements3-4	Social Studies/Humanities Focus12-14	Law, Public Safety, Corrections and Security
State Requirements3-5	Theatre Arts14-15	
Examinations5	Wellness, Strength & Conditioning for Athletes,	Early College – HVAC
	and Physical Education15	
District Collaborative	J.R.O.T.C	Additional on-line courses NSCC
Austin Peay5		Early Post-Secondary Opportunities42-43

INTRODUCTION

The Creek Wood High School Registration Guide contains information regarding course offerings, recommended course sequence, policies, requirements, and services. This information has been prepared to enable students and parents to make informed career decisions and to prepare for the lifelong career decision-making process. Course offerings are contingent on the number of students registering for a course, budget considerations, and teacher assignments.

A strong high school background is essential for continued success in the workplace or in post-secondary studies. In selecting a curriculum, students should recognize that employment and college admissions are highly competitive. Rigor of curriculum, grade-point average, class rank, attendance, and standardized test scores are crucial factors in decisions made by employers and college admissions personnel. Therefore, it is advantageous for students to select a challenging curriculum consistent with career goals and postsecondary plans.

TENNESSEE DIPLOMA PROJECT

The purpose of the Tennessee Diploma Project is to align our curriculum to make sure we give students, parents and teachers a pathway to reach those high standards. We want to make sure that our tests and graduation requirements reflect that our students really are prepared for workforce training or college.

The goal is to build stakeholder support for raising education standards. Both higher education and the business community play key roles. These groups feel that graduates need:

- Stronger **math and science skills**, but especially mastery of basic math; in addition, post-secondary school or work requires that students be able to think critically toward a focused solution.
- Stronger **communication skills**, including both verbal skills and writing skills
- To be **able to work in teams** to solve real world problems
- To be **able to think, apply, and use** what they know

• To have a **strong work ethic**; be at work regularly and be on time

General Registration

1. Placement into classes will follow the procedures outlined below.

All students will be placed in the classes for which they qualify based on data. Parents and students who disagree with the recommended placement and would prefer their son or daughter take a lower level class must sign a release form for the transfer to occur. Parents students who disagree with and the recommended placement and would prefer their son or daughter take a higher level class must sign a release form for the transfer to occur. Transfer to the higher level course will occur without penalty after the mid-point of the first grading period (P1) if the student has attained an average of 93 or greater in the course.

- 2. A student may not request a transfer from one teacher to another.
- 3. A student must be enrolled for credit in a math course through the senior year even if four credits in math have already been earned.
- 4. For an elective course, students should list at least five (5) alternative courses on their course request form.

Post-Registration

- 1. After registration and before the end of the current school year, each student shall receive a course verification form which shows the courses selected. Parents and students are asked to review the form and make any changes or corrections and return by the stated deadline.
- 2. *Friday, March 14, 2025* is the deadline to request changes from one class to another. A student may not request a different class after this deadline.
- 3. Student schedule changes initiated by teachers/counselors may be made after the deadline due to special circumstances that make such changes necessary.

Request for Schedule Changes. Changes must be made in compliance with the following deadlines:

- A. Changes must be requested through the Creek Wood Counseling Department using the proper paper work.
- B. Schedule change requests will be made through the counseling department and be reviewed by an academic team comprised of a teacher, the counselor and an administrator.

NON-DISCRIMINATION

It is the policy of Creek Wood High School not to discriminate on the basis of sex, race, or disabilities when planning its educational program.

INDIVIDUALZED INSTRUCTION

In an attempt to meet the individual needs of pupils, Creek Wood High School offers elective courses in art, business, language arts, world languages, mathematics, music, physical education, science, social studies, and career/technical subjects. Some courses offered in English, mathematics, science, and social studies are offered on an advanced level.

CALCULATION OF GPA

All GPA's will be calculated on a 4.0 system. For purposes of determining class rank, the numerical average of grades will be used. All numerical grades (including audited classes) earned in grades 9, 10, 11 and first semester of the 12th will be counted toward the grade-point average used to determine class rank.

*HONORS, Dual Enrollment & Advanced	
Placement classes	

Elements of Statistics DE	English I-IV Honors
English III, IV DE	Economics/Gov Honors
Teaching K-12 I, II DE	Pre-Calculus Honors
Pre-Calc, College Alg DE	Geometry Honors
Calculus AB, Calculus AB DE	U.S. History Honors
U.S. History DE	Biology I, II Honors
Mechatronics I-VI DE	Algebra I/II Honors
Intro to Emer Mgt DE	Chemistry I Honors
Welding I-VI DE	AP Modern World History
Res & Com Constr I-VI DE	AP Human Geography
HVAC DE	AP Psychology
Net Systems I-VI DE	Spanish /French I, II, III Honors
AP Macroeconomics	AP Government & Politics

Guidelines: Additional rigor points will be added each grading period and to the semester exam grade for these advanced classes. Advanced Placement will receive five (5) rigor points. Dual Enrollment courses will receive four (4) rigor points and Honors courses will receive three (3) rigor points.

RECOMMENDATION FOR ENROLLMENT IN ADVANCED COURSES

TVAAS data (historical student state test scores) and teacher recommendation are used in placement of most Honors courses.

For Dual Enrollment courses, please see specific requirements listed under each course in this guide.

GRADUATION REQUIREMENTS

All State of Tennessee and Creek Wood graduation requirements must be completed in order to participate in commencement exercises. To meet state and local requirements for graduation, all students shall have attained an approved attendance, conduct, and subject matter record which covers a planned program of education.

As a strategy for assessing student readiness for postsecondary education, every student enrolled in a Tennessee public school during their eleventh (11th) grade year shall take either the ACT or SAT. To receive a regular high school diploma, all students enrolled in a Tennessee public school during their eleventh (11th) grade year must take either the ACT or SAT.

United States Civics Test- Beginning January 1, 2017, all high school students shall be given a United States civics test. All students must take this test to be awarded a diploma.

STATE OF TENNESSEE GRADUATION REQUIREMENTS

1. A diploma of Specialized Education may be awarded to students with disabilities at the end of their fourth year of high school, who (1) have not met the requirements for a high school diploma, (2) have satisfactorily completed an individualized education program, and (3) have satisfactory records of attendance and conduct. Students who obtain the special education diploma may continue to work towards the high school diploma through the end of the school year in which they turn twenty-two years old.

2. An occupational diploma may be awarded to students with disabilities at the end of their fourth year of high school who have (1) not met the requirements for a high school diploma, (2) have satisfactorily completed an individualized education program, (3) have satisfactory records of attendance and conduct, (4) have completed the occupational diploma Skills, Knowledge, and Experience Mastery Assessment (SKEMA) created by the Tennessee Department of Education, and (5) have completed two (2) years of paid or non-paid work experience. The determination that an occupational diploma is the goal for a student with a disability will be made at the conclusion of the student's tenth (10th) grade year or two (2) academic years prior to the expected graduation date. Students who obtain the occupational diploma may continue to work towards the high school diploma through the end of the school year in which they turn twenty-two (22) years old.

3. On January 26, 2018, the State Board of Education approved the addition of the alternate academic diploma within High School Policy 2.103. In order to meet the 22 credit requirement, students pursuing the alternate academic diploma (AAD) may be enrolled in their courses using the AAD course codes and taught according to the AAD course requirements. The course requirements are based on the <u>Tennessee Academic Standards</u> and outline the expectations for a student working towards the AAD.

4. The high school diploma will be awarded to students who (1) earn the specified 22 units of credit, and (2) have satisfactory records of attendance and conduct.

+For the Class of 2028, Computer Science will be a new graduation requirement that MAY replace the 4th Math in the senior year.

* Students shall be required to achieve, by the time they graduate, at least the following: Algebra I, Geometry, and Algebra II (or the equivalents) plus one additional mathematics course beyond Algebra II. All students will be enrolled in a math class each year. Students with qualifying disabilities as documented in the individualized education program shall be required to achieve at least Algebra I and Geometry (or the equivalent).

** Students shall be required to achieve, by the time they graduate, at least Biology I and either Chemistry or Physics plus another laboratory science. Students with qualifying disabilities as documented in the individualized education program shall be required to achieve at least Biology IA, Biology IB, and one other lab science credit. The required number of credits in science will be achieved through strategies such as, but not limited to, increased time, appropriate methodologies, and accommodations as determined by the IEP team.

The social studies curriculum shall include United States History, World History/World Geography, Economics, and Government. *In exceptional circumstances, schools may waive the world language and fine art requirement for students who are not planning to attend a university. Students must expand and enhance their elective focus.

Graduation with Honors and Distinction.

1. Students who score at or above all of the subject area readiness benchmarks on the ACT or equivalent score on the SAT will graduate with honors.

2. Students will be recognized as graduating with "distinction" by attaining a B average and completing at least one of the following:

(i). Earn a nationally recognized industry certification.

(ii). Participate in at least one of the Governor's Schools.

(iii). Participate in one of the state's All State musical organizations.

(iv). Be selected as a National Merit Finalist of Semi-Finalist

(v). Attain a score of 31 or higher composite score on the ACT

(vi). Attain a score of 3 or higher on at least two advanced placement exams.

Math *	4 credits including
	Algebra I and II,
	Geometry or its
	equivalent, and a fourth
	higher level course
Science **	3 credits including
	Biology, Chemistry or
	Physics, and a third lab
	course
English	4 credits
Social Studies ***	3 credits
Physical Education and	1.5 credits
Wellness	
Personal Finance	0.5 credits
Foreign Language ****	2 credits
Fine Arts ****	1 credit
Elective Focus Area	3 credits (see last page)
Computer Sci Req (C/O	1 credit substitution 4 th
28)+	year Math
Total Credits	22 credits

(vii). Successfully complete the International Baccalaureate Diploma Program.

(viii). Earn 12 or more semester hours of tran scripted postsecondary credit.

TN Scholars Students may pick up a community service documentation sheet in the Creek Wood Counseling Center.

In today's competitive workforce, Tennessee Scholars graduate better prepared to meet the challenges of the workplace. Graduating as a Tennessee Scholar entitles you to join the other 25,000 students who have chosen this path for graduation and have already experienced greater success after high school. To become a Tennessee Scholar students complete a demanding high school curriculum that emphasizes "on level" and above courses in mathematics, science, social studies, language arts (English and foreign language), and computer literacy. The program also stresses the importance of attendance and dependability, and volunteerism.

EXAMINATIONS

1. TN Ready testing will be conducted for students who are enrolled in the following courses, Biology I, English I, English II, Algebra I, Algebra II, Geometry and US History. This test will count as a 15% of the entire course, as determined by the local board of education.

2. Other state mandated testing includes: ACT (11th grade).

As a strategy for assessing student readiness for postsecondary education, every student enrolled in a Tennessee public school during their eleventh (11th) grade year shall take either the ACT or SAT. To receive a regular high school diploma, all students enrolled in a Tennessee public school during their eleventh (11th) grade year must take either the ACT or SAT. District Collaborative with Austin Peay State University

Whether you want to take one course or earn an associate degree, APSU has a program for you. However, rising Juniors will have an opportunity to earn up to 60 college credits while in high school. This will give them an opportunity to earn an associate degree and their high school diploma at the same time. We will have an information meeting at some point. See your counselor for more information.

GENERAL COURSE DESCRIPTIONS

Student Government/Service Learning

Program 1 credit: 9th, 10th, 11th, 12th......## This is a required course for students recommended to student council and student government. This course will be placed in a student's schedule by their counselor upon approval to the position.

This course meets TN Diploma Project Graduation Requirements for the Humanities Focus Elective Area.

SPECIAL SENIOR ONLY COURSES

JOBS FOR TENNESSEE GRADUATES -

<u>1 credit:12th..... C25H09</u> Students in this course are given the opportunity to develop skills critical to success in everyday life, in school and on the job. The curriculum includes occupation information, goal setting, study skills, human relations, and leadership development. The need for assuming responsibility for one's actions and decisions is emphasized. This course is based on a national model to assist students in graduating from high school and gaining employment or further education after graduation. Students learn career development and job attainment competencies and develop skills that employers believe are fundamental to success on the job. Follow-up and employment services are continued for twelve months following graduation.

PERSONAL FINANCE - 1/2 credit: 12th .G04H36

Graduation Requirement for all Seniors This course is designed to help students understand the importance of individual choices on career and salary potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets; simulate use of checking and saving accounts; demonstrate knowledge of finance, debt, and credit management; and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions.

NOTE: Dual credit opportunity at Nashville State Community College for this course. See teacher for more information.

ART Art Classes have a \$20.00 fee used to purchase materials.

Art 1: FOUNDATIONS OF STUDIO ART:... 1 credit: 9th, 10th 11th 12thG05H08

This course satisfies the Fine Art requirement. As the foundation course, Art 1: Foundations of Studio Art is the prerequisite course for the comprehensive high school art program and fulfills the one credit Fine Arts graduation requirement. Studio problems are designed to build creative and critical thinking skills through practice in drawing, painting, printmaking, sculpture, crafts, and other art disciplines. As students gain knowledge of the ways artists find and interpret ideas, they develop an understanding and appreciation of the role of the artist in a culturally diverse world.

ART III/IV: PORTFOLIO DEVELOPMENT AND PERSONAL DIRECTIONS IN ART— 1

Students wishing to take Art III/IV must complete Art II with a B average or better. This course is designed to prepare students for admission to a four-year college level visual arts program, where portfolio reviews are nearly always required. Students enrolling in Art III/IV will develop a unique and personal body of work, and prepare a portolio for admission to selective college level visual arts programs and portfolio-based competitive scholarships.

English Honors Program

The English Department offers honors-level courses for each grade level of a student's high school career. These courses are designed to challenge students above and beyond the rigor provided in other English courses. The expectations for student progress and achievement in these courses are highly demanding. Acceptance in the program will be based on previous student performance as indicated by state test scores.

There will be required Summer Reading for Honors.

NINTH GRADE ENGLISH

English I – 1 credit: 9thG01H09 This freshman course includes analyzing complex texts and thinking critically with a concentration on improving language, reading, and writing skills needed for success in high school.

English I (Honors)—1 credit: 9thG01H09-H

This course provides a more in-depth approach to the skills and content covered in the English I course.

TENTH GRADE ENGLISH

English II—1 credit: 10thG01H10

This sophomore course continues the exploration of complex texts and critical thinking begun in English I. There is a continued focus on advancing language, reading, and writing skills, as well as the skills needed to effectively work both independently and collaboratively.

English II (Honors)-1 credit: 10th ... G01H10-H

This honors course expands on the English II course curriculum and is designed to give college-bound students additional preparation for the demands of academic scholarship.

ELEVENTH GRADE ENGLISH English III—1 credit: 11thG01H11

This junior course focuses on increasing proficiency with complex texts, critical thinking, and composition. The course is built around a study of foundational documents and fictional and informational texts drawn from American literature. There is also an emphasis on the skills addressed on the ACT exam administered to students during the junior year

English III (Honors)-1 credit: 11th ... G01H11-H

This honors course approaches the English III curriculum with a greater degree of challenge. There is a particular focus on college preparation and the application of academic scholarship.

English III Dual Enrollment—1 credit: 11th

You must meet the APSU Dual Enrollment admissions criteria (3.0 HS GPA or 21 ACT Composite). If you score 28-30 on the English section of the ACT, APSU will award credit for ENGL 1010. If you score 31-36 on the English section of the ACT, APSU will aware credit for ENGL 1010 and 1020. See your counselor if you have additional questions.

> There is a tuition fee associated with this class.

This is a college-level composition course. The focus is on reading and analyzing complex texts as models for improving composition skills for student writing. Preparation for the ACT exam is also included in the course curriculum.

TWELFTH-GRADE ENGLISH English IV—1 credit: 12thG01H13

This senior-level course is focused on application of close-reading, writing, and critical thinking skills in a project-based learning context. Students are required to apply previously acquired skills in a variety of contexts. Particular attention is given to helping students demonstrate mastery of skills needed for college and career readiness.

ENGLISH IV (HONORS)—1 credit: 12th

It is highly recommended that students have taken English III Honors before enrolling in English IV Honors. This course is designed for students who have exhibited exceptional skills in the use of language and interpretation of literature. There is a strong emphasis on composition and critical reading. A dualenrollment option for college credit will be available to students in this course. There is a list of required reading for this course.

English IV Dual Enrollment Literature/Technical Writing—1 credit: 12thG01H34, G01H35

Pre-requisite: Completion of English 1010 and 1020. This is ENGL 2330 and ENGL 1100 at the college level. You must meet the APSU Dual Enrollment admissions criteria (3.0 HS GPA or 21 ACT Composite). There is a tuition fee associated with this class.

This is a college-level literature course. The focus is on reading and analyzing complex texts drawn from world literature. The course requires extensive reading and writing demonstrating strong academic scholarship.

English IV Dual Enrollment Composition-1

credit: 12th......G01H30-12, G01H31-12 This course is English 1010 and 1020 at the college

level. You must meet the APSU Dual Enrollment admissions criteria (3.0 HS GPA or 21 ACT Composite). If you score 28-30 on the English section of the ACT, APSU will award credit for ENGL 1010. If you score 31-36 on the English section of the ACT, APSU will aware credit for ENGL 1010 and 1020. See your counselor if you have additional questions.

There is a tuition fee associated with this class.

This is a college-level composition course. The focus is on reading and analyzing complex texts as models for improving composition skills for student writing.

WORLD LANGUAGES

FRENCH I –1 credit: 10th 11th......G24H21

In French I, emphasis is placed on pronunciation, vocabulary, listening comprehension, logic of the language, speaking, reading, writing, grammar, and French culture. Much drill and practice are offered the student in class through the use of audio-lingual and audio-visual materials.

FRENCH I Honors-1 credit: 10th 11th G24H21-H

In French I, emphasis is placed on pronunciation, vocabulary, listening comprehension, logic of the language, speaking, reading, writing, grammar, and French culture. Much drill and practice are offered the student in class through the use of audio-lingual and audio-visual materials.

French II intensifies pronunciation, vocabulary, comprehension, logic of the language, speaking, reading, writing, grammar, and French culture. Students increase their vocabulary. This goal is achieved by much drill and practice in class through the use of audio-lingual and audio-visual materials. Culture study is enhanced through individual projects.

FRENCH II Honors—1 credit: 11th 12TH

French II Honors intensifies pronunciation, vocabulary, comprehension, logic of the language, speaking, reading, writing, grammar, and French culture. Students increase their vocabulary. This goal is achieved by much drill and practice in class through the use of audio-lingual and audio-visual materials. Culture study is enhanced through individual projects.

Prerequisite: Recommendation of French II teacher French III is a continuation of the study and use of French as a global language and the numerous cultures from around the world that use French in their everyday lives. More detailed vocabulary, grammar, and cultural topics will be introduced to build and expand upon the foundation of the language acquired in levels I and II with an emphasis on fluency and immersion. We will continue to study French and francophone societies and their impact on our world through communication, cultural comparisons, and a mixture of independent and collaborative study in French.

<u>SPANISH I Honors –1 credit: 10th G24H04-H</u> Pre-requisite: Recommendation of English I teacher

In Spanish I, emphasis is placed on pronunciation, vocabulary, listening comprehension, logic of the language, speaking, reading, writing, grammar, and Hispanic culture. Much drill and practice are offered the student in class through the use of audio-lingual and audio-visual materials.

<u>SPANISH I –1 credit: 10th 11thG24H04</u>

In Spanish I, emphasis is placed on pronunciation vocabulary, listening comprehension, logic of the language, speaking, reading, writing, grammar, and Hispanic culture. Much drill and practice are offered the student in class through the use of audio-lingual and audio-visual materials.

SPANISH II—1 credit: 11th 12THG24H05 Spanish II intensifies pronunciation, vocabulary, comprehension, logic of the language, speaking, reading, writing, grammar, and Hispanic culture. Students increase their vocabulary. This goal is achieved by much drill and practice in class through the use of audio-lingual and audio-visual materials. Culture study is enhanced through individual projects.

SPANISH II Honors-1 credit: 11th 12TH

Spanish II Honors intensifies pronunciation, vocabulary, comprehension, logic of the language, speaking, reading, writing, grammar, and Hispanic culture. Students increase their vocabulary. This goal is achieved by much drill and practice in class through the use of audio-lingual and audio-visual materials. Culture study is enhanced through individual projects.

<u>SPANISH III Honors —1 credit: 12thG24H06</u> Pre-requisite: Recommendation of Spanish II teacher

Spanish III is a continuation of study and use of the language as a means of communication. The subjunctive is taught to provide fluency in the language. Spanish III is designed for those students who wish to polish fine points of grammar, build vocabulary, and increase fluency. Culture of the Spanish speaking countries is continued with collaborative projects in the target language.

	MATHEMATICS					
Recommended Math Course Sequences						
9th Grade		10th Grade	→	11th Grade Precalculus DE	→	12th Grade
Geometry Honors	7				or or	Calculus AB Elements of Stats DE
				class of 2028 +	\rightarrow	Statistics Computer Science+
		Geometry	\rightarrow	Algebra II	\rightarrow	Statistics
	7			class of 2028 +	\rightarrow	Computer Science+
Algebra 1						
	И	Geometry Honors	\rightarrow	Algebra II Honors	\rightarrow	Precalculus DE
					or	Elements of Stats DE
				class of 2028 +	-	Computer Science+
				er Science will be a the 4th Math in the		•

MATHEMATICS

<u>ALGEBRA I Honors– 1 credit: 9^{th,} G02H00-H</u> Pre-requisite: Teacher recommendation from 8th Grade Math data

The course includes the study of the real number system, solving linear equations and inequalities, using proportional reasoning, applying elementary probability and statistics, graphing linear functions, writing linear equations and functions, solving systems of linear equations, working with polynomials, solving quadratic equations, and working with radicals.

ALGEBRA I – 1 credit: 9^{th,}G02H00

The course includes the study of the real number system, solving linear equations and inequalities, using proportional reasoning, applying elementary probability and statistics, graphing linear functions, writing linear equations and functions, solving systems of linear equations, working with polynomials, solving quadratic equations, and working with radicals.

ALGEBRA II --1 credit: 10th 11th......G02H05 Prerequisite: Algebra I

Topics covered include number systems, relations and functions, exponents, radicals, common logarithms, quadratic relations, systems of equations and inequalities, rational expressions, and introduction to probability and statistics.

ALGEBRA II (HONORS)-1 credit: 10th 11th

Prerequisite: Honors Geometry This course provides more in-depth study of all topics listed for Algebra II (Regular) and also includes natural logarithms, matrix algebra, and polynomial functions.

Prerequisite: Algebra I

This course is a study of the properties, relationships, and geometric modes of thinking concerning one, two, and three-dimensional geometric figures.

GEOMETRY (HONORS)-1 credit: 9th, 10th

......G02H11-H

Teacher recommendation required This course is a study of the properties, relationships, and geometric modes of thinking concerning one-, two-, and three-dimensional geometric figures.

PRE-CALCULUS (Honors)-1 credit: 11th 12th

This course is a college-preparatory course in trigonometry, analytic geometry and functions.

PRE-CALCULUS (Dual Enrollment)—1 credit: 11th 12thG02H48, G02H90

This course is Math 1710, 1810 at the college level, College Algebra, Pre-Calculus I.

Prerequisite You must meet the APSU Dual Enrollment admissions criteria (3.0 HS GPA or 21 ACT Composite). Juniors can be concurrently enrolled in Algebra II Honors,

There is a tuition fee associated with this class. A study of functions and their representations with emphasis on the use of functions in problem-solving and modeling contexts. Topics include polynomial functions, rational functions, power and root functions, inverse functions, and systems of equations.

CALCULUS AB—DUAL ENROLLMENT; 1 credit: 12th......G02H51

This course is Math 1910, Calculus and Analytic Geometry the college level. In addition to meeting the APSU Dual Enrollment admissions criteria, this course requires MATH 1710 and 1720, OR MATH 1730, OR High school Algebra II, pre-calculus, and ACT Math sub score of 27. There is a tuition fee associated with this class.

Calculus AB is primarily concerned with developing the students understanding of the concepts of calculus and providing experience with its methods and applications. The courses emphasize a multirepresentational approach to calculus, with concepts, results and problems being expressed graphically, numerically, analytically and verbally. The connections among these representations also are important. This course are intended to be challenging and demanding. STATISTICS —1 credit: 12thG02H37

Measures of central tendency and dispersion for descriptive statistics, estimations of confidence intervals for means and proportions, probability distributions, hypotheses testing, analysis of variance, the least squares method, correlation analysis, and nonparametric methods. Applications will be explored in the fields of medicine, social science, business, politics, psychology, sports, education and the sciences.

ELEMENTS OF STATISTICS DUAL—1 credit:

12thG02H49 This course is Math 1530, Elements of Statistics @ APSU._*Prerequisite:* You must meet the APSU Dual Enrollment admissions criteria (3.0 HS GPA or 21 ACT Composite). Juniors can be concurrently enrolled

in Algebra II Honors, Pre-Calculus There is a tuition fee associated with this class.

Measures of central tendency and dispersion for descriptive statistics, estimations of confidence intervals for means and proportions, probability distributions, hypotheses testing, analysis of variance, the least squares method, correlation analysis, and nonparametric methods. Applications will be explored in the fields of medicine, social science, business, politics, psychology, sports, education and the sciences.

MUSIC

CHORAL AUDITION-1 credit: 9th, 10th 11th 12th

Choral Audition is a registration tool to simplify the process of placing students in appropriate choral groups. Choral Audition is required of all students who desire placement in a choral group. All students will be charged \$25.00 per semester.

This course will satisfy the Fine Arts requirement. This is a course for beginning guitarists with little or no experience on the instrument. The main objective of this course is for students to gain an enhanced appreciation of music through playing the guitar. Students will learn how to read music notation, chord symbols, and tablature. A variety of genres including folk, classical, blues, pop, and rock will be explored. Access to a guitar outside the class is helpful but not necessary. This course fulfills the graduation requirement for a fine arts credit.

GUITAR LAB II/Rock Band—1 credit: 9th, 10th, 11th, 12thG05X14-RB

This course will satisfy the Fine Arts requirement. Auditions for admission are required. (see Dr. Long)

This is a continuation of Guitar Lab I. Students must have taken and Music Lab/Guitar Lab 1 to be considered for this course. Students may also show content knowledge to the teacher to be considered if they did not take the prerequisite class. The main objective of this course is for students to gain an enhanced appreciation of music through playing the guitar. Students will learn how to read music notation, chord symbols, and tablature. A variety of genres including folk, classical, blues, pop, and rock will be explored. Access to a guitar outside of the class is helpful but not necessary. This course fulfills the graduation requirement for a fine arts credit.

Classical PIANO LAB I -1 credit: 9th, 10th 11th 12th

G05HA5 Student will learn the basics of music notation, rhythm, melody and harmony. Students progress through instruction utilizing beginning piano books and supplementary materials. Access to a piano/keyboard outside the class is helpful but not necessary. This course will satisfy the one credit requirement for a fine arts credit.

This course satisfies the Fine Art requirement. The purpose of this course is to provide musical enrichment for students. The Percussion Ensemble will study literature from all eras and provide advanced students with the skills necessary to perform at the college level. This group will perform as part of the band at festivals, public concerts, and other events requiring instrumental ensembles. Members of this group also participate in marching band. Fees will be charged for summer band camp, symphonic band camp, and trips. Students may choose band or percussion but not both.

Jazz Ensemble-1 credit: 9th, 10th 11th 12th

G05H93 Auditions for admission are required. (see Dr. Long) This course satisfies the Fine Art requirement.

Contemporary Instrumental Ensemble courses can include jazz, rock, mariachi, chamber ensembles, and other courses outside of band and strings-specific courses. Courses help students perform a variety of contemporary styles, such as traditional jazz, jazz improvisation, rock, mariachi, chamber music, and others. At the same time, these courses cultivate students' technique on instruments appropriate to the style(s) performed—brass, woodwind, string, percussion instruments, and/or electronic. Advanced coursework provides students with opportunities for growth through rehearsal and performance, improvisation, or creating and performing their own compositions.

This course satisfies the Fine Art requirement.

The purpose of this course is to provide musical enrichment for students. The band will study literature from all eras and provide advanced students with the skills necessary to perform at the college level. The band will perform at festivals, public concerts, and other events requiring instrumental ensembles. Members of this group also participate in marching band. Fees will be charged for summer camp, symphonic band camp, and trips.

MUSICEXPLORATIONSINWORLDCULTURES-1 credit:9th, 10th11th12th.....G05H11

This course satisfies the Fine Art requirement. This music course is for the non-musician who enjoys listening to music, as well as those with a background of music study seeking information outside of the performance arena. This course explores the role music plays in our lives, a basic introduction to Music Theory, and an exploration of the evolution of Music from many different time periods and cultures. The course may include field trip(s).

DE Intro to Music: 1 credit:11th, 12th.....G05H54 *Prerequisite:* You must meet the APSU Dual Enrollment admissions criteria (3.0 HS GPA or 21 ACT Composite).

Music Appreciation introduces students to the discipline of music through listening, discussion, lectures, and analysis. The course traces the historical development of music with an emphasis on Western art music.

SCIENCE Recommended Science Course Sequences				
9th Grade		10th Grade		11th Grade
Physical Science	→	Chemistry	→	Biology I
Physical Science Hon	→ c	Chemistry I Honors	\rightarrow	Biology I Hon

PHYSICAL SCIENCE - 1 credit: 9th......G03H00

Physical Science is a *laboratory science course* that explores the relationship between matter and energy. Students investigate physical science concepts through an inquiry-based approach. Embedded standards for Inquiry, Technology & Engineering, and Mathematics are taught in the context of the content standards for Energy, Matter, Motion, and Forces. Emphasis will be placed on preparation for Chemistry.

PHYSICAL SCIENCE Hon - 1 credit: 9th

Physical Science is a *laboratory science course* that explores the relationship between matter and energy. Students investigate physical science concepts through an inquiry-based approach. Embedded standards for Inquiry, Technology & Engineering, and Mathematics are taught in the context of the content standards for Energy, Matter, Motion, and Forces. Emphasis will be placed on preparation for Chemistry.

BIOLOGY I-1 credit: 11thG03H03

Biology I is a course that introduces students to the study of living things at various levels of organization. Students will explore basic life processes. Topics covered are cells and cell processes, genetics, interactions, diversity, taxonomy, ecology, biological evolution and biotechnology. Biology I should provide students with the knowledge to make informed decisions about their bodies, their health and their world.

BIOLOGY I (HONORS)—1 credit: 11TH

This course covers the topics of cells and cell processes, genetics, interactions, diversity, taxonomy, ecology, biological evolution and biotechnology. The class moves at a faster pace and is more in depth that Regular Biology I. Students are expected to be self-motivated and to achieve a level of mastery of the subject material. Special emphasis is placed on problem solving and student participation. A project or paper is required to earn Honors points.

CHEMISTRY I—1 credit: 10thG03H12

This course is designed for students who realize that some knowledge of chemistry is vital to the consumer in our technological society. It attempts to familiarize the student with general chemical principles (such as those dealing with the re-activities of the elements and the general properties of solids, liquids, and gases) in an easier and slower fashion than Honors Chemistry. Problem solving and reasoning skills are still emphasized, and a good working knowledge of fundamental algebra is essential. Laboratory work will develop observation and interpretation skills.

<u>Pre-AP Chemistry—1 credit: 10^{th.....}G03H12-H</u> Prerequisite: Teacher recommendation from Physical Science.

This course is designed for students who are interested in science or health field careers. Since it emphasizes higher-order thinking skills, it also provides excellent preparation for most college work. A challenging course, it provides a general survey of chemistry with emphasis on problem-solving and reasoning skills. The re-activities of elements will be explored as well as the general properties of solids, liquids, and gases. Laboratory work will be provided for development of technique, observational ability, and interpretation. A working knowledge of algebra is essential. A project or paper is required to earn Honors points.

SCIENCE & MATHEMATICS FOCUS AREA COURSES, Elective Science Courses

PHYSICS (Honors)-1 credit: 12th G03H20-H

It provides a general survey of physics including the areas of mechanical physics, energy, heat, light, sound, and nuclear physics. Emphasis is placed on mathematical problem-solving in the analysis of observed physical phenomenon.

BIOLOGY II HONORS -1 credit: 12TH G03H09-H

A course for non-science majors. Topics covered include scientific methodology, the nature of living organisms, cell structure and function, cell chemistry and division, nature of heredity and gene action, the theory of evolution and principles of ecology.

SOCIAL STUDIES WORLD HISTORY & Geography—1 credit:

U.S. HISTORY & Geography --1 credit: 11th

U.S. HISTORY & Geography (HONORS)-1

<u>UNITED STATES HISTORY Dual Enrollment —</u> <u>1 credit: 11th 12thG04H48, G04H49</u> Pre-requisite: Students must meet the APSU Dual Enrollment admissions criteria of 3.0 HS GPA or 21 ACT Composite.

Students will earn college credit HIST 2010/2020 from

Austin Peay State University. There is a tuition fee associated with this class.

A survey of the social, cultural, economic, and political aspects of American life from the pre-Columbian period through the Civil War and Reconstruction. A study of the social, cultural, economic, and political aspects of American life from the Reconstruction period to the present.

U.S. GOV & Civics —1/2 credit: 12th......G04H12

United States Government provides a study of state and local governmental institutions as well as a thorough study of our national government. Emphasis is on the underlying principles, the processes involved, and the powers and people that comprise the three branches of government. Great stress is placed on the current political situation, events, and issues. Also, the historical background that has led us to where we are as a nation is examined.

U.S. GOV & Civics (HONORS)-1/2 credit:12th

G04H12-H Honors Government provides a more in-depth study of our national government and its institutions. At the end of the course, students will be able to recognize and analyze significant local and national political issues. Students will also be familiar with a variety of strategies for meaningful participation in the democratic process.

This course is a study of the market economy and the modified free enterprise system. Emphasis will be placed on the role of government and the individual in the system. Economic systems, supply and demand, business cycles, money, labor, government intervention, problems of scarcity, and international economics are some of the topics covered.

ECONOMICS (HONORS)-1/2 credit: 12th

AP Macroeconomics:....1 credit: 12th ...G04HC1

AP Macroeconomics is a college-level course that introduces students to the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination. It also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. ***EPSO: Students are eligible for college credit based on their score on the AP Exam and postsecondary institution requirements. There is an AP testing fee associated with this course.** <u>https://apcentral.collegeboard.org/courses</u>

AP U.S. Government and Politics-1 credit: 12th

AP U.S. Government and Politics provides a collegelevel, nonpartisan introduction to key political concepts, ideas, institutions, policies, interactions, roles. and behaviors that characterize the constitutional system and political culture of the United States. Students will study U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions among political institutions, processes, and behaviors. Underpinning the required content of the course are several big ideas that allow students to create meaningful connections among concepts throughout the course. Students will also engage in skill development that requires them to read and interpret data, make comparisons and applications, and develop evidence-based arguments. In addition, they will complete a political science research or applied civics project.

*EPSO: Students are eligible for college credit based on their score on the AP Exam and postsecondary institution requirements. There is an AP testing fee associated with this course. <u>https://apcentral.collegeboard.org/courses</u>

HUMANITIES FOCUS AREA COURSES, Elective Language Arts/Social Studies

<u>YEARBOOK—1 credit: 10th 11th, 12thG01H15</u> Make application for this class with Mrs. Cassie Wright, Room 411

Yearbook is an elective course that gives students marketable experience in print media publishing. This course solely works toward the completion and selling of a large finished product, Creek Wood High School's yearbook. Yearbook class is different from normal classes in high school in that it is a real business maintaining an account that must balanceout at the end of the school year. In class, students compose, construct, and edit all elements of computerized text layout, graphic art, and digital photography. Students work on many clerical operations, make announcements, maintain signs, conduct student polls, take photos, and write articles. The course in turn covers many of the content standards and objectives encountered in English courses, as does it also for objectives of art, business, and computer technology courses. Because Yearbook is a monetary business, students must cooperatively work with others, must be hardworking, and be eager to be creative. Out of class and after school, students will shoot digital photos, sell and design advertising, and distribute yearbook order forms. Students are responsible for the proper care and handling of all equipment used in the course. Pairs or groups of students should expect to spend some of their time before and after school as well working on computerized yearbook pages. This course also examines legal and ethical issues of media law and copyright. Help capture the moments of your high school career while learning marketable skills for the workplace!

CREATIVE WRITING—1/2 credit: 10th 11th

ADV CREATIVE WRITING-1/2 credit: 10th 11th

AP Modern World—1 credit: 10th 11th 12th

Offered in alternating years.

AP Modern World History students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, continuity, and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

*EPSO: Students are eligible for college credit based on their score on the AP Exam and postsecondary institution requirements. There is an AP testing fee associated with this course. <u>https://apcentral.collegeboard.org/courses</u>

AP Human Geography-1 credit: 10th 11th 12th

Offered in alternating years.

Explore how humans have understood, used, and changed the surface of Earth. You'll use the tools and thinking processes of geographers to examine patterns of human population, migration, and land use. This course is an Advanced Placement class, and course work will mimic that of an introductory geography course in college. This course also serves as an ESPO (Early Post-Secondary Opportunity).

*EPSO: Students are eligible for college credit based on their score on the AP Exam and postsecondary institution requirements. There is an AP testing fee associated with this course. <u>https://apcentral.collegeboard.org/courses</u>

AP EUROPEAN HISTORY-1 credit: 10th 11th

This course allows the student to examine European history since 1450 and introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. The goals of AP European History are to develop an understanding of some of the principal themes in modern European history, to analyze historical evidence and interpretation, and to express historical understanding in writing.

*EPSO: Students are eligible for college credit based on their score on the AP Exam and postsecondary institution requirements. There is an AP testing fee associated with this course. <u>https://apcentral.collegeboard.org/courses</u>

*EPSO: Students are eligible for college credit based on their score on the AP Exam and postsecondary institution requirements. There is an AP testing fee associated with this course. <u>https://apcentral.collegeboard.org/courses</u>

SOCIOLOGY: --1/2 credit: 9th, 10th, 11th, 12th

SPANISH III Honors —1 credit: 12thG24H06 Pre-requisite: Recommendation of Spanish II

teacher

Spanish III is a continuation of study and use of the language as a means of communication. The subjunctive is taught to provide fluency in the language. Spanish III is designed for those students who wish to polish fine points of grammar, build vocabulary, and increase fluency. Culture of the Spanish speaking countries is continued with collaborative projects in the target language.

Prerequisite: Recommendation of French II teacher French III is a continuation of the study and use of French as a global language and the numerous cultures from around the world that use French in their everyday lives. More detailed vocabulary, grammar, and cultural topics will be introduced to build and expand upon the foundation of the language acquired in levels I and II with an emphasis on fluency and immersion. We will continue to study French and francophone societies and their impact on our world through communication, cultural comparisons, and a mixture of independent and collaborative study in French

THEATRE ARTS

Theatre: Acting & Perfomance I—1 credit: 9th 10th 11th 12th G05HE3

This course satisfies the Fine Art requirement. Theatre Arts I is a beginning drama course designed to help students develop acting skills by participating in theatre games, improvisation, scenes, monologues, and productions. We will also learn about the origins of drama, study significant plays and playwrights, write original scenes, and practice voice, movement, and characterization.

Musical Theater courses provide students with the opportunity to explore and/or participate in various aspects of musical theater, including auditioning, singing, acting, and dancing. These courses review the history and evolution of musical theatre, its literature and artists, and styles of composition and vocal presentation. Students work collaboratively on performances, including solo, duet, and ensemble work.

<u>Theatre: Production/Directing I-II—2 credits:</u> 10th, 11th, 12th,G05HF1, G05HF2

Production/Directing courses focus on developing students' skills in translating a script into a final production. Courses enable each student to create an artistic vision and develop a personal aesthetic. These courses may expose students to different types of theatrical techniques and traditions. They also provide students with opportunities to direct the performances of others (either in scenes or in a full production.)

<u>Theatre:Technical/Stagecraft I-II – 2 credits:</u> 10th, 11th, 12th,G05HE7, G05HE8

Technical Theatre/Stagecraft courses provide students with an understanding of the various aspects of theatrical production, including lighting, costuming, sound, set construction, makeup, stage management, and the use of computer and media-based applications. These courses prepare students to engage in the hands-on application of these production elements in design and technology courses.

WELLNESS, Strength & Conditioning for Athletes, AND PHYSICAL EDUCATION LIFETIME WELLNESS 9th 10th 11th 12th --1

LIFETIME SPORTS- 10th, 11th, 12th - 1/2

This course is designed to meet needs of all students who would like to explore lifetime sports and activities. Activities to be offered will have carry over value, affording people the opportunity for lifetime physical well-being.

STRENGTH & CONDITIONING for Any Athlete

10th, 11th, 12th.....G08H01 Pre-requisite: Athletic Strength and Conditioning classes are only available to students participating in JV or Varsity school Athletic Programs.

STRENGTH & CONDITIONING for BASEBALL/SOFTBALL - 1 credit - ...G08H01-BS Prerequisite: Approval of head coach

STRENGTH & CONDITIONING for JV FOOTBALL1 credit:9th......G08H01-JVF

Prerequisite: Approval of head coach



The CWHS Junior Reserve Officer Training Corps (JROTC) A Character and Leadership Development Program Curriculum focus: Citizenship, Language Arts, Self-Regulation, Physical Fitness, Public Speaking, Leadership Skills, Civics Thinking and Reasoning, Health, Economics, Life Skills Geography, Life Work, Working with Other U.S. History

JROTC Enrollment Requirements:

Enrollment in this program is voluntary. Students/prospective cadets must be enrolled in and attending CWHS as a full-time student. Once enrolled, Cadets must maintain an acceptable standard of academic achievement and standing as required by the JROTC Department and CWHS. Cadets must also maintain an acceptable standard of conduct, comply with the JROTC grooming standards and be physically capable to participate in the physical education program. Cadets must agree to wear the Army JROTC uniform one school day per week.

JROTC Leadership and Education (LET) – G08H04 Level 1 – 1st Year: 1 credit

LET 1 is the entry-level course of the Junior Reserve Officer Training Corps Program and teaches Cadets the value of citizenship, leadership service to the community, personal responsibility and a sense of accomplishment while instilling in them self-esteem, teamwork, and self-discipline. The program promotes graduation from high school by providing curriculum, Leadership and Education Training (LET), and rewarding opportunities that benefit the student, community and the nation both in the present and the future. LET 1 Cadets can expect to assume entry-level leadership positions in CWHS's Corps of Cadets.

JROTC Leadership and Education (LET) – G08H05 Level 2 – 2nd Year: 1 credit

Prerequisite: Successful completion of LET Level 1 LET 2 of the Junior Reserve Officer Training Corps Program broadens a Cadet's knowledge and understanding of citizenship, leadership, service to the community and personal responsibility. The curriculum expands beyond the LET 2 focus areas and includes, Health/Lifestyle Awareness, First Aid, Drug Awareness, Map Reading/Orienteering, Geography, Environmental Awareness, Citizenship Skills, and the History and Operations of the U.S. Government. LET 2 Cadets continue to build self-esteem, teamwork, and selfdiscipline and work to assume greater positions of responsibility as leaders in CWHS's Corps of Cadets.

JROTC Leadership and Education (LET) – ...G08H06 Level 3 –3rd Year: 1 credit

Prerequisites: Successful completion of LET 1,LET 2 LET 3 of the Junior Reserve Officer Training Corps sharpens a Cadet's knowledge and understanding of leadership principles, planning, goal-setting, and leadership strategies, as well as decision making and problem solving skills. LET 3 Cadets develop stronger writing and presentation skills, conflict management skills and begin exploring time management, career planning and financial planning strategies. LET 3 Cadets continue to develop as leaders, both physically and mentally and work to assume greater positions of responsibility as leaders in CWHS's Corps of Cadets. (CERT) training. The course content includes fire safety, light search and rescue, team organization, disaster psychology, potential terrorist scenarios and disaster medical operations.

Senior Let IV Cadets – register for both numbers: C15H22DE & G08H07 – This will equal 1 credit. Non-Dual option – request G08H07FY

Dual Enrollment - Introduction to Emergency Management 12th; 1/2 credit, semester 2

only:.....C15H22DE Students must meet the APSU Dual Enrollment admissions criteria of 3.0 HS GPA or 21 ACT Composite. Dual Enrollment credit through Austin Peay State University PM 2000: Introduction to Emergency Management

This course develops effective leadership, communications, planning, and teamwork skills. The curriculum centerpiece for their course is the Federal Emergency Management Administration's (FEMA) Community Emergency Response Team

JROTC Leadership and Education (LET) –G08H07 Level 4 –4th Year: 1/2 credit Propagation of LET 1, 2 and 2

Prerequisites: Successful completion of LET 1, 2 and 3

LET 4 of the Junior Reserve Officer Training Corps Program is the capstone level of a Cadet's high school JROTC leadership and education. Cadets further expand their knowledge and understanding of leadership, leadership strategies and principles, and work to enhance their decision making and problem solving skills. LET 4 Cadets receive additional instruction in Financial Planning and develop skills in teaching and delivering instructions, to include lesson plans, presentations, and the use of Thinking Maps and Graphic Organizers. LET 4 Cadets, having benefited from 3 years of experience in the JROTC Program; usually assume the top leadership positions in the CWHS Corps of Cadets. Throughout the LET 4 year, Cadets earnestly plan and prepare for education opportunities after high school graduation.

DRONES—1 credit: 9th 10th 11th 12th C20H29 Unmanned Aircraft Systems Pilot is a course intended to prepare students for positions as commercial drone pilots for small Unmanned Aircraft Systems (sUAS). The course teaches students the knowledge and skills needed to successfully pilots UAS (less than 55 lbs.). Students in Unmanned Aircraft Systems Pilot will receive rigorous instruction in preparation to take the Federal Aviation Administration (FAA) Remote Pilot Certification (Part 107) written exam also called the aeronautical knowledge exam. The course places an emphasis on applicable regulations, operating requirements, weather impacts, charts, aeronautical decision-making, and safety.



CREEK WOOD HIGH SCHOOL

Career and Technical courses offer students the opportunity to learn and use real-world skills in the classroom. Students will then be able to utilize these skills in the workplace after graduation, or pursue additional education and training at a post-secondary institution. Taking Career and Technical courses also gives each student a better understanding about the different career choices that are available after they complete high school. Explore a Career and Technical program and find your passion!

Course offerings are available in the following focus areas:

- 1) Advanced Manufacturing Technology
 - a. Mechatronics
 - b. Welding
- 2) Agriculture
 - a. Veterinary and Animal Science
 - b. Horticulture Science
- 3) Architecture and Construction a. Structural Systems
- 4) Arts, Audio/Visual Technology & Communications
 - a. Audio/Visual Production
- 5) Business Management and Administration
 - a. Business Management

- 6) Education and Training
 - a. Teaching as a Profession (K-12)
- 7) Health Science
 - a. Emergency Services
 - b. Therapeutic Services
- 8) Civics, Public Service & Safety
 - a. Law Enforcement Services
 - b. Fire Management Services
- 9) Digital Technology a. Networking Systems b. Coding
- 10) Heating, Ventilation, Air Conditioning / Refrigeration
- 11) Agriculture Systems, Diesel Power Equipment

**Depending upon space availability, there will be a limited number of seats available for classes at the Tennessee College of Applied Technology. Students may have the option to attend these classes for dual credit. Arrangements must be made through the school guidance counselor.

******Nashville State Community College offers dual credit opportunities for students to receive college credit after completing a Career and Technical course. For more information about specific dual credit opportunities, see the list at the end of the Career and Technical section of this guid

ADVANCED MANUFACTURING TECHNOLOGY

Student Organization - Skills USA

The Mechatronics program of study is designed for students interested in becoming a mechatronics technician. electrical technician. mechanical engineering technician, robotics technician, or mechatronics engineer. Course content focuses on the components of manufacturing systems, collection and analysis of quality data, electronics, mechanics, fluid power systems, computers and control systems, and technical documentation and troubleshooting. Upon completion of this POS, students will be prepared to pursue industry certification at a technology college or more advanced coursework at a two-year or four-year postsecondary institution.

Mechatronics Engineer Mechatronics Technician Maintenance Technician Machinist Electrical Engineer Automation Technician Quality Technician Line Specialist

MECHATRONICS PROGRAM OF STUDY

PRINCIPLES OF MANUFACTURING NON-

DUAL –1credit.....C13H05 Principles of Manufacturing is designed to provide students with exposure to various occupations and pathways in the Advanced Manufacturing career cluster. such as Machining Technology, Electromechanical Technology, Mechatronics, and Welding. Throughout the course, students will develop an understanding of the general steps involved in the manufacturing process and master the essential skills to be an effective team member in a manufacturing production setting. Course content covers basic quality principles and processes, blueprints and schematics, and systems. Upon completion of this course, proficient students will advance from this course with a nuanced understanding of how manufacturing combines design and engineering, materials science, process technology, and quality.

<u>MECHATRONICS I DE – 10th, 11th, 12th: 1 credit.....C13H04, C13H32 MECHATRONICS I NON DUALC13H16</u>

Prerequisite: Principles of Manufacturing Mechatronics I is an applied course in the manufacturing cluster for students interested in learning more about careers as a mechatronics technician, maintenance technician, electromechanical technician, and manufacturing

engineer. This first of two courses covers basic electrical and mechanical components of mechatronics systems as well as their combined uses with instrument controls and embedded software designs. Upon completion of this course, proficient students are able to describe and explain basic functions of physical properties and electrical components within a mechatronic system. They can logically trace the flow of energy through a mechatronic system and can communicate this process to others. They know how to effectively use technical documentation such as data sheets, schematics, timing diagrams, and system specifications to troubleshoot basic problems with equipment. Finally, they develop strategies to identify, localize, and correct malfunctioning components and equipment.

(This class is a dual enrollment class for 10th, 11th and 12th grade through Tennessee College of Applied Technology at no cost to students.)

MECHATRONICS II DE – 11th, 12th:

<u>1 credit.....C13H36, C13H37</u> <u>MECHATRONICS II NON DUAL.....C13H17</u> Prerequisite: Principles of Manufacturing,

Mechatronics I

Mechatronics II is an advanced course in the manufacturing career cluster for students interested in learning more about such careers as mechatronics technician. maintenance technician, or electromechanical technician. Following the groundwork of mechanics and electronics laid in Mechatronics I, this course covers basics of pneumatic, electro pneumatic, and hydraulic control circuits in a complex mechatronic system. In addition, the course addresses basic digital logic and programmable logic controllers (PLCs) employed in the mechanical, electronic, and control systems in a mechatronics system. Upon completion of this course, proficient students are able to explain the interrelationships of components and modules within a complex mechatronic system. They understand the differences between hydraulic and pneumatic fluid power and can explain the scientific principles that apply. They also use technical documentation (such as datasheets, circuit diagrams, displacement step diagrams, timing diagrams, and function charts) to troubleshoot and resolve malfunctioning pneumatic and hydraulic components and circuits. They demonstrate understanding of the role of programmable logic controllers (PLC) in mechatronic systems and the ability to write, debug, and run basic ladder logic. (This class is a required dual enrollment class through Tennessee College of Applied Technology at no cost to students.)

WORK-BASED LEARNING; Mechatronics: 12th

2 or 3 credits:.....C13H42 Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application. Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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.

WELDING PROGRAM OF STUDY

<u>WELDING I DE –9th, 10th, 11th, 12th: 1 credit.....C13H03, C13H18 PRINCIPLES OF MANUFACTURING NON-</u>

DUAL- 1 redit.....C13H05 Principles of Manufacturing is designed to provide students with exposure to various occupations and pathways in the Advanced Manufacturing career cluster. such Machining as Technology, Electromechanical Technology, Mechatronics, and Welding. Throughout the course, students will develop an understanding of the general steps involved in the manufacturing process and master the essential skills to be an effective team member in a manufacturing production setting. Course content covers basic quality principles and processes, blueprints and schematics, and systems. Upon completion of this course, proficient students will advance from this course with a nuanced understanding of how manufacturing combines design and engineering, materials science, process technology, and quality.

<u>WELDING II DE – 10th, 11th, 12th:</u> <u>1 credit.....C13H38, C13H39</u> <u>WELDING I NON DUAL FOR –10th.....C13H12</u>

Prerequisite: Principles of Manufacturing Welding I is designed to provide students with the skills and knowledge to effectively perform cutting and welding applications used in the advanced manufacturing industry. Proficient students will develop proficiency in fundamental safety practices in welding, interpreting drawings, creating computer aided drawings, identifying and using joint designs, efficiently laying out parts for fabrication, basic shielded metal arc welding (SMAW), mechanical and thermal properties of metals, and quality control. Upon completion of this course, proficient students will understand the requirements to pursue the American Welding Society (AWS) Entry Welder qualification and examination and will be prepared to undertake more advanced welding coursework. *Due to space limitations, this class is limited to 12 students. Students must be approved by the welding instructor.* (*This class is a dual enrollment class for 10th, 11th and 12th grade through Tennessee College of Applied Technology at no cost to students.*)

WELDING III DE – 11th, 12th:

<u>1 credit.....C13H44, C13H45</u> <u>WELDING II NON DUAL FOR –11th...C13H10</u> <u>Prerequisite: Principles of Manufacturing,</u> <u>Welding I</u>

Welding II is designed to provide students with opportunities to effectively perform cutting and welding applications of increasingly complexity used in the advanced manufacturing industry. Proficient students will build on the knowledge and skills of the Welding I course and apply them in novel environments, while learning additional welding techniques not covered in previous courses. Specifically, students will be proficient in (1) fundamental safety practices in welding, (2) gas metal arc welding (GMAW), (3) flux cored arc welding (FCAW), (4) gas tungsten arc welding (GTAW), and (5) quality control methods. Upon completion of the Welding II course, proficient students will be eligible to complete the American Welding Society (AWS) Entry Welder qualification and certification. Due to space limitations, this class is limited to 12 students. Students must be approved by the welding instructor. (This class is a required dual enrollment class through Tennessee College of Applied Technology at no cost to students.)

WORK-BASED LEARNING; Welding: 12th: 2 or

<u>3 credits</u>.....C13H43 Prerequisite: Welding I & II, Must do the selection process. See Mr. Hardin for application and information.

Manufacturing Practicum is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous Advanced Manufacturing courses within a professional, working environment. While continuing to add to their technical skillsets, students in this course assume increasing responsibility for overseeing manufacturing processes and managing complex projects. Specifically, proficient students will be able to work in teams to plan the production of a sophisticated product; develop troubleshooting and problem solving mechanisms to ensure that projects run smoothly; analyze output and compile professional reports; and connect practicum activities to career and postsecondary opportunities. For all projects undertaken in this course, students are expected to follow the focus area in their chosen program of study (Machining Technology, Industrial Maintenance Technology, Mechatronics, or Welding), while also refining skills previously acquired to achieve deeper levels of mastery. Upon completion of the practicum, proficient students will be prepared for postsecondary study and career advancement in their chosen focus area.

AGRICULTURE

Student Organization -- Future Farmers of America FFA

This Agriculture program of study prepares students for careers in the planning, implementation, production, management, processing and/or marketing of agricultural commodities and services. This includes food, fiber, wood products, natural resources, horticulture, and other plant and animal products. It also includes related professional, technical and educational services.

Employment opportunities will continue to increase for those who provide and market an expanding array of food, forest, and veterinary medical consumer products to a growing world population. Continued globalization of the food, agricultural and natural resources system will increase opportunities for graduates who understand the socio-economic factors that define international markets. Graduates who know how to satisfy the diverse consumer needs and preferences in different cultures, and who have the language skills to communicate effectively, will have the best opportunities to be employed by the growing number of multinational businesses.

Animal breeder/Animal	Far
trainer	
Greenhouse manager	W
Groundskeeper	E
Fish and game warden	
Landscape Designer	
Soil Conservationist	
Animal Groomer	

Farm Owner and Manager

Water Quality Specialist Environmental Analyst Florist Extension Agent Veterinarian Vet Technician

VETERINARY AND ANIMAL SCIENCE PROGRAM OF STUDY

science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology plays in the twenty-first century. In addition, it serves as the first course for all programs of study in the Agriculture, Food, & Natural Resources cluster. Upon completion of this course, proficient students will be prepared for success in more advanced agriculture and science coursework. This course counts as a lab science credit toward graduation requirements.

<u>SMALL ANIMAL SCIENCE – 1 credit..C18H20</u> Prerequisite: Agriscience * Offered on alternating years

Small Animal Science is 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 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.

LARGE ANIMAL SCIENCE - 1 credit...

Prerequisite: Agriscience * Offered on alternating years

Large Animal Science 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. Upon completion of this course, proficient students will be prepared for success in the level-four Veterinary Science course and further postsecondary training.

Offered as a Dual Enrollment Credit Course through MTSU Agriculture Department.

<u>VETERINARY SCIENCE – 1 credit.......C18H21</u> Prerequisite: Agriscience

Veterinary Science 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. Upon completion of this course, students will be able to pursue advanced study of veterinary science at a postsecondary institution.

WORK-BASED LEARNING; Vet and Animal

Science – 2 or 3 credits: 12thC18H66 Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application. Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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.

HORTICULTURE SCIENCE PROGRAM OF STUDY

AGRISCIENCE – 1 credit.....C18H19

Agriscience 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 plays in the twenty-first century. In addition, it serves as the first course for all programs of study in the Agriculture, Food, & Natural Resources cluster. Upon completion of this course, proficient students will be prepared for success in more advanced agriculture and science coursework. This course counts as a lab science credit toward graduation requirements.

LANDSCAPE AND TURF SCIENCE -1

<u>credit.</u> Prerequisite: Agriscience * Offered on alternating years

Landscaping and Turf Science is a 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.

GREENHOUSE MANAGEMENT –

<u>1 credit......C18H17</u> *Prerequisite: Agriscience* * Offered on alternating years

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. 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.

Offered as a Dual Enrollment Credit Course through MTSU Agriculture Department.

WORK-BASED LEARNING; Vet and Animal Science – 2 or 3 credits: 12thC18H66 Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application. Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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.

CONSTRUCTION

Student Organization – Skills USA

The Architecture and Construction program of study prepares students for careers in designing, planning, managing, building and maintaining the building environment. People employed in this cluster work on new structures, restorations, additions, alterations and repairs.

Architecture and construction comprise one of the largest industries in the United States. Based on the latest statistics, this career cluster has 13.8 million jobs. In the next few years, many new jobs will be added and many employment opportunities will result from the need to replace experienced workers who leave jobs.

Architect Civil engineer Contractor Surveyor Heavy equipment operator Drywall installer Electrician Plumber

STRUCTURAL SYSTEMS PROGRAM OF STUDY

DE FUNDAMENTALS OF CONSTRUCTION I-II 9th, 10th, 11th, 12th:C17H02, C17H32 FUNDAMENTALS OF CONSTRUCTION Non-Dual – 9th, 10th, 11th, 12th: 1 credit....C17H15

Fundamentals of Construction is 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 **Course fee \$5.00**

Required Prerequisites: Fundamentals of Construction, Algebra I

Structural Systems I is the second course in the Structural Systems program of study intended to prepare students for careers in residential and commercial carpentry by focusing on building framing and construction techniques. Upon completion of this course, proficient students will be able to demonstrate knowledge and skill in framing floors, walls, ceilings, roofs, and stairs. Students will develop the ability to safely employ tools and interpret construction drawings to complete projects. Emphasis is placed on proper measurement techniques and the application of mathematical concepts. Standards in this course also include foundational principles of the construction industry, as well as an introduction to business and project management. Throughout the course, students will compile artifacts for inclusion in their portfolios, which they will carry with them through the entire program of study. Course fee \$5.00

STRUCTURAL SYSTEMS V-VI 11th, 12th:

Structural Systems II is the third course in the Structural Systems program of study designed to prepare students for careers in construction by building on the foundational skills learned in Fundamentals of Construction and Structural Systems I. This course focuses on advanced framing techniques, the physics of structural loads, and the application of interior and exterior finishes. Upon completion of this course, proficient students will be able to demonstrate knowledge and skills in later phases of building construction, including roofing systems, siding, thermal and moisture protection components, drywall installation, and trim work. Students will safely employ tools and interpret construction drawings to complete projects, while implementing material estimating procedures. Emphasis is placed on the proper application of measurement techniques and mathematical concepts. Standards in this course also expand on principles of the construction industry and provide a deeper understanding of business and project management strategies. Throughout the course, 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. Course fee \$5.00

WORK-BASED LEARNING; Structural Systems

<u>-2 or 3 credits: 12thC17H48</u> Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application. Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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.

ARTS, ENTERTAINMENT, & DESIGN

Student Organization – Technology Student Association (TSA)

Individuals that work in the AV communications industry manufacture, sell, rent, design, install, integrate, operate, and repair the equipment of audiovisual communications. They are involved in the presentation of sound, video, and data to groups in such venues as corporate boardrooms, hotels, convention centers, classrooms, theme parks, stadiums, and museums. The major activity sectors in the AV communications industry are distributive service firms (AV dealers, rental companies, consultants, designers, and related firms), manufacturers of AV presentations and communications products, and large end-users.

Most observers expect the job growth rate within AV industries to be at 20-30 percent for the foreseeable future. In just the AV systems technician field, the industry could expect to add 20,600 jobs annually.

A/V Technician Sound Engineer Production Specialist Video Production Assistant Light and Sound Technician A/V Installation

A/V PRODUCTION I – 1 credit.....C11H01

A/V Production I is a foundational course in the Arts, A/V Technology, & Communications cluster for students interested in A/V (audio/visual) production occupations. Upon completion of this course, proficient students will be able to explain and complete the phases of the production process including pre-production, production, and postproduction. Students will establish basic skills in operating cameras, basic audio equipment, and other production equipment. Standards in this course include career exploration, an overview of the history and evolution of A/V production, and legal issues affecting A/V production. In addition, students will begin compiling artifacts for inclusion in a portfolio, which they will carry with them throughout the full sequence of courses in this program of study

<u>A/V PRODUCTION II (6050) – 1 credit...C11H02</u> Prerequisite: A/V Production I

A/V Production II is the second course in the A/V Production program of study intended to prepare students for a careers in audio/visual production. Building on knowledge acquired in A/V Production I, this course advances technical skill in utilizing industry equipment related to lighting and audio, and it places special emphasis on the research and technical writing involved in planning productions. Upon completion of this course, proficient students will be able to plan, capture, and edit research-based productions of increasing complexity, individually and through collaboration in teams. In addition to more robust career preparation, standards in this course include an investigation of concerns affecting A/V production businesses, such as ethical and legal issues, technology, funding, and the organization of professional roles in various industries. 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.

<u>A/V PRODUCTION III – 1 credit......C11H03</u> Prerequisite: A/V Production II

A/V Production III is an applied-knowledge course intended to prepare students to pursue careers and postsecondary learning in audio/visual production. Students in this course will apply knowledge and skills from previous courses in the program of study to create productions both independently and in teams, with the option of participating in a work-based learning experience for additional credit. Students will use industry equipment and technology to complete all phases of the production process, including planning, coordinating, capturing, editing, and distributing productions. Standards in this course include policies and regulations, independent and collaborative productions, distribution of media, and production of live events. 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. Upon completion of this course, proficient students will be prepared for a career in audio/visual production or to transition to a postsecondary program for further study.

APPLIED ARTS PRACTICUM -

BUSINESS MANAGEMENT AND ADMINISTRATION

Student Organization - Future Business Leaders of America FBLA

The Business, Management and Administration program of study prepares students for careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service and communication.

The business management and administration services industry is projected to be one of the fastest growing through the year 2020. Nearly half of all jobs are in managerial and professional occupations, and nearly one-fourth of all workers are selfemployed. The business management and administration services industry is one of the highestpaying industries. In the next few years, many new jobs will be added and many openings will result from the need to replace experienced workers who leave jobs.

Accountant Office Clerk Human Resources Manager Administrative Assistant Management Analyst Marketing Manager Receptionist Information Systems Manager

BUSINESS MANAGEMENT AND ADMINISTRATION PROGRAM OF STUDY

INTRODUCTION ТО BUSINESS & MARKETING - 1 credit;C12H26 Introduction to Business and Marketing is an introductory course designed to give students an overview of the Business Management and Administration, Marketing, and Finance career clusters. The 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. Upon completion of this course, proficient students will be equipped with the foundational skills to succeed in any of the Business, Marketing, or Finance programs of study and will be prepared to make an informed decision regarding which pathways they would like to pursue in high school.

BUSINESS COMMUNICATIONS –

<u>1 credit.....C12H16</u> Prerequisite: Introduction to Business & Marketing.

Business Communications is a course designed to develop students' effective oral and electronic business communications skills. This course develops skills in multiple methods of communications, including social media, as well as electronic publishing, design, layout, composition, and video conferencing. Upon completion of this course, proficient students will be able to demonstrate successful styles and methods for professional business communications using the proper tools to deliver effective publications and presentations.

BUSINESS MANAGEMENT -

<u>1 credit.....C12H17</u> Prerequisite: Business Communications

Business Management 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. Upon completion of this course, proficient students will be able to complete a full review of an existing business and offer recommendations for improvement as would a management consultant.

BUSINESS MANAGEMENT DE I-II

<u>.....C12H01, C12H47</u> <u>INTRO TO BUSINESS – NSCC – BUSN 1305</u> Prerequisite: Business Communications

An introduction to the private enterprise system. Topics covered include forms of business organizations, business finance, human_resource management, production, entrepreneurship, business ethics, marketing, and the changing business environment.

WORK-BASED LEARNING; Business Management Practicum – 2 or 3 credits: 12th

.....C12H61 Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application.

Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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 AND TRAINING

Student Organization—Family, Career, and Community Leaders of America FCCLA

This Career Cluster prepares learners for careers in planning, managing and providing education and training services and related learning support services. Millions of people each year prepare for careers in education and training in a variety of settings that offer academic instruction, vocational and technical instruction, and other education and training services. A growing emphasis on improving education and making it available to more Americans will increase the overall demand for workers in the Education and Training Cluster. Employers are expected to devote greater resources to job-specific training programs in response to the increasing complexity of many jobs, the aging of the work force, and technological advances that can leave employees with obsolete skills. This will result in particularly strong demand for training and development specialists across all industries.

E Elementary School Teacher High School Teacher School Administrator Corporate Trainer Child Care Worker College Professor Physical Trainer Preschool Teacher

TEACHING AS A PROFESSION (K-12) PROGRAM OF STUDY

<u>FUNDAMENTALS OF EDUCATION – 1</u> credit...C32H33

Fundamentals of Teaching is a foundational course in the Education and Training career cluster for students interested in learning more about becoming a school counselor, teacher, librarian, or speech-language pathologist. Upon completion of this course, proficient students will gain knowledge in the history of education in the United States, careers in education, and the influence of human development on learning. Artifacts will be created for inclusion in a portfolio, which will continue throughout the full sequence of courses.

TEACHING AS A PROFESSION I -

<u>1 credit.....C32H01</u> Prerequisite: Fundamentals of Teaching

Teaching as a Profession I (TAP I) is an intermediate course for students interested in learning more about becoming a school counselor, teacher, librarian, or speech-language pathologist. This course covers the components of instruction, teaching strategies, types of assessments, student learning, special populations, and educational technology. Students will conduct observations of educators at work and create artifacts for a course portfolio, which will continue with them throughout the program of study. Upon completion of this course, proficient students will have a fundamental understanding of instructional strategies needed for becoming an educator.

TEACHING K-12 I/II Dual Enrollment-

<u>1 credit.....C32H04, C32H05</u> <u>Prerequisite: Teaching as a Profession I</u> Students must meet the APSU Dual Enrollment admissions criteria.

Teaching as a Profession II (TAP II) is an appliedknowledge course for students interested in learning more about becoming a teacher, school counselor, librarian, or speech-language pathologist. This course covers classroom management, concepts of higher order thinking, differentiating instruction, and strategies of effective classroom planning. Students in this course will demonstrate their skills in laboratory settings while building a course portfolio of work, which will carry with them throughout the program of study.

WORK-BASED LEARNING: Teaching – 2 or 3

<u>credits: 12th</u>......C32H36 Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application. Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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.

HEALTHCARE AND HUMAN SERVICES

Student Organization—Health Occupation Students of America - HOSA

Health Services is one of the largest industries in the country, with more than 11 million jobs, including the self-employed. The health services industry includes establishments ranging from small-town private practice physicians who employ only one medical assistant to busy inner city hospitals that provide thousands of diverse jobs. More than half of all non-hospital health service establishments employ fewer than five workers. On the other hand, almost two-thirds of hospital employees were in establishments with more than 1,000 workers.

Wage and employment in the health services industry is projected to increase more than 25 percent through 2010, compared with an average of 16 percent for all industries. Employment growth is expected to account for about 2.8 million new jobs.

Nurse	Ultrasound Technician
Dentist	Medical records
	Administrator
EMT(Paramedic)	Nursing Assistant
Pharmacist	First-Responder
Health Educator	Radiology Technician

EMERGENCY SERVICES PROGRAM OF STUDIES

HEALTH SCIENCE EDUCATION –

<u>1 credit.....C14H14</u>

Health Science Education 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 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 healthcare skills. This course will serve as a strong foundation for all of the Health Science programs of study.

Course fees are \$5.00

ANATOMY AND PHYSIOLOGY -

<u>1 credit.....C14H09</u> Prerequisite: Health Science Education

Anatomy and Physiology 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. **Course fees are \$25.00**

EMERGENCY MEDICAL SERVICES -

<u>1 credit.....C14H13</u> Prerequisite: Health Science Education, Anatomy and Physiology

Emergency Medical Services is a capstone course designed to prepare students to pursue careers in the fields of emergency medicine. Upon completion of this course, proficient students will be able to: identify careers and features of the EMS system; define the importance of workforce safety and wellness; maintain legal and ethical guidelines; correlate anatomy and physiology concepts to the patient with a medical or traumatic injury; and perform EMS skills with a high level of proficiency. If taught with an EMT instructor, students will be given the opportunity to sit for the National Emergency Medical Responder certification. In addition, students will continue to add artifacts to a portfolio, which they will continue to build throughout the program of study. Each standard presumes that the expected knowledge and behaviors are within the scope of practice for that EMS licensure level, as defined by the National EMS Scope of Practice Model. Each competency applies to patients of all ages, unless a specific age group is identified. The standards also presume there is a progression in practice from the Emergency Medical Responder level to the Paramedic level. The descriptors used to illustrate the increasing complexity of knowledge and behaviors through the progression of licensure levels originate, in part, from the National EMS Scope of Practice Model. Note: If this course is taught for EMR certification, the program must be approved by the TN Department of Health, Office of Emergency Medical Services. Students enrolled in this course must be 17 years old before the course concludes.

Course fees are \$25.00

MEDICAL THERAPEUTICS –

1 credit......C14H15

Prerequisite: Health Science Education

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.

EMT Practicum: Dual Enrollment (Columbia State) –4 credits:12thC14H04, C14H29, C14H35, C14H36

Please see Heather Bradley, for an application. Emergency Medical Services Practicum is a capstone course in the Emergency Services program of study 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 Emergency Services program of study. 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.

EMT – Students may earn 16 college credit hours through Columbia State. See Ms. Bradley for further information. Class is limited to 15 students, 12th grade only.

NOTE: Students must apply and be admitted to

Columbia State Community College. Admission to this class is subject to junior year interview process, teacher evaluations, GPA and attendance rate. Students must maintain 90% attendance while participating in EMT DE.

THERAPEUTIC SERVICES PROGRAM OF STUDY

HEALTH SCIENCE EDUCATION –

Course fees are \$5.00

ANATOMY AND PHYSIOLOGY -

<u>1 credit.....C14H09</u>

Prerequisite: Health Science Education Anatomy and Physiology 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. Course fees are \$25.00

MEDICAL THERAPEUTICS –

<u>1 credit.....C14H15</u> Prerequisite: Health Science Education

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.

CLINICAL INTERNSHIP -

2 credits: 12th......C14H11 Prerequisites: Students must have successfully completed a course in Medical Therapeutics, must have a physical with a negative TB test; must take the HBV vaccine; and must provide their own clinical uniforms and transportation to clinical site.

Clinical Internship is a capstone course and workbased learning experience designed to provide students with real-world application of skills and knowledge obtained in a pre-requisite Health Science course. Upon completion of this course, proficient students will be able to pursue certification in the prerequisite course of Cardiovascular Services or Pharmacological Science once they have graduated and reached 18 years of age. 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. Business Management & Administration concentrators may also take this course as part of a career practicum/work-based learning placement within the Health Services

Administration program of study. Note: Student to teacher ratio for this course is 15:1 in a clinical setting. **NOTE: Admission to this class is subject to junior** year interview process, teacher evaluations, GPA and attendance rate. Students must maintain 90% attendance while participating in clinicals.

Work-Based Learning : Therapeutic Services

<u>Career Practicum – 2 or 3 credits; 12th.....C14H48</u> Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application. Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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.

HEALTH SCIENCE DE.....C14H05 MEDICAL TERMINOLOGY DE – NSCC BIO 1000

Prerequisite: Health Science and A & $P - 11^{TH}$ OR 12^{TH} GRADE

This course will cover the basic techniques for anatomical, physiological, and medical wordbuilding. The course will teach a systematic approach to defining general medical terms and terms for pathological disorders by dividing them into word roots, combining forms, suffixes, and prefixes. A grade of "C" or above in all Surgical Technology and Central Processing curriculum courses must be earned prior to graduation.

HEALTH SCIENCE DE.....C14H28 BASIC ANATOMY / PHYSIOLOGY – NSCC SURG 1304

Prerequisite: Health Science and A & $P - 11^{TH}$ OR 12^{TH} GRADE

An introduction to human anatomy and physiology. Topics include the cell, and organ systems including integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive as well as disorders of these systems. A grade of "C" or above in all Surgical Technology and Central Processing curriculum courses must be earned prior to graduation.

<mark>DIGITAL</mark> TECHNOLOGY

Student Organization - Skills USA The *Digital Technology* program is study is designed for students interested in occupations including: computer support specialists, network and computer systems administrators, computer hardware engineers, computer network architects, and information security analysts. This program of study provides students the opportunity to acquire knowledge in both theory and practical applications pertaining to hardware, operating systems, safe mode, command prompt, security, networking, printers, peripheral devices, laptops, mobile devices, troubleshooting, and customer service management. Upon completion of the course, proficient students will have acquired skills and knowledge to install, configure, and maintain computer systems. Students will also identify types of networks, understand the layers of the open systems interconnection (OSI) model, prevent security risks, and apply troubleshooting theory to the successful execution of networking tasks. Course content covers transmission control protocol, internet protocol, wired and wireless topologies, switching and routing, network hardware, wireless networking, and network operating systems (NOS).

NETWORKING SYSTEMS PROGRAM OF STUDY

COMPUTER SCIENCE FOUNDATIONS NON-DUAL 1 CREDIT 9TH, 10TH, 11TH, 12THC10H11 NET SYSTEMS I-II DE C10H02, C10H29 Computer Science Foundations (CSF) is a course

intended to provide students with exposure to various information technology occupations and pathways such as Networking Systems, Coding, Web Design, and Cybersecurity. As a result, students will complete all core standards, as well as standards in two of four focus areas. Upon completion of this course, proficient students will be able to describe various information technology (IT) occupations and professional organizations. Moreover, they will be able to demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Depending on the focus area, proficient students will also demonstrate an understanding of electronics and basic digital theory; project management and teamwork; client relations; causes and prevention of Internet security breaches; and writing styles appropriate for web publication. Upon completion of the CSF course, students will be prepared to make an informed decision about which Information Technology program of study to pursue.

COMPUTER SYSTEMS NON-DUAL 1 CREDIT 10TH, 11TH, 12TH NET SYSTEMS DE III-IV C10H36, C10H37

Prerequisite: Computer Science Foundations, Algebra I

Computer Systems is an intermediate course designed to prepare students with work-related skills and aligned certification in the information technology industry. Content provides students the opportunity to acquire knowledge in both theory and practical applications pertaining to hardware, operating systems, safe mode, command prompt, security, networking, printers, peripheral devices, laptops, mobile devices, troubleshooting, and customer service management. Upon completion of this course, proficient students will have acquired skills and knowledge to install, configure, and maintain computer systems.

NETWORKING Non-Dual......<u>C10H13</u> 1 CREDIT 11TH, 12TH<u>C10H13</u> NET Systems DE V-VI C10H56, C10H57

Prerequisite: Computer Systems, Algebra I Networking is an advanced course designed to emphasize the conceptual and practical skills necessary to design, manage, and diagnose network hardware and software. Upon completion of this course, proficient students will identify types of networks, understand the layers of the open systems interconnection (OSI) model, prevent security risks, and apply troubleshooting theory to the successful execution of networking tasks. Course content covers transmission control protocol, internet protocol, wired and wireless topologies, switching and routing, network hardware, wireless networking, and network operating systems (NOS)

WORK-BASED LEARNING; Networking – 2 or

Work-Based Learning: Career Practicum 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.

CODING PROGRAM OF STUDY

COMPUTER SCIENCE FOUNDATIONS NON-DUAL

<u>1 CREDIT 9^{тн}, 10^{тн}, 11^{тн}, 12^{тн}С10Н11</u>

Computer Science Foundations (CSF) is a course intended to provide students with exposure to various information technology occupations and pathways such as Networking Systems, Coding, Web Design, and Cybersecurity. As a result, students will complete all core standards, as well as standards in two of four focus areas. Upon completion of this course, proficient students will be able to describe various information technology (IT) occupations and professional organizations. Moreover, they will be able to demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Depending on the focus area, proficient students will also demonstrate an understanding of electronics and basic digital theory; project management and teamwork; client relations; causes and prevention of Internet security breaches; and writing styles appropriate for web publication. Upon completion of the CSF course, students will be prepared to make an informed decision about which Information Technology program of study to pursue.

CODING I : 1 CREDIT 10th, 11th, 12th

.....C10H14 Prerequisite: Computer Science Foundations, Algebra

Coding I is a course intended to teach students the basics of computer programming. The course places emphasis on practicing standard programming techniques and learning the logic tools and methods typically used by programmers to create simple computer applications. Upon completion of this course, proficient students will be able to solve problems by planning multi-step procedures; write, analyze, review, and revise programs, converting detailed information from workflow charts and diagrams into coded instructions in a computer language; and will be able to troubleshoot/debug programs and software applications to correct malfunctions and ensure their proper execution.

CODING II

Coding II is an advanced course designed to build on the foundational skills learned in **Coding I**, focusing on problem analysis, algorithm development, and the implementation of complex programming solutions. The course emphasizes the use of advanced programming techniques and logical reasoning to create and refine applications. Upon completion of this course, proficient students will be able to analyze problems, design algorithms, and implement solutions using high-level programming languages such as FOCUS, Python, or SAS. Students will practice writing, testing, and debugging code to ensure proper program execution, while developing the skills to select appropriate languages, development environments, and strategies for the software development life cycle. Course content is reinforced through a variety of individual and group projects, which strengthen students' ability to think critically, troubleshoot errors, and produce efficient, error-free programs.

WORK-BASED LEARNING; Coding – 2 or 3

credits: 12thC10H40 Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application. Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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.

CIVICS, PUBLIC SERVICE & SAFETY

Student Organization – Skills USA

The Civics, Public Service and Safety program of study helps prepare students for careers in planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

Renewed national interest in public safety and security should help expand opportunities for employment in the Law, Public Safety and Security Cluster. Numerous job openings will stem from employment growth attributable to the desire for increased corporate, industrial and homeland security. Also, a more security-conscious society and concern about drug-related crimes should contribute to the increasing demand. Firefighter Police officer Corrections officer Lawyer Paralegal Bailiff Security guard Legal clerk

CRIMINAL JUSTICE AND CORRECTION SERVICES PROGRAM OF STUDY

CRIMINAL JUSTICE I –

<u>1</u> credit......C30H00 Criminal Justice I is the first course in Law Enforcement Services and the Legal and Correctional Services programs 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, have investigative skills pertaining to basic crime scenes and incident documentation, and understand the importance of communications and professionalism in law enforcement.

CRIMINAL JUSTICE II -

1 credit.....C30H01 Prerequisite: Criminal Justice I

Criminal Justice II is an integrated survey of the law and justice systems for students interested in pursuing careers in law enforcement and legal services. From initial crisis scenario management to arrest, transport, trial, and corrections, procedures and laws governing the application of justice in the United States are examined in detail, with special emphasis on the best practices and professional traits required of law enforcement and legal professionals. Upon completion of this course, proficient students will be prepared for advanced work in crime scene analysis and forensic science, and have strong knowledge and skill preparation for postsecondary or career opportunities in associated fields.

CRIMINAL JUSTICE III – INVESTIGATIONS -

<u>1 creditC30H02</u> *Prerequisite: Criminal Justice II*

Students in this course will explore the basic processes and principles of forensic science as it relates to criminal investigation. Students will learn the importance of the identification, collection, and processing of evidence and of its contribution to the criminal investigation. Students will learn of the legal responsibilities and challenges which the forensic investigator may encounter from initial response to the court room.

An examination of policing, corrections, and the American court system. Topics include the complexity of the criminal justice process, its lack of central coordination and, most significantly, how justice is administered in American society.

This course reviews basic laws governing the maintenance of a democratic society and how criminal and constitutional laws meet the challenge of American society.

WORK-BASED LEARNING; Criminal Justice -

2 or 3 credits: 12thC30H27 Prerequisite: Must have at least 2 credits in the program area and meet the selection criteria as stated on the Work-Based Learning application. Please see Veronica Walton or Timbra Sutton for an application.

Work-Based Learning: Career Practicum 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.

HEATING, VENTILATION, AIR CONDITIONING / REFRIGERATION PROGRAM OF STUDY

Heating, Ventilation, Air Conditioning, Refrigeration / Estimated length: 20 months 3 credits; 11th, 12th C17H03/C17H30......MEPS I-II, HVAC I C17H39/C17H40......MEPS III-IV, HVAC II

Classroom and shop learning experiences include theory, application, and service of air conditioning and refrigeration equipment. Included are print reading, basic electronics, pneumatics, math, programmable controllers, refrigerant containment certification (EPA certification), and heat pump technology. Upon completion, students are prepared to enter jobs as service technicians in a variety of domestic, industrial, and commercial settings. Students will be required to provide their own transportation to TCAT-Dickson. Class will run from 2:30-5:30. Students will be allowed to start school later and end early to equalize time. Students should be able to achieve 350+ hours / year.

Program Credentials Hours Credential

HVAC Mechanic Helper	432
Certificate Domestic Unit Repair	864
Certificate HVAC Technician	1296
HVAC Refrigeration Technician	1728

Agriculture Systems/Diesel Powered Equipment: 20 months: 3 credits 11th, 12th C18H46/C18H45.....DE Ag Systems I-II

EARLY TECHNICAL COLLEGE TCAT-Dickson

NASHVILLE STATE ONLINE DUAL ENROLLMENT OPPORTUNITIES REQUEST G25H10NS to take these courses on-line.

ACCOUNTING

ACCT 1010 (3 Credit Hours) <u>Principles of Accounting I</u> An introduction to accounting principles, practices, and techniques with an emphasis on the preparation and reporting of financial statements. Prerequisite(s): Level 2 placement in Math and Reading.	ACCT1020 (3 Credit Hours) <u>Principles of Accounting II</u> A continuation of ACCT 1010 - Principles of Accounting I. Introduces the preparation and use of managerial and cost accounting concepts utilized in planning and controlling operations. Prerequisite(s): ACCT 1010 with a grade of "C" or higher.
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ART

ART1035 (3 Credit Hours) <u>Introduction to Art</u> Provides students with the opportunity to experience the role art plays in life. Students will learn a descriptive, formal vocabulary while researching significant artists, techniques, periods, and styles. Topics include the relationship between art, religion, politics, and society in a variety of cultures. Prerequisite(s): Level 1 placement in English; Level 2 placement in Reading or concurrent enrollment in READ 0815. Note: ART 1035 meets the general education requirement for Humanities.	ART2000 (3 Credit Hours) <u>Art History Survey I</u> A survey of art history that provides students with the opportunity to see how history and art are interwoven from prehistoric times to the Middle Ages. Prerequisite(s): Level 1 placement in English; Level 2 placement in Reading or concurrent enrollment in READ 0815. Note: ART 2000 meets the general education requirement for Humanities.
ART2020 (3 Credit Hours) <u>Art History Survey II</u> A continuation of Art History Survey I that provides the opportunity to see how history and art are interwoven from the Renaissance to Modern times. Prerequisite(s): Level 1 placement in English; Level 2 placement in Reading or concurrent enrollment in READ 0815. Note: ART 2020 meets the general education requirement for Humanities.	

BIOLOGY

BIOL1000 (3 Credit Hours)	BIOL1010 (4 Credit Hours)	
Medical Terminology	Introduction to Biology	
This course will cover the basic techniques for anatomical, physiological,	An introduction to biology course. Topics include cell structure and	
and medical word-building. The course will teach a systematic approach	function, organic molecules and energy pathways, genetics, evolution,	
to defining general medical terms and terms for pathological disorders	and the principles of ecology. This course does not fulfill the science	
by dividing them into word roots, combining forms, suffixes, and	requirement for biology majors. Credit for BIOL 1110 and BIOL 1010	
prefixes. A grade of "C" or above in all Surgical Technology and Central	may not be used together to satisfy the general education natural science	
Processing curriculum courses must be earned prior to graduation.	requirement. Prerequisite(s): Level 2 placement in English and Reading.	

BIOLOGY

BIOL1020 (4 Credit Hours)	BIOL1215 (3 Credit Hours)
Diversity of Life	Principles of Nutrition
A survey of the Domains of life as it highlights representative members	A course in human nutrition with emphasis on scientific principles,
and their characteristics and importance. Particular attention is given to	metabolism, and requirements for nutrients. Topics of interest to those in
the human organism and its organ systems. This course does not fulfill	health care and related professions are stressed. Prerequisite(s): Level 2
the science requirement for biology majors. BIOL 1010 - Introduction to	placement in English, Math and Reading.
Biology is not a prerequisite for this course. Credit for BIOL 1120 and	
BIOL 1020 may not be used together to satisfy the general education	
natural science requirement. Prerequisite(s): Level 2 placement in	
English and Reading.	

BUSINESS

BUSN1300 (3 Credit Hours) <u>Personal Finance</u> This course helps students to define and reach personal financial goals. Topics may include: planning, budgeting, taxes, credit, housing, insurance, investing, and retirement planning.	BUSN1305 (3 Credit Hours) <u>Introduction to Business</u> This course provides an introduction to the business environment. Topics may include business ownership and organization, management, marketing, business ethics, accounting, economics, finance, and business careers.
BUSN2380 (3 Credit Hours) <u>Principles of Marketing</u> This course is a study of basic marketing principles and practices, including the selection of target markets and the development of the marketing mix (product, price, promotion, and place of distribution). Prerequisite(s): Level 2 placement in English and Reading.	*Not apart of the Tennessee Transfer Pathway

CHEMISTRY

CHEM1110 (4 Credit Hours)	CHEM1120 (4 Credit Hours)
General Chemistry I	General Chemistry II
An in-depth study of the fundamental concepts of chemistry. Topics	A continuation of CHEM 1110. Topics include solutions, acids and
include matter and measurement, atomic and molecular structure,	bases, chemical equilibrium, thermodynamics, kinetics,
nomenclature, formulas and equations, stoichiometry, aqueous reactions,	electrochemistry, oxidation and reduction reactions, nuclear chemistry
gases, thermochemistry, periodic trends, molecular geometry, and	and an introduction to organic chemistry. Prerequisite(s): CHEM 1110
chemical bonding. Prerequisite(s): Level 2 placement in English and	
Reading, and Initial Level 2 placement or higher in Math, or MATH	
1000.	
(MATH 1130 - College Algebra highly recommended)	

COMMUNICATIONS

COMM2025 (3 Credit Hours)	COMM2045 (3 Credit Hours)
Fundamentals of Communication	<u>Public Speaking</u>
An exploration and practical application of communication theory in	An introduction to the fundamentals of public speaking. Emphasis is on
various contexts: interpersonal, small group, and public speaking.	preparing and delivering informative and persuasive speeches.
Prerequisite(s): ENGL 1010 and Level 2 placement in Reading or	Prerequisite(s): ENGL 1010 and Level 2 placement in Reading or
concurrent enrollment in READ 0815.	concurrent enrollment in READ 0815.

CRIMINAL JUSTICE

CRMJ1010 (3 Credit Hours) <u>Intro to Criminal Justice</u> An examination of policing, corrections, and the American court system. Topics include the complexity of the criminal justice process, its lack of central coordination and, most significantly, how justice is administered in American society. Prerequisite(s): Level 2 placement in English and Reading.	CRMJ1020 (3 Credit Hours) <u>Intro to the Legal Process</u> This course reviews basic laws governing the maintenance of a democratic society and how criminal and constitutional laws meet the challenge of American society. Prerequisite(s): Level 2 placement in English and Reading.
CRMJ2010 (3 Credit Hours)	CRMJ2020 (3 Credit Hours)
<u>Intro to Law Enforcement</u>	<u>Intro to Corrections</u>
An overview of the American Police, including the philosophy and	An overview of corrections, including the philosophy and historical
historical evolution behind the police force. Emphasizes policing	evolution behind the development of corrections. Emphasizes
procedures; crime prevention and control; functions of law enforcement;	corrections procedures, current prison conditions and operations,
problems and needs facing the police; and contemporary issues.	problems and needs facing corrections, and related contemporary issues.
Prerequisite(s): Level 2 placement in English and Reading.	Prerequisite(s): Level 2 placement in English and Reading.

EARLY CHILDHOOD EDUCATION

EARLY CHILDHOOD EDUCATION

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ECONOMICS

ECON2100 (3 Credit Hours)	ECON2020 (3 Credit Hours)
Principles of Macroeconomics	Principles of Microeconomics
This course introduces and explores a variety of macroeconomic topics	This course introduces and explores a variety of microeconomic topics
including aggregate supply and demand, market equilibrium, Gross	including supply and demand, market equilibrium, elasticity, decision
Domestic Product, employment, income, prices, major schools of	making by producers and consumers, production cost, market structures,
economic thought, fluctuations, growth, monetary policy, fiscal policy,	public policy, the labor market, distribution of income, environmental
the national debt, international trade, and international finance. ECON	policy, market efficiency, and government intervention. ECON 2200
2100 meets the General Education requirement for Social Sciences.	meets the General Education requirement for Social Sciences.
Prerequisite(s): Level 2 placement in English, Math and Reading. Note:	Prerequisite(s): Level 2 placement in English, Math and Reading. Note:
This course is not a prerequisite for ECON 2200.	This course is not a prerequisite for ECON 2100.

EDUCATION

EDU2010 (3 Credit Hours)	EDU2120 (3 Credit Hours)
<u>Introduction to Teaching</u>	<u>Introduction to Special Educ.</u>
A study of the historical, philosophical, and sociological foundations	A study of the characteristics and needs of children with special needs
underlying the development of American educational institutions. The	and/or disabilities with an emphasis on legislation, programs, services,
role of the schools, the aims of education, and the role of state, local, and	and best practices in the educational setting. Field experiences are
federal agencies will be included in addition to a required field	required. Prerequisite(s): Level 2 placement in English and Reading,
experience. Prerequisite(s): Level 2 placement in English and Reading	EDUC 2010.
EDU2210 (3 Credit Hours) <u>Educational Psychology</u> A study and application of the principles of growth and development, learning theory, and assessment techniques in the classroom setting. Motivating and facilitating learning processes in school settings will be emphasized. Field experiences in an approved classroom are required. Prerequisite(s): EDUC 2010, Level 2 placement in English and Reading.	

ENGLISH

ENGL1010 (3 Credit Hours) <u>English Composition I</u> A study of style, syntax, and basic organizational patterns. Topics include various rhetorical patterns, audience, purpose, diverse perspectives, writing, revising, and editing. Documented research paper required. Prerequisite(s): Level 2 placement in English or Level 1 placement in English with concurrent enrollment in ENGL 0815; Reading: Level 2 placement in Reading or concurrent enrollment in READ 0815.	ENGL1020 (3 Credit Hours) <u>English Composition II</u> A study of argumentative and analytical writing. Topics include advanced methods of composition, analysis and explication of literature/ essays, elements of persuasion, use of evidence, and advanced methods of research. Prerequisite(s): ENGL 1010.
ENGL2035 (3 Credit Hours) <u>Introduction to Fiction</u> An introduction to short stories and novels. Topics include major literary themes, historical/social events that influenced the writers, literary terminology, characteristics of literature, interpretation of literature, and analysis of composition and style. Prerequisite(s): ENGL 1010 and ENGL 1020. Note: ENGL 2035 meets the general education requirement for Humanities as a literature course or otherwise.	ENGL2140 (3 Credit Hours) <u>Introduction to Cinema</u> An introduction to the basic elements of cinema. Topics include elements of classic films, techniques of analysis, and cinematic production techniques. Prerequisite(s): ENGL 1010 and ENGL 1020. Note: ENGL 2140 meets the general education requirement for Humanities as a literature course or otherwise.

FRENCH

FREN1010 (3 Credit Hours)	FREN1020 (3 Credit Hours)
Beginning French I	Beginning French II
An introduction to the French language. Provides a foundation in	A continuation of FREN 1010. Students improve skills in reading,
reading, writing, speaking, and aural comprehension. Prerequisite(s):	writing, speaking, and aural comprehension. Prerequisite(s): FREN 1010
Level 2 placement in English; Level 1 placement in Reading.	or instructor permission

HISTORY

HIST2010 (3 Credit Hours)	HIST2020 (3 Credit Hours)
Early US History	Modern US History
A survey of the social, cultural, economic, and political aspects of	A study of the social, cultural, economic, and political aspects of
American life from the pre-Columbian period through the Civil War and	American life from the Reconstruction period to the present.
Reconstruction. Prerequisite(s): Level 2 placement in English or	Prerequisite(s): Level 2 placement in English or concurrent enrollment
concurrent enrollment in ENGL 1010 and ENGL 0815; Reading: Level	in ENGL 1010 and ENGL 0815; Reading: Level 2 placement in Reading
2 placement in Reading or concurrent enrollment in READ 0815.	or concurrent enrollment in READ 0815.

INFORMATION SYSTEMS

INFS1010 (3 Credit Hours)

<u>Computer Applications</u> Computer Applications is an examination of the development of computing technology and terminology. Topics include: identification of the functional components of a computer system; using word processing, spreadsheet, and presentation graphics; the proper handling of computer media; and an exploration of the uses of electronic mail and graphical Internet. Prerequisite(s): Level 2 placement in Reading.

MATH

MATH1130 (3 Credit Hours) <u>College Algebra</u> A traditional college algebra course for non-science majors. Topics include rational and exponential expressions, the concept of functions and their inverses, linear functions and equations including equations with radicals and absolute values, quadratic functions and equations, exponential and logarithmic functions and equations, graphs of basic functions, systems of equations, and inequalities. Prerequisite(s): Initial Level 2 placement or higher in Math or MATH 1000.	MATH1530 (3 Credit Hours) <u>Introduction to Statistics</u> An introduction to basic concepts and formulas for both descriptive and inferential statistics. Topics include the nature of data, uses and abuses of statistics, methods of sampling, summarizing data, pictures of data, counting techniques, measures of central tendency, measures of variation, measures of position, understanding probability, binomial and normal distributions, central limit theorem, confidence intervals, fundamentals of hypothesis testing for both one and two samples, and linear regression. Prerequisite(s): Level 2 placement or higher in Math or concurrent enrollment in MATH 0835.
MATH1710 (3 Credit Hours) <u>Precalculus Algebra</u> A traditional course in precalculus algebra. Topics include polynomial, radical, rational, exponential, and logarithmic expressions and equations; polynomial, radical, rational, exponential, logarithmic, and logistic functions, graphs, and their applications; polynomial and rational inequalities and their applications; and inverse functions. Prerequisite(s): Initial Level 2 placement or higher in Math or MATH 1000.	MATH1720 (3 Credit Hours) <u>Precalculus Trigonometry</u> A traditional course in precalculus trigonometry. Topics include the trigonometric functions and their graphs, right and oblique triangles, degree/radian measure, trigonometric equations, identities, inverse trigonometric functions, vectors, the polar coordinate system, parametric equations, conic sections, and applications. Prerequisite(s): Level 3 placement or higher in Math or MATH 1710.
MATH1730 (5 Credit Hours) <u>Precalculus</u> A single course in precalculus algebra and trigonometry. Topics include polynomial, radical, rational, exponential and logarithmic expressions and equations and functions, polynomial and rational inequalities, inverse functions, trigonometric functions and their graphs, right and oblique triangles, degree/radian measure, trigonometric equations, identities, inverse trigonometric functions, vectors, the polar coordinate system, conic sections, and applications. Prerequisite(s): Initial Level 2 placement or higher in Math or MATH 1000.	MATH1830 (3 Credit Hours) <u>Applied Calculus</u> An introduction to calculus without a requirement for trigonometry with applications from business, economics, life sciences, and health sciences. Topics include a survey of limits, continuity, differentiation, integration, related rates, maximum-minimum problems, and exponential growth and decay. Prerequisite(s): Level 3 placement or higher in Math, MATH 1710, or MATH 1130.

MATH

MATH1910 (4 Credit Hours) <u>Calculus I</u> An introductory first course in the traditional three-course calculus sequence. Topics include plane analytical geometry, function theory including limits and continuity, the differential and integral calculus of algebraic, trigonometric, and transcendental functions, curve sketching, maxima and minima, and related rates. Prerequisite(s): Level 4 placement in Math, MATH 1720, or MATH 1730.	MATH1920 (4 Credit Hours) <u>Calculus II</u> A continuation of MATH 1910 and the second course in the traditional three-course calculus sequence. Topics include a study of the differential and integral calculus of algebraic and transcendental, further exploration of the trigonometric functions, further applications of the definite integral, integration techniques, infinite series, parametric equations, and polar coordinates. Prerequisite(s): MATH 1910.
MATH2010 (3 Credit Hours) <u>Intro to Linear Algebra</u> A traditional introductory linear algebra course. Topics include matrices, determinants, systems of linear equations, vectors, vector spaces, linear transformations, eigenvalues and eigenvectors. Prerequisite(s): MATH 1910.	MATH2050 (3 Credit Hours) <u>Calculus Based Prob/Stats</u> An introduction to probability and statistics covering data analysis, probability and statistical inference. The inference material covers means, proportions, and variances for one and two samples, one-way ANOVA, regression and correlation and chi-square analysis. Prerequisite(s): MATH 1830 or MATH 1910.
MATH2110 (4 Credit Hours) <u>Calculus III</u> A continuation of MATH 1920 and the third course in the traditional three-course calculus sequence. Topics include solid analytical geometry, the calculus of more than one independent variable, surfaces and curves in space, cylindrical and spherical coordinate systems, vectors and vector-valued functions, partial derivatives, multiple integrals, and applications. Prerequisite(s): MATH 1920.	MATH2120 (3 Credit Hours) <u>Differential Equations</u> An introductory first course in differential equations. Topics include linear first-order differential equations, applications, homogeneous linear differential equations, second-order linear equations, systems of differential equations, and the Laplace Transforms. Prerequisite(s): MATH 1920.

MUSIC

MUS1030 (3 Credit Hours)

Introduction to Music

A survey of music from the Middle Ages, the Renaissance, the 18th and 19th centuries, and modern times. Topics include folk music, popular music, world music, music theory, and cultural and historical influences. Prerequisite(s): Level 1 placement in English; Level 2 placement in Reading or concurrent enrollment in READ 0815. Note: MUS 1030 meets the general education requirement for Humanities.

PHYSICAL EDUCATION

PHED1010 (3 Credit Hours)	PHED1030 (1 Credit Hours)
Intro to Health & Wellness	Walking
	A study of and practice in maintaining physical fitness through walking. Topics include the effects of walking on the body.

PHYSICS

PHYS2010 (4 Credit Hours)	PHYS2020 (4 Credit Hours)
<u>Non-calculus Physics I</u>	<u>Non-Calculus Physics II</u>
An algebra/trigonometry-based course in the concepts and principles of	An algebra/trigonometry-based course in the concepts and principles of
mechanics, fluids, heat, and thermodynamics. Prerequisite(s): Level 4	wave motion, sound, electricity and magnetism, light and optics, and
placement in Math, MATH 1720 or MATH 1730	elements of modern physics. Prerequisite(s): PHYS 2010
PHYS2110 (4 Credit Hours) <u>Calculus Based Physics I</u> A calculus-based course in the concepts and principles of mechanics, fluids, heat, and thermodynamics. This course is intended to serve students who plan to major in science or engineering at the four-year college level. Prerequisite(s): MATH 1910	PHYS2120 (4 Credit Hours) <u>Calculus Based Physics II</u> A calculus-based course in the concepts and principles of wave motion, sound, electricity and magnetism, light and optics, and the elements of modern physics. This course is intended to serve students who plan to major in science or engineering at the four-year college level. Prerequisite(s): PHYS 2110

POLITICAL SCIENCE

POLS1030 (3 Credit Hours)

American Government

An introduction to foundations and principles of American national government such as constitutional principles, functions, and administration of the American national government, Congress, the Presidency, the Supreme Court, and the U.S. political system. Prerequisite(s): Level 2 placement in English and Reading. Note: POLS 1030 meets the requirement for a Social Sciences elective.

PSYCHOLOGY

PSYC1030 (3 Credit Hours) <u>Intro to Psychology</u> An introduction to the fundamentals of human behavior. Topics include biological bases of behavior, sensation and perception, motivation, learning and memory, maturation and development, personality, and social psychology. Prerequisite(s): Level 2 placement in English or concurrent enrollment in ENGL 1010 and ENGL 0815; Level 2 placement in Reading or concurrent enrollment in READ 0815. Note: PSYC 1030 meets the requirement for a Social Sciences elective.	PSYC2125 (3 Credit Hours) <u>Abnormal Psychology</u> A study of major patterns of abnormal behavior and their descriptions and diagnoses, interpretation, treatment, and prevention. Prerequisite(s): Level 2 placement in English and Reading; PSYC 1030.
PSYC2130 (3 Credit Hours) <u>Life Development Psychology</u> A survey of the biological and environmental factors influencing the physical, intellectual, social, emotional, and language development from birth until death. Explores causes and results of interruption in or interference with the developmental process. Prerequisite(s): Level 2 placement in English or concurrent enrollment in ENGL 1010 and ENGL 0815; Level 2 placement in Reading or concurrent enrollment in READ 0815. Note: PSYC 2130 meets the requirement for a Social Sciences elective.	

SOCIOLOGY

SOCI1010 (3 Credit Hours)	SOCI1040 (3 Credit Hours)
Introduction to Sociology	Social Problems
An introduction to the study of society, social groups, and social	A study of issues and topics identified as social problems in American
interaction. Topics include culture and society, socialization, social	society, such as crime, drug and alcohol abuse, environment, changing
stratification, minorities, education, religion, and social change.	family and gender relationships, poverty, and violence. Prerequisite(s):
Prerequisite(s): Level 2 placement in English or concurrent enrollment	Level 2 placement in English and Reading. Note: SOCI 1040 meets the
in ENGL 1010 and ENGL 0815; Level 2 placement in Reading or	requirement for a Social Sciences elective.
concurrent enrollment in READ 0815. Note: SOCI 1010 meets the	-
requirement for a Social Sciences elective.	
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SPANISH

SPAN1010 (3 Credit Hours) Beginning Spanish I An introduction to the Spanish language. Provides a foundation in reading, writing, speaking, and aural comprehension. Prerequisite(s): Level 2 placement in English; Level 1 placement in Reading.	SPAN1020 (3 Credit Hours) <u>Beginning Spanish II</u> A continuation of SPAN 1010. Students improve skills in reading, writing, speaking, and aural comprehension. Prerequisite(s): SPAN 1010 or instructor permission.
SPAN2010 (3 Credit Hours)	SPAN2020 (3 Credit Hours)
Intermediate Spanish I	Intermediate Spanish II
A continuation of the development of the student's knowledge of	A continuation of the development of the student's knowledge of
Spanish. Students build aural comprehension skills and speaking ability,	Spanish. Students increase aural comprehension skills and speaking
write compositions, and study Spanish literature and Hispanic culture.	ability, further develop their writing skills, and broaden their study of
Prerequisite(s): SPAN 1020 or instructor permission.	Hispanic literature. Prerequisite(s): SPAN 2010 or instructor permission.

SURGICAL TECH.

SURG134 (3 Credit Hours)

Basic Human Anatomy/Physiology

An introduction to human anatomy and physiology. Topics include the cell, and organ systems including integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive as well as disorders of these systems. A grade of "C" or above in all Surgical Technology and Central Processing curriculum courses must be earned prior to graduation.

SOCIAL WORK

SWRK2010 (3 Credit Hours)	SWRK1020 (3 Credit Hours)
Intro to Social Work	Human Behavior Social Environment
An introduction and orientation to the field of social work. Topics	A study of human motivation and the impact of the social environment
include professional values and ethics, diverse population groups served,	on human behavior. Topics include development of socialization skills
and the historical development and present structure of social services.	and coping mechanisms necessary for effectively functioning in social
	contexts.

THEATER

THEA1030 (3 Credit Hours)

An introduction to the basic social, artistic, and technical elements of theater. Topics include theater as storytelling; dramatic genres, styles, and structures; and the contributions of the playwright, designers, director, actors, and audience to the theatrical process. Prerequisite(s): Level 1 placement in English; Level 2 placement in Reading or concurrent enrollment in READ 0815. Note: THEA 1030 meets the general education requirement for Humanities.

Creek Wood High School Early Post-Secondary Opportunities (EPSOs) for 2024-25

Early postsecondary opportunities (EPSOs) include a course and/or exam that give students a chance to obtain postsecondary credit while still in high school. Courses (whether stand-alone or in conjunction with an exam for postsecondary credit) **must** be aligned to postsecondary standards.

Early postsecondary opportunities allow students to:

- earn postsecondary credits while in high school.
- become familiar with postsecondary rigor and expectations.
- develop confidence and skills for success in postsecondary learning.
- make informed postsecondary and career decisions.
- decrease the time and cost of completing a certificate or degree.

Advanced Placement

Human Geography Modern World History AP Psychology



Dual Enrollment

APSU Dual Enrollment Collaborative (visit www.apsu.edu/govnow for info and course offerings) Composition I/II, World Lit, Tech Writing - APSU Intro to Emergency Management – APSU Intro to Music - APSU Calculus AB - APSU Pre-Calculus (College Algebra) - APSU **US History - APSU Elements of Statistics – APSU** Mechatronics I/II – TCAT-Dickson Welding I/II – TCAT-Dickson Fundamentals of Construction, Structural Systems I/II – TCAT-Dickson On Site Classes – @ TCAT-Dickson HVAC – Early Technical College @ TCAT-Dickson Pre-Nursing - @ TCAT-Dickson Teaching K-12 I/II - APSU Business Management – Nashville State Community College Computer Systems, Networking Systems I/II – TCAT-Dickson

Local Dual Credit

Greenhouse Management & Intro to Ornamental Horticulture – PLSO 1101 – MTSU Large Animal Science – ANSC 1410 – MTSU A/V III - COM 2010 - Digital Video I, NSCC

Industry Certifications (may vary due to student interest and federal grant money) OSHA 10 – The goal is to get all CTE students certified. Advanced Manufacturing - American Welding Society, AWS-SENSE Entry Level Welder, NC3 L.E. Flux Cored Arc Welding, NC3 L.E. Gas Metal Arc Welding, NC3 L.E. Gas Tungsten Arc Welding, NC3 L.E. Shielded Metal Arc Welding, NC3 L.E. Welding Safety, SNAP-on-Precision Measurements, SNAP-on Multimeter, SNAP-on Tool Identification Architecture & Construction - NCCER Core Curriculum, NCCER Construction Technology, NCCER Carpentry 1, NCCER Carpentry 2-Residential

Audio Visual – Adobe Certified Assistant

Business Management & Administration – SWA Professional Communication Certificate, Express Employment Professional Communications Certificate

Creek Wood High School Early Post-Secondary Opportunities (EPSOs) for 2024-25

Health Science – Emergency Medical Responder (First Responder), Patient Care Tech Assistant, CPR-Basic Life Support,

Certified Clinical Medical Assistant

Information Technology – CompTIA-IT Fundamentals

JROTC – IS-100 Introduction to Incident Command System, IS-200 Basic Incident Command System for initial Response

Community Emergency Response, Lean Six Sigma