

**2013-2014**

**CUMBERLAND  
COUNTY SCHOOL  
SYSTEM**

**SECONDARY  
COURSE CATALOG**

**“To empower each student with the skills to be a productive citizen.”**

**REGISTRATION TIPS**

1. Review and update your Six-Year Plan on your own or with your counselor. Make your course selections based on your plan.
2. In order for students to enroll in an Honors, AP, or Dual class, students must have scored **ADVANCED** on state TCAPS and/or EOC (End of Course exam) exams. Exception: Guidance counselor and teacher approval.

3. Consult the Course Catalog to see if your chosen class has a pre-requisite or requires instructor approval.
  - a. Pre-requisites are classes that must be successfully completed prior to taking another specific class. If you have not successfully completed the pre-requisites for a class, you will not be allowed to take the class.
  - b. If a class requires instructor approval, you must have the instructor initial your Curriculum Sheet before you will be allowed to register for the class.
4. Please choose Honors or Advanced Placement (AP) classes carefully. These are rigorous courses that will require you to apply yourself to the curriculum.
5. Take care when choosing your alternate courses. If a requested course is not part of the master schedule, your alternate course selections will be used to complete your schedule.
6. Remember that the master schedule is based on student requests at the time of registration and the availability of instructors certified in that subject area. Not all classes in the course catalog will be taught every school year.
7. Choose all classes based on your graduation requirements and your particular interests. Don't choose a class just because your friends or boy/girlfriend is taking the same class. Class changes can only be made for a limited time at the beginning of each semester.

**\*\*REMEMBER\*\***

**The School Counselors make every effort to honor all class requests. However, due to scheduling constraints and graduation requirements, all scheduling scenarios are not possible.**

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# Freshman Academy

## **Content Area Reading 3081**

*Prerequisite: Instructor recommendation*

This course is designed for students with a need for additional instruction in reading, comprehension, and basic grammar. Emphasis will be placed on improvement of basic reading skills. The course should be taken in addition to grade level English courses.

## **FA English 9 FA3001**

Grade Levels: 9 Credit: 1

This entry-level English class covers basic grammar skills including parts of speech, sentences, phrases, and clauses. Literature studies include short stories, biographical and auto-biographical excerpts, poetry, and drama. There is an emphasis on paragraph development and persuasive writing. End of course testing is mandated.

## **FA English 9 Honors FA30012**

Grade Levels: 9 Credit: 1

This course includes grammar study. Writing skills are combined with a study of short stories, plays, a novel, poetry, informational texts, and biographical/autobiographical selections. Students interact with the community through independent career study. Expectations are high, and the pace is faster than that of English 9. End of course testing is mandated.

## **FA English 9 Accelerated Honors**

**FA30013**

Grade Levels: 9 Credit: 1

Students should enroll in this course in preparation for taking Advanced Placement English courses their junior and senior year. This course includes grammar study. Writing skills are combined with a study of short stories, plays, a novel, poetry, biographical/autobiographical selections, and informational texts. Students interact with the community through independent career study. Expectations are high, and the pace is faster than that of Honors English 9. End of course testing is state mandated.

## **FA Environmental Science FA3260**

## **FA Environmental Science Honors FA32601**

## **FA Agriscience**

**FA5171**

**Honors FA51712**

Grade Levels: 9

Credit: 1

Agriscience consists of standards to prepare students for biology and subsequent sciences for the university bound student. The content area covers ecology, biological processes, sexual and asexual reproduction and a study of the chemical and physical laws that govern life. Agriscience is awarded a Life Science credit.

## **FA Physical Science**

**FA3202**

Grade Levels: 9

Credit: 1

Students study scientific processes as they relate to the physical world. Topics include matter and energy relationships, the structure and properties of matter, and measurement. Lab experiences and mathematical calculations are included. Students must have a calculator.

## **FA Physical Science Honors**

**FA32025**

Grade Levels: 9

Credit: 1

*Prerequisites: None*

This course covers all the topics of the physical science course but in greater depth. Students study scientific processes as they relate to the physical world. Topics include matter and energy relationships, the structure and properties of matter, and measurement. Lab experiences and mathematical calculations are included. Students must have a calculator.

## **FA Biology 1**

**FA3210**

**Honors FA32107**

Grade Levels: 9

Credit: 1

This class focuses on the same topics as the Biology 1 course; however, this class requires more reading, writing, and analytical thinking skills. End of course testing is mandated

## **FA Biology CTE**

**FA32102**

Grade Level: 9

Credit: 1

## **FA Algebra 1A**

**FA31023**

Grade Levels: 9

Credit: 1

This is the study of algebraic expressions, equations and inequalities involving integers, rational expressions, graphing, linear equations, rational and irrational numbers.

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**FA Algebra 1B**                      **FA31024**  
Grade Levels: 9                      Credit: 1  
*Prerequisites: FA Algebra 1A*  
Algebra 1B is a continuation of Algebra 1A and will include factoring of polynomials, radical expressions, quadratics, and an introduction to trigonometry. All students graduating must pass a standardized test administered at the end of the course in order to receive a high school diploma. End of course testing is mandated.

**FA Algebra 1A (CTE)**            **FA310231**  
Grade Levels: 9                      Credit: 1  
This is the study of algebraic expressions, equations and inequalities involving integers, rational expressions, graphing, linear equations, rational and irrational numbers. . Additional enrichment activities will be included and specific applications that help students understand the relevance of abstract mathematical concepts in the workplace and everyday life. This course promotes active learning and many opportunities for students to work with their peers in cooperative learning groups. Students will use their problem-solving skills on real-life problems.

**FA Algebra 1B (CTE)**            **FA31022**  
Grade Levels: 9                      Credit: 1  
*Prerequisites: FA Algebra 1A (CTE)*  
Algebra 1B is a continuation of Algebra 1A and will include factoring of polynomials, radical expressions, quadratics, and an introduction to trigonometry. Additional enrichment activities will be included and specific applications that help students understand the relevance of abstract mathematical concepts in the workplace and everyday life. This course promotes active learning. Students will use their problem-solving skills on real-life problems. All students must pass a standardized test administered at the end of the course in order to receive a high school diploma.

**FA Algebra 1A Honors**           **FA310235** Grade  
Levels: 9                              Credit: 1  
All of the topics covered in Algebra 1A and Algebra 1B will be covered, but in greater depth. Additional enrichment activities will be included as well. Honors Algebra 1A will be taught the first semester. End of course testing is mandated.

**FA Algebra 1B Honors**           **FA310245**  
Grade Levels: 9                      Credit: 1  
*Prerequisites: FA Algebra 1A*  
All of the topics covered in Algebra 1A and Algebra 1B will be covered, but in greater depth. Additional enrichment activities will be included as well. Honors Algebra 1B is taught second semester. End of Course testing is mandated.

**FA Algebra 1 Honors**            **FA31027** Grade  
Levels: 9                              Credit: 1  
This is a first semester course and must be paired with Honors Algebra 2 second semester. All of the topics covered in Algebra 1A and Algebra 1B will be covered, but in greater depth.

**FA Algebra 2 Honors**            **FA3103** Grade  
Levels: 9                              Credit: 1  
*Prerequisites: Algebra 1 Honors*  
This course includes in depth instruction in solving systems of equations and inequalities, matrices, radical and rational expressions, graphing conics, polynomial functions, probability exponential and logarithmic functions, sequences and trigonometric functions, as well as circular functions, complex number, and vectors. Students must have successfully completed Honors Algebra I first semester.

**FA Geometry**                      **Honors FA3108**  
Grade Levels: 10, 11, 12            Credit 1  
This course incorporates the same core geometric concepts required in a standard geometry course but includes additional topics that focus on technical applications. These concepts will be taught using practical applications in a contextual style of teaching, including labs and projects.

**FA World Geography**            **FA3410** Grade  
Levels: 9                              Credit: 1  
This course is designed to expose students to the many nations and peoples of the Earth, including their histories, economics, locations, social structures, and topographies.

**FA World History**                      **FA3401**  
Grade Levels: 9                      Credit: 1  
World History is a survey course covering the events and people from ancient to modern times.

**Lifetime Wellness –1<sup>st</sup> Semester**    **3303**  
**2<sup>nd</sup> Semester**                      **330322**

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PE Boys-- Basketball	33014
PE Girls-- Basketball	33015
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FA Agriculture Science	FA51712

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# UPPERCLASS COURSES----- 10<sup>th</sup> 11<sup>th</sup> 12<sup>th</sup>

## Fine Arts

**History of Rock** 3517  
Grade levels: 9, 10, 11, 12 Credit: 1  
History of Rock is the study of the origins, characteristics and stylistic development of music dating from the 5th to 21st century, emphasizing the Rock-n-Roll genre of the 1950's to the present.

**Instrumental of Music 1-1<sup>st</sup>Sem** 3530  
**Instrumental of Music 2-2<sup>nd</sup>Sem** 35302  
Grade levels: 9, 10, 11, 12 Credit: 1  
Marching Band is offered First Semester. Concert Band is offered Second Semester. The marching band performs at all football games, participates in marching competitions, and other activities throughout the year. Rehearsals and Band Camp begin in the summer. Members must attend band camp. Attendance is required at all rehearsals, performances, and camp. Students earn 1 credit. Course Grade is applied to the student's GPA the first time student completes the course. Subsequent course grades will not be applied toward student's GPA.

**Guitar** 3552  
Grades 9,10,11,12 Credit: 1

**Percussion** 3505  
Grades 9,10,11,12 Credit: 1

**Piano** 3540  
Grades 9,10,11,12 Credit: 1

**Theatre Arts 1** 3524  
Grade levels: 9, 10, 11, 12 Credit: 1  
The course includes the beginning concepts of drama, involving an introduction to acting, basic technical theater and design, costumes, makeup, puppetry, storytelling, musical theater, and writing. An introductory survey of theater history, including major playwrights and movements, will be included. The purpose of this course is to introduce students to the world of theater arts and to foster appreciation, while giving them practical experience necessary for audition and production.

**Theatre Arts 2** 3521  
Grade levels: 9, 10, 11, 12 Credit: 1  
*Prerequisites: Instructor approval*  
An extension of Theatre Arts 1, this course seeks to provide more in-depth analysis and study of theatre history and its movements, as well as practical experience in acting, directing, technical theatre, and dramaturgy. Advanced scene study and script analysis may lead to performance opportunities, depending on the needs and interests of the class.

**Visual Art 1** 3501  
Grade levels: 9, 10, 11, 12 Credit: 1  
Art 1 is an introductory class, requiring no prior art background. This course provides hands-on studio experiences in creating art plus an introduction to art history and art criticism. Students explore drawing and painting. Students will be encouraged to experiment with tools, material, techniques, processes, and ideas.

**Visual Art 2 /Photography** 3502  
Grade levels: 10, 11, 12 Credit: 1  
*Prerequisites: Visual Art 1 3501*  
This course expands on the skills learned in Visual Arts 1 and is designed for students that excelled in Art 1. This class takes a creative, historical, and critical approach to learning about art. Students work with all types of media to develop drawing and painting skills. Students will produce only original artwork. An art portfolio may be started in this class.

**Visual Art 3** 3503  
Grade levels: 11, 12 Credit: 1  
*Prerequisites: Visual Art 2 3502*  
This class is designed for the serious art student who is interested in pursuing an art or art-related career. Visual Art 3 students will expand their portfolio for art scholarships and art shows.

**Visual Art 4** 3504  
Grade Levels: 11, 12 Credit: 1  
*Prerequisites: Visual Arts 3*  
This class is designed for the serious art student who is interested in pursuing an art or art-related career. Visual Art 4 students will expand their portfolio for art scholarships and art shows.

**Visual Communications** 5759  
Grade Levels: 10, 11, 12 Credit: 1  
This course provides a foundation to the visual art, design, and photography industries. Students are introduced to photography through film and digital cameras. Black and white film processing is taught as well as computer-based art.

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**Studio Art AP Drawing Portfolio 3533**

**2D Design Portfolio AP 3545**  
Grade levels: 11, 12 Credit: 1

*Prerequisites: Visual Art 1 3501*

Students in AP Studio Art work towards developing a comprehensive vocabulary of art. This involves viewing, analyzing, and creating work in a wide variety of media. The class focuses on creating a portfolio that will meet requirements for college-level classes. Students begin AP Studio Art in the fall term and should continue in the spring term in order to create the body of work required. Upon completion of the AP course, students will be required to submit their portfolio to the AP program for evaluation in order to receive college credit.

**Vocal Music 1 3531**

Grade levels: 9, 10, 11, 12 Credit: 1

Students enrolling in this class may have little or no singing background. The class involves vocal performances in the classroom and regularly scheduled performances. Attendance is required at all rehearsal and performances. Course grade is applied to GPA.

**Vocal Music 2 35312**

Grade levels: 9, 10, 11, 12 Credit: 1

*Prerequisites: Vocal Music 1 35311*

Students are involved in vocal performances in the classroom, and give public performances on a regular basis. This choir will compete in festivals and other performance events. Attendance is required at all rehearsals and performances. Course grade is not applied to student's GPA.

## Language Arts

**Content Area Reading 3081**

*Prerequisite: Instructor recommendation*

This course is designed for students with a need for additional instruction in reading, comprehension, and basic grammar. Emphasis will be placed on improvement of basic reading skills. The course should be taken in addition to grade level English courses.

**English 10 3002**

Grade Levels: 10, 11, 12 Credit: 1

This course includes the study and practice of writing skills and basic grammar. The literary focus is on short stories, poetry, a Shakespearean play, and a novel. A standardized (state-mandated) test is administered at the end of the course. All students must pass this test in order to receive a high school diploma.

**English 10 Honors 30029**

Grade Levels: 10, 11, 12 Credit: 1

*Prerequisites: English 9 Honors FA30012*

This course will require students to develop an advanced style of writing. Practice writing will be explored in the areas of exposition and persuasive writing. Students will establish a higher level in the areas of grammar, writing, and reading. Students will be required to pass an end-of-course examination administered at the end of each term.

**English 10 Accelerated Honors 30027**

Grade Levels: 10, 11, 12 Credit: 1

*Prerequisites: FA English 9 Honors*

Students should enroll in this course in preparation for taking Advanced Placement English courses their junior and senior year. This Honors course stresses grammar study and thematic writing. Writing skills are combined with a study of short stories, a Shakespearean play, a novel, and other literary genres. A standardized (state-mandated) test is administered at the end of the course. All students must pass this test in order to receive a high school diploma.

**English 11 3003**

Grade Levels: 9, 10, 11, 12 Credit: 1

*Prerequisites: English 9 English 10*

This course includes a survey of American literature. Practical writing skills, as well as expository and persuasive writing skills, are studied.

**English 11 Honors 30039**

Grade Levels: 11, 12 Credit: 1

*Prerequisites: English 10 Honors*

This course includes an intense review of American literature. The course also includes the practice and study of grammar. The class will prepare students for the state writing assessment.

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**Language Arts (cont.)**

**English 11 Accelerated Honors 30033**

Grade Levels: 11 Credit: 1

*Prerequisites: English 10 Honors*

This course is the first half of a year one course designed to culminate in the AP exam for English Literature & Composition. Students who plan to sit for this exam must enroll in this class for the first semester. This is a demanding course focused on developing mastery of rhetoric, which involves the expository, analytical and argumentative writing. Students will be taught to read the primary and secondary sources carefully, to synthesize material from these texts in their own compositions and to cite sources accurately and correctly. Improving the student's reading and writing skills. End of course testing is mandated.

**English 11 AP (Language and Composition) 3013**

Grade Levels: 11 Credit: 1

*Prerequisites: English 9 English 10 English 11*

This is a demanding course focused on developing mastery of rhetoric, which involves the expository, analytical and argumentative writing. Students will be taught to read the primary and secondary sources carefully, to synthesize material from these texts in their own compositions and to cite sources accurately and correctly. Improving the student's reading and writing skills. Upon completion of the Advanced Placement (AP) course, students will be required to pass the AP exam in order to receive college credit.

**English 12 3005**

Grade Levels: 12 Credit: 1

*Prerequisites: English 9 English 10 English 11*

This course includes the study of writing skills and grammar usage. Emphasis is placed on vocabulary. World and English literature selections are covered.

**English 12 (CTE) 30052**

Grade Levels: 12 Credit: 1

*Prerequisites: English 9 English 10 English 11*

This course is designed to strengthen a variety of communications skills in the modern work environment. English 1 2 standards incorporate the writing, reading, viewing/reviewing, speaking, listening, and representing with rigorous approaches. Students will use research, technical reading, and presentation skills designed to enhance professionalism.

**English 12 Honors 30057**

Grade Levels: 12 Credit: 1

*Prerequisites: English 9 English 10 English 11*

This course includes a brief review of grammar usage with intensive study and practice of writing skills, particularly critical or evaluative writing. It also includes a survey of English and World literature (all literary genres).

**English 12 AP (Literature & Composition) (AP Lit Comp) 3014**

Grade Levels: 12 Credit: 1

*Prerequisites: English 11*

College English Composition credit may be earned simultaneously with Honors English 12 credit. Course materials include RSCC texts, videos, and approved syllabi. Students must meet current college guidelines on the ACT. Student signing for Dual also have the option of the AP Honors English 12. AP Honors English will be accomplished within the Dual Honors English during the 2<sup>nd</sup> semester class. Students are prepared to take the AP English Literature and Composition Examination.

**Public Speaking 3015**

Grade Levels: 11, 12 Credit: 1

This course is designed to develop effective oral communication, including delivery, organization, content, and stress management. Informative, impromptu, and persuasive speaking.

**Journalism/Yearbook 1 3008**

Grade Levels: 10, 11, 12 Credit: 1

*Prerequisites: Students must submit an application and be approved by the instructor.*

**This course is offered First Semester.**

**Journalism/Yearbook 2 30082**

Grade Levels: 11-12 Credit: 1

*Prerequisites: Students must submit an application and be approved by the instructor.*

**This course is offered Second Semester.**

**Design Yearbook 1-1<sup>st</sup> Semester 58271**

Grade Levels: 10, 11, 12 Credit: 1

**Design Yearbook 2-2<sup>nd</sup> Semester 58281**

Grade Levels: 10, 11, 12 Credit: 1

**Creative Writing 3012**

Grade Levels: 10, 11, 12 Credit: 1

*Prerequisites: None*

**English Second Language 1<sup>st</sup> Sem 3075**

**English Second Language 2<sup>nd</sup> Sem 30752**

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## World Language

**French 1** **3041**  
Grade Levels: 10, 11, 12 Credit: 1  
Students will be able to understand everyday questions and simple conversations. Students will use the four skills of foreign language: listening, speaking, reading, and writing. Students will be exposed to French costumes, history and culture.

**French 2** **3042**  
Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: French 1*  
This course is a continuation of the material explored in French 1. Students will be able to understand everyday questions and simple conversations. Students will use the four skills of foreign language: listening, speaking, reading, and writing. Students will be exposed to French costumes, history, and culture.

**French 3** **3043**  
Grade Levels: 11, 12 Credit: 1  
*Prerequisites: French 1 & 2*  
This course is a continuation of the material explored in French 1 and 2. Students will be able to understand everyday questions and simple conversations. Students will use the four skills of foreign language: listening, speaking, reading, and writing. Students will be exposed to French costumes, history, and culture.

**German 1** **3051**  
Grade Levels: 10, 11, 12 Credit: 1  
Students will be able to understand everyday questions and simple conversations. Students will use the four skills of foreign language: listening, speaking, reading, and writing. Students will be exposed to German costumes, history and culture.

**German 2** **3052**  
Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: German 1*  
This course is a continuation of the material explored in German 1. Students will be able to understand everyday questions and simple conversations. Students will use the four skills of foreign language: listening, speaking, reading, and writing. Students will be exposed to German costumes, history, and culture.

**German 3** **3053**  
Grade Levels: 11, 12 Credit: 1  
*Prerequisites: German 1 & 2*  
This course is a continuation of the material explored in German 1 and 2. Students will be able to understand everyday questions and simple conversations. Students will use the four skills of foreign language: listening, speaking, reading, and writing. Students will be exposed to German costumes, history, and culture.

**German 4** **3054**  
Grade Levels: 12 Credit: 1  
*Prerequisites: German 1, 2, & 3*  
This course is a continuation of the material explored in German 1, 2, and 3. Students will be able to understand everyday questions and simple conversations. Students will use the four skills of foreign language: listening, speaking, reading, and writing. Students will be exposed to German costumes, history, and culture.

**Spanish 1** **3021**  
Grade Levels: 10, 11, 12 Credit: 1  
Students completing this course are able to understand questions, conversations, and instructions in Spanish, and study Spanish using the four skills of language learning, listening, speaking, reading, and writing. Emphasis is placed on vocabulary and grammatical structure. Spanish culture and Spanish-speaking countries are also reviewed. Students who plan to enroll in AP Spanish in a subsequent school year should enroll in Accelerated Spanish 1 & 2 in order to prepare for the rigors of the AP course work.

**Spanish for Workplace Communications (Span Com) 302111**  
Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: Spanish 1 3021*  
Students completing this course will further their working skills and knowledge by learning how to effectively communicate in Spanish while in the workplace. Cultural aspects of Spanish-speaking communities will also be explored.

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## World Language (cont.)

### **Spanish I Accelerated 30212**

Grade Levels: 10, 11, 12      Credit: 1

*Prerequisites: None*

Corequisites: None

Students are able to understand questions, conversations, and instructions in Spanish, and study Spanish using the four skills of language learning, listening, speaking, reading, and writing. Emphasis is placed on vocabulary and grammatical structure. Spanish culture and Spanish-speaking countries are also reviewed. Students who plan to enroll in AP Spanish in a subsequent school year should enroll in this course and Accelerated Spanish 2 in order to prepare for the rigors of the AP course work.

### **Spanish 2 3022**

Grade Levels: 10, 11, 12      Credit: 1

*Prerequisites: Spanish I 3021*

Students are able to understand questions, conversations, and instructions in Spanish, and study Spanish using the four skills of language learning, listening, speaking, reading, and writing. Emphasis is placed on vocabulary and grammatical structure. Spanish culture and Spanish-speaking countries are also reviewed.

### **Spanish 2 Accelerated 30222**

Grade Levels: 10, 11, 12      Credit: 1

*Prerequisites: Spanish I*

This course is a continuation of the material begun in Accelerated Spanish I. Students are able to understand questions, conversations, and instructions in Spanish, and study Spanish using the four skills of language learning, listening, speaking, reading, and writing. Emphasis is placed on vocabulary and grammatical structure. Spanish culture and Spanish-speaking countries are also reviewed. Students who plan to enroll in AP Spanish in a subsequent school year should enroll in Accelerated Spanish I and this course in order to prepare for the rigors of the AP course work.

### **Spanish 3 Accelerated Honors 3023**

Grade Levels: 11, 12      Credit: 1

*Prerequisites: Spanish 1 & 2*

Students should successfully complete this course prior to taking Spanish 4. This course enables the student to reinforce the Oral and writing skills acquired in Spanish. Applying and understanding expanded vocabulary, and increasing the speaking, reading and writing skills are included. Students who complete both Spanish 3 and 4 will be prepared to sit for the AP exam.

### **Spanish 4 Accelerated Honors 3024**

Grade Levels: 11, 12      Credit: 1

*Prerequisites: Spanish 3 Honors 3023*

This course is a continuation of Spanish 3 Honors 3023 and enables the student to reinforce the oral and writing skills acquired in the previous semester of Spanish. Applying and understanding vocabulary and increasing their speaking, reading and writing skills are included. Students who complete both Spanish 3 and 4 will be prepared to sit for the AP exam.

### **Spanish 5 Accelerated Honors 3100**

Grade Levels: 9, 10, 11, 12      Credit: 1

*Prerequisites: Spanish 1, 2, 3, & 4*

This course enables the student to reinforce the oral and writing skills acquired in Spanish. Applying and understanding expanded vocabulary, and increasing the speaking, reading and writing skills are included.

### **Spanish 6 AP 3025**

Grade Levels: 12      Credit: 1

*Prerequisites: Spanish 5*

This course enables the student to reinforce the oral and writing skills acquired in Spanish. Applying and understanding expanded vocabulary, and increasing the speaking, reading and writing skills are included. Students who complete this course will be prepared to sit for the AP exam.

# Mathematics

**Foundations 2** 3131  
Grade Levels: 9, 10, 11, 12 Credit: 1  
*Prerequisites: None*

This course is designed for those students who need help before taking Algebra 1. The course includes a study of (1) number of sense and theory, (2) estimation, measurement, and computation, (3) patterns, functions, and algebraic thinking, (4) statistics and probability, and (5) spatial sense and geometric concepts. After successful completion of Foundations 2, a student should be ready to enter Algebra 1.

**Algebra 1A** 1<sup>st</sup> Sem 31023  
**Algebra 1A-Repeat—2<sup>nd</sup> Sem** 3102344  
Grade Levels: 9, 10, 11, 12 Credit: 1  
This is the study of algebraic expressions, equations and inequalities involving integers, rational expressions, graphing, linear equations, rational and irrational numbers.

**Algebra 1B** 2<sup>nd</sup> Sem 31024  
**Mathematics (cont.)**

**Algebra 1B-Repeat 1<sup>st</sup>Sem** 31024555  
Grade Levels: 9, 10, 11, 12 Credit: 1  
*Prerequisites: Algebra 1A*  
Algebra 1B is a continuation of Algebra 1A and will include factoring of polynomials, radical expressions, quadratics, and an introduction to trigonometry. All students graduating must pass a standardized test administered at the end of the course in order to receive a high school diploma. End of course testing is mandated by the state.

**Algebra 1A (CTE)** 31028  
Grade Levels: 9, 10, 11, 12 Credit: 1  
This is the study of algebraic expressions, equations and inequalities involving integers, rational expressions, graphing, linear equations, rational and irrational numbers. Additional enrichment activities will be included and specific applications that help students understand the relevance of abstract mathematical concepts in the workplace and everyday life. This course promotes active learning. Students will use their problem-solving skills on real-life problems. Students receive 1 elective credit for this course. The Algebra 1 math credit is awarded upon completion of Algebra 1B.

**Algebra 1B (CTE)** 31022  
Grade Levels: 9, 10, 11, 12 Credit: 1  
*Prerequisites: Algebra 1A (CTE)*  
Algebra 1B is a continuation of Algebra 1A and will include factoring of polynomials, radical expressions, quadratics, and an introduction to trigonometry. Additional enrichment activities will be included and specific applications that help students understand the relevance of abstract mathematical concepts in the workplace and everyday life. This course promotes active learning and many opportunities for students to work with their peers in cooperative learning groups. Students will use their problem-solving skills on real-life problems. End of course testing is mandated.

**Algebra 2A** 31033  
Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: Algebra 1B*  
Algebra 2A will be offered in the fall semester, and will count as 1 elective credit. This course includes solving systems of equations and inequalities, matrices, radical and rational expressions, graphing conics, polynomial functions, probability, exponential and logarithmic functions, sequences and trigonometric functions.

**Algebra 2B** 31034  
Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: Algebra 1B*  
Algebra 2B will be offered in the spring semester and is normally taught by the same teacher students had for Algebra 2A. Algebra 2B is a continuation of Algebra 2A. This course includes solving systems of equations and inequalities, matrices, radical and rational expressions, graphing conics, polynomial functions, probability, exponential and logarithmic functions, sequences and trigonometric functions. End of course testing is mandated.

**Algebra 2** 3103  
Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: Algebra 1*  
This course includes solving systems of equations and inequalities, matrices, radical and rational expressions, graphing conics, polynomial functions, probability, exponential and logarithmic functions, sequences and trigonometric functions.

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## Mathematics (cont.)

**Algebra 2A Honors** 31035  
**2B Honors** 31036

Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: Algebra 1*  
All of the topics covered in Algebra 2 are covered, as well as additional topics such as circular functions, complex numbers, and vectors. This course is much more rigorous and faster paced than Algebra 2.

**Algebra 2A (CTE)** 31039  
**2B (CTE)** 310322

Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisite: Algebra 1*  
This is a CTE course. Course description same as Algebra 2 with more hands on activities.

**Geometry** 3108

Grade Levels: 10, 11, 12 Credit 1  
*Prerequisites: Algebra 1*  
Topics covered in this course consist of both plane and solid geometry. The course includes a study of points, lines, and planes and their relationships. Emphasis is placed on geometric skills, and the application of geometric concepts to life situations.

**Geometry (CTE)** 31082

Grade Levels: 10, 11, 12 Credit 1  
*Prerequisites: Algebra 1*  
This course incorporates the same core geometric concepts required in a standard geometry course but includes additional topics that focus on technical applications. These concepts will be taught using practical applications in a contextual style of teaching, including labs and projects.

**Geometry Honors** 31087

Grade Levels: 10, 11, 12 Credit 1  
*Prerequisites: Algebra 1*  
All of the topics covered in Unified Geometry are discussed in this course, but in much greater depth. In addition to learning geometric concepts and their applications, emphasis is placed on geometric proofs to improve reasoning skills and abstract thinking.

**Bridge Math** 1<sup>st</sup> Semester 3181  
2<sup>nd</sup> Semester 31812

Grade Levels: 11, 12 Credit: 1  
The class is for students that scored 18 or below in the Math subject area on the ACT.

**Adv Alg & Trig/College Algebra Dual Honors**  
1<sup>st</sup> Semester 3124

2<sup>nd</sup> Semester 31242  
Grade Levels: 11, 12 Credit: 1  
*Prerequisites: Geometry Algebra 1 B Algebra 2B Algebra 2 Honors*  
Advanced Algebra & Trigonometry is a comprehensive course designed to prepare students for higher math. This course includes topics from probability and statistics, trig, analytic geometry, and advanced algebra.

**College Algebra Dual** 31241

Grade Levels: 11,12 Credit: 1

**Pre Calculus Dual/Honors** 3126

Grade Levels: 11, 12 Credit: 1  
*Prerequisites: Adv Alg & Trig/college Algebra Dual Honors 3124*  
This course consists of the study of linear, quadratic, exponential, logarithmic, and trig functions, sequences and series, the conic sections, and an introduction to calculus.

**Statistics Dual/Honors** 3136

Grade Levels: 11, 12 Credit: 1  
This course is an introduction to probability and statistics without calculus. Topics covered include sampling, frequency distribution, elementary probability, hypotheses testing, linear regression and correlation, analysis of variance and non- parametric statistics.

**Calculus 1 Honors/Dual** 3113

Grade Levels: 12 Credit: 1  
This course is offered fall semester and deals with the study of limits, derivatives, applications of derivatives, integrals, applications of definite integrals, logarithmic, exponential, hyperbolic, and trigonometric functions, improper integrals, infinite series and analytic geometry.

**Calculus 2 Honors/Dual** 31132

Grade Levels: 12 Credit: 1  
*Prerequisites: Adv Alg & Trig/College Algebra Dual Honors 3124, Calculus Honors 3113*  
This course is offered spring semester. A student has the option to take Calculus 1 and 2 for 8 semester hours of college credit in addition to the 2 high school credits. Students must meet the current guidelines on the ACT test (26) to take the course for college credit.

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## Mathematics (cont.)

### Calculus AB AP 3127

Grade Levels: 10, 11, 12 Credit: 1

*Prerequisites: Geometry Adv Alg & Trig/College Algebra Dual Honors 3124, Pre Calculus Dual/Honors 3126*

This course is offered spring semester and deals with the study of limits, derivatives, applications of derivatives, integrals, applications of definite integrals, logarithmic, exponential, hyperbolic, and trigonometric functions, improper integrals, infinite series, and analytic geometry. A student has the option to take this course for 4 semester hours of college credit in addition to the 1 high school credit. Students must meet the current guidelines on the ACT test to take the course for college credit.

### Calculus BC AP 3128

Grade Levels: 12 Credit: 1

This course is offered spring semester and deals with the study of limits, derivatives, applications of derivatives, integrals, applications of definite integrals, logarithmic, exponential, hyperbolic, and trigonometric functions, improper integrals, infinite series, and analytic geometry. A student has the option to take this course for 4 semester hours of college credit in addition to the 1 high school credit. Students must meet the current guidelines on the ACT test to take the course for college credit. Students will sit for the AP exam at the conclusion of this course.

## Health and PE

### Physical Education-1<sup>st</sup> Semester 3301

2<sup>nd</sup> Semester 330120

Grade Levels: 9, 10, 11, 12 Credit: 1

This course provides an opportunity for students to participate in and learn the rules and strategies of a variety of individual and dual sports such as bowling, jump roping, tennis, badminton, archery, and Frisbee golf. This course will also include an opportunity for students to participate in and learn a variety of fitness activities that promotes individual responsibility for optimal well being.

### PE Girl's Softball 33018

Grade Levels: 9, 10, 11, 12 Credit: 1

This course is designed for the highly competitive athlete. Students will study rules, strategies, and training techniques of softball. This class will also include appropriate weight

lifting.

### Lifetime Wellness –1<sup>st</sup> Semester 3303 2<sup>nd</sup> Semester 330322

Grade Levels: 9, 10, 11, 12 Credit: 1

This course is a graduation requirement. Lifetime Wellness is a course mandated by the state of Tennessee which includes the following 7 strands: personal fitness and related skills, nutrition, substance use/abuse, sexuality and family life; safety and first aid; disease prevention and control, and mental health.

### PE Baseball 33016

Grade Levels: 9, 10, 11, 12 Credit: 1

This course is designed for the highly competitive athlete. Students will study rules, strategies, and training techniques of baseball. This class will also include appropriate weight lifting.

### PE Boys Basketball 33014

Grade Levels: 9, 10, 11, 12 Credit: 1

This course is designed for the highly competitive athlete. Students will study rules, strategies, and training techniques of basketball. This class will also include appropriate weight lifting.

### PE Girls Basketball 33015

Grade Levels: 9, 10, 11, 12 Credit: 1

*Prerequisites: None*

This course is designed for highly competitive athletes that participate in, learn and apply rules, strategies of a variety of competitive team sports such as basketball, soccer, softball and volleyball. This class will also include proper weight lifting.

### Weight Lifting –1<sup>st</sup> Semester 33012

2<sup>nd</sup> Semester 330122

Grade Levels: 9, 10, 11, 12 Credit: 1

This course introduces basic weight lifting and cardiovascular endurance techniques.

### Weight Lifting Football 33013

Grade Levels: 9, 10, 11, 12 Credit: 1

This course is designed for the highly competitive athlete. Students will study rules, strategies, and training techniques of football. This class will also include appropriate weight lifting.



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## Science

### **Agriscience 5171**

#### **Honors 51712**

Grade Levels: 10, 11, 12 Credit: 1  
Agriscience consists of standards to prepare students for biology and subsequent science for the university bound student. The content area covers ecology, biological processes, sexual and asexual reproduction and a study of the chemical an physical laws that govern life. This course helps students understand the important role science serves as the agricultural industry. Satisfies lab science requirement.

### **Physical Science 3202**

Grade Levels: 9, 10, 11, 12 Credit: 1  
Students study scientific processes as they relate to the physical world. Topics include matter and energy relationships, the structure and properties of matter, and measurement. Lab experiences and mathematical calculations are included. Students must have a calculator.

### **Physical Science Honors 32025**

Grade Levels: 9, 10, 11, 12 Credit: 1  
This course covers all the topics of the physical science course but in greater depth. Students study scientific processes as they relate to the physical world. Topics include matter and energy relationships, the structure and properties of matter, and measurement. Lab experiences and mathematical calculations are included. Students must have a calculator.

### **Biology 1 3210**

Grade Levels: 9, 10, 11, 12 Credit: 1  
Biology 1 focuses on the organizational levels of all living things. The study includes the chemical make-up of life, the cell, tissues and organ systems, genetics, photosynthesis and respiration, diversity, and biological interactions. Lab work is an integral part of this class. End of course testing is mandated.

### **Biology 1 CTE) 32102**

Grade Levels: 9, 10, 11, 12 Credit: 1  
Biology 1 focuses on the organizational levels of all living things. The study includes the chemical make-up of life, the cell, tissues and organ systems, genetics, photosynthesis and respiration, diversity, and biological interactions. Lab work is an integral part of this class. Students graduating must pass a standardized test administered at the end of the course in order to receive a high school diploma. End of course testing is mandated..

### **Biology I Honors 32107**

Grade Levels: 10, 11, 12 Credit: 1  
This class focuses on the same topics as the Biology 1 course; however, this class requires more reading, writing, and analytical thinking skills. End of course testing is mandated.

### **Biology 1 Honors Dual 32108**

Grade Levels: 11, 12 Credit: 1  
*Prerequisites: Biology 1*  
In this science lab, students will conduct experiments, collect and analyze data and interpret results. Students identify unifying principals and repeatable patterns in nature, the value of diversity, and apply them to problems of scientific nature. Biochemistry of cell function and plant and animal anatomy and physiology are the course of study. High school elective credit. College credit in BIO 1110. Students must meet the guidelines on the ACT Test (19) to take the course for college credit.

### **Biology 2 32161**

Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: Biology 1*  
*Biology 2 is a continuation of Biology 1 and focuses on genetics and inheritance, human genetics, interdependency of organisms, population ecology, energy flow through ecosystems, and the study of plants. Laboratory investigations do not rely on animal dissection.*

### **Biology 2 Honors 3216**

Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: Biology 1*  
Biology 2 involves a deeper study into cell biology. Chemical structure and how it affects cell function is discussed. Photosynthesis, respiration, reproduction, and gene regulation are presented. Dissection is used in a brief study of vertebrate comparative anatomy. This class requires more reading, writing, and analytical thinking skills.

### **Biology 2 AP 3217**

Grade Levels 10,11,12 Credit: 1

### **Chemistry in the Community 32219**

Grade Levels: 10, 11, 12 Credit: 1  
*Prerequisites: Algebra 2*  
Chemistry 1 is a laboratory science course in which students investigate the composition as well as the physical and chemical changes of matter. Students use science process skills to study the fundamental structure of atoms, the way atoms combine to form compounds, and the interactions between matter and energy.

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**Science (cont.)**

**Chemistry 1**

**3221**

Grade Levels: 10, 11, 12      Credit: 1

*Prerequisites: Biology 1 Algebra 2*

The emphasis in this course is placed on the mathematical and scientific skills required of those students who will major in mathematical or scientific fields. It is recommended that this course be taken by those students who plan to major in Sciences, Health Sciences careers, and Engineering.

**Chemistry 1 Accelerated Honors 32212** Grade Levels: 10, 11, 12      Credit: 1

*Prerequisites: Algebra 2*

This course must be taken in the Spring Semester followed by Chemistry 2 in the Fall Semester by students who plan on taking AP Chemistry the following Spring Semester. Accelerated Honors Chemistry will cover in more detail the principles in honors chemistry and even more principles of chemistry.

**Chemistry 2 Honors 3224**

Grade Levels: 11, 12      Credit: 1

*Prerequisites: Chemistry 1 Honors 3221*

Honors Chemistry 2 will be an in-depth and fast-paced study of acids and bases, chemical reactions, calculations, oxidation- reduction reactions, chemical kinetics, and laboratory activities. This course is highly recommended for students majoring in Sciences, Health Sciences careers, and Engineering.

**Chemistry AP 3225**

Grade Levels: 11, 12      Credit: 1

*Prerequisites: Chemistry 1 Honors 3221, Chemistry 2 Honors 3224*

This course is the second half of an all-year sequence consisting of Chemistry 2 and AP Chemistry. Students will receive AP Chemistry credit upon successful completion of the AP Chemistry exam. This course covers concepts to enable the student to take the AP Exam. Topics include atomic theory, molecular theory, reactions, gases, thermo chemistry, oxidation-reduction, stoichiometry, etc. Lab work is vital to the course. Students will need to be able to work after school.

**Ecology 3255**

Grade Levels: 10, 11, 12      Credit: 1

*Prerequisites: Biology 1*

Ecology is the study of the human effect on the environment. The interdependence of all organisms and the need for conserving natural resources are discussed. Required readings and presentations about current environmental science, writing on ecological issues, lab experiences, and special projects are essential to this class. This class will substitute for a lab science credit.

**AP Environmental Science 3236**

Grade Levels: 11, 12      Credit: 1

*Prerequisites: Biology 1 Chemistry 1*

This class will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. This course serves as a lab science credit.

**Physics Honors 3231**

Grade Levels: 11, 12      Credit: 1

*Prerequisites: Biology 1 Chemistry 1 Honors*

Honors Physics is the study of physical laws that govern our universe. Topics covered include Newtonian mechanics, motion, acceleration forces, gravity, momentum, work energy, thermodynamics and wave mechanics.

**Anatomy & Physiology Honors 3251**

Grade Levels: 11, 12      Credit: 1

*Prerequisites: Biology 1 Chemistry 1 Honors*

This honors-level course is designed for the science student interested in the field Health Sciences (medicine, physical therapy, or sports medicine) or one interested in an in-depth study of the workings of the human body. It will provide a look at the organization of the body as a whole and then provide a detailed study of its structure and function. Extended reading and research are an integral part of this class.

## Social Studies

**Ancient History** 3402  
Grade Levels: 9, 10, 11, 12 Credit: 1  
This course will focus on the history of times long past. Students will develop an understanding of the relationships among persons and places, and an overall era's relationship with those proceeding and preceding it in the history of our world before the Renaissance.

**Bible** 3452  
Grade Level: 10,11,12 Credit: 1

**Economics** 3431  
Grade Levels: 11, 12 Credit: .5  
Economics is a survey of the free-enterprise system and the role of consumers. Topics that will be covered are taxes, money and banking, supply and demand, inflation unemployment, competition, types of business, the stock market and the global economy.

**Economics Honors** 34315  
Grade Levels: 11, 12 Credit: .5  
Economics is a survey of the free-enterprise system and the role of consumers. Topics that will be covered are taxes, money and banking, supply and demand, inflation unemployment, competition, types of business, the stock market and the global economy. This is a rigorous course that will require additional reading, writing, and analytical skills.

**Personal Finance** 3496  
(Honors) 34965  
Grade Levels: 11,12 Credit: .5  
This course is to be taken with Honors Economics 34315, Economics 3431, or Business Economics 3755. Personal Finance is required for graduation.

**Psychology** 3433  
Grade Levels: 9, 10, 11, 12 Credit: 1  
Psychology is the science of the mind and the scientific study of the way the human mind works and influences behavior, or the influence of the particular person's character on behavior.

**Psychology AP** 3447  
Grade Levels: 11, 12 Credit: 1  
The purpose of the AP course in Psychology is to introduce the systematic and scientific study of the behavior and mental processes of human beings and other animals. Included is a consideration of the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students will sit for the AP exam in Psychology at the end of this course.

**Sociology** 3432  
Grade Levels: 9, 10, 11, 12 Credit: 1  
Sociology is the study of groups of people and their interrelationships with society.

**U.S. Government** 3407  
Grade Levels: 11, 12 Credit: 1  
U.S. Government is a study of the structure of government in the United States. The course examines the how and why of the American political system. Students apply their knowledge and personal experience to examine some of the basic problems facing our nation today.

**U.S. History** 3405  
Grade Levels: 11, 12 Credit: 1  
U.S. History is a chronological survey of the people and events that have shaped our nation's history from Reconstruction to modern times. End of course testing is mandated.

**U.S. History Honors** 34051  
Grade Levels: 11, 12 Credit: 1  
Honors U.S. History is a study of the social and political movements, philosophies, and national and international events that have created the present-day United States. Higher order thinking skills will be developed. End of course testing is mandated.

**U.S. History AP** 3440  
Grade Levels: 11, 12 Credit: 1  
This course is a continuation of Honors U.S. History. The class is structured to help students develop effective higher order thinking skills. Upon completion of the Advanced Placement (AP) course, students will be required to pass the AP exam in order to receive college credit.

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## Social Studies (cont.)

**World Geography** **3410**  
Grade Levels: 9, 10, 11, 12      Credit: 1  
This course is designed to expose students to the many nations and peoples of the Earth, including their histories, economics, locations, topographies, and social structures,

**World History** **3401**  
Grade Levels: 9, 10, 11, 12      Credit: 1  
World History is a survey course covering the events and people from ancient to modern times.

## Specialized Assignment

**Peer Tutoring** **9499**  
Grade Levels: 11, 12      Credit: 1  
*Prerequisites: Teacher Approval*  
This course would be excellent for those interested in teaching, childcare, and/or health occupations. This class requires that students work in the LRE classroom as a peer tutor to students who have disabilities.

**Assist Principal -1<sup>st</sup> Sem** **9210**  
Student assistant in administrative office. Must complete an application and be selected.

**Assist Principal-2<sup>ND</sup>Sem** **92102**  
Student assistant in administrative office. Must complete an application and be selected.

## Special Education

All students enrolled in Special Education classes must have an IEP and instructor approval.

**Adaptive PE** **33011**  
Grade Levels: 9, 10, 11, 12      Credit: 1  
*Prerequisites: None*  
This course provides an opportunity for students with disabilities to participate in and learn the rules and strategy of a variety of physical education activities.

**Algebra 1A (SE)** **31025**  
Grade Levels: 9, 10, 11, 12      Credit: 1

**Algebra 1B (SE)** **31026**  
Grade Levels: 10, 11, 12      Credit: 1

**Basic Math 1 (SE)** **91081**  
Grade Levels: 9, 10, 11, 12      Credit: 1

**Basic Reading (SE)** **91111**  
Grade Levels: 9, 10, 11, 12      Credit: 1

**Biology 1A (SE)** **32105**  
Grade Levels: 10, 11, 12      Credit: 1

**English I (LRE)** **91331**  
Grade Levels: 9, 10, 11, 12      Credit: 1

**English 1 (SE)** **30015**  
Grade Levels: 9      Credit: 1

**English 2 (LRE)** **91332**  
Grade Levels: 9, 10, 11, 12      Credit: 1

**English 2 (SE)** **30025**  
Grade Levels: 10      Credit: 1  
End-of-course testing is mandated.

**English 3 (SE)** **30035**  
Grade Levels: 11      Credit: 1

**English 4 (SE)** **30055**  
Grade Levels: 12      Credit: 1

**Math 1 (LRE)** **91333**  
Grade Levels: 9, 10, 11, 12      Credit: 1

**Math 2 (LRE)** **91334**  
Grade Levels: 9, 10, 11, 12      Credit: 1

**Mathematics (LRE)** **9108**  
Grade Levels: 9, 10, 11, 12      Credit: 1

**Transition at Central Office(SE)** **91122**  
Grade Levels: 11, 12      Credit: 1

**Work Based Learning-1<sup>st</sup>Semester** **9498**

**Work Based Learning-- 2<sup>nd</sup> Semester** **94982**

**Math, Social Skill, & Language**  
**1<sup>st</sup> Semester** **9133333**  
**2<sup>nd</sup> Semester** **9133339**  
3 Block Meting Pattern for CDC students—IEP teacher approval

## CAREER AND TECHNICAL EDUCATION (CTE)

### Agriculture, Food, & Natural Resources

#### Advanced Principles of Agricultural Sciences 5155

Grade Levels: 10, 11, 12      Credit: 1  
This class includes standards that challenge students to plan for one of the five career clusters in agriculture. Understanding the skills necessary to be successful in an agriculture career is important for students as they enter the agricultural industry in the 21st century.  
*Recommended Prerequisites: Agriscience or Principles of Agricultural Sciences*

**Agricultural Engineering**      5178  
Grade Levels: 11, 12      Credit: 1  
Agricultural Engineering includes standards on metal fabrication and agriculture structures.  
*Recommended Prerequisites: Agriscience (HQ), Principles of Agricultural Sciences or Principles of Horticultural Sciences*

**Agricultural Mechanics and Maintenance**  
5151  
Grade Levels: 10, 11, 12      Credits: 1  
This class includes standards to prepare students for operational procedures for a shop or a home environment. Students learn basic skills in areas, including welding, electricity, land measurement, and plumbing. As students enter the 21st century, they need to have skills that can be used in a rural or an urban environment.  
*Recommended Prerequisites: Agriscience (HQ), Principles of Agricultural Sciences or Principles of Horticultural Sciences*

**Agricultural Power & Equipment**  
5152  
Grade Levels: 11, 12      Credit: 1  
This class includes basic information and laboratory activities on small engines, tractors and agricultural equipment maintenance, repair and overhaul. The standards address competencies for electrical motors, hydraulic systems and fuel-powered engines.  
*Recommended Prerequisites: Agriscience (HQ), Principles of Agricultural Sciences or Principles of Horticultural Sciences*

**Agriscience (HQ)**      5171  
**Honors**      51712  
Grade Level: 9, 10, 11, 12      Credit: 1  
Agriscience is a laboratory science course that prepares students for biology, subsequent science courses and postsecondary pursuits. The content area includes ecology, biological processes, sexual and asexual reproduction and a study of the chemical and physical laws that govern life processes. This course helps students understand the important role agricultural science serves as industry moves into the 21st century.

**Advanced Livestock Management** 5186  
Grade Level: 11,12      Credit: 1  
This is a course to prepare students with interests in higher level science based animal agriculture. Students will study rigorous standards related to taxonomy, anatomy and physiology, body systems, reproduction, hormonal and immune systems, nutrition, heredity and genetics (molecular biology), health, agri-medicine, well-being, DNA and biotechnology, and emerging technologies associated with companion and production animals. *Recommended Prerequisites: Agriscience, Introduction to Agricultural Sciences or Introduction to Horticultural Sciences and Biology*

**Forestry Management/GIS**      5165  
**Dual**      51653  
Grade Level: 10,11,12      Credit: 1  
This class is designed to develop student knowledge of forestry technology. The student will develop skills in producing, harvesting, marketing and developing forestry products and public utilization. Forests are one of Tennessee's most valuable resources.  
*Recommended Prerequisites: Agriscience or Principles of Agricultural Sciences*

**Greenhouse Management**      5167  
Grade Levels: 10,11,12      Credit: 1  
Greenhouse Management is a course is designed to prepare a student to manage a greenhouse operation. Students in this class will learn to produce various ornamental crops and food crops. An understanding of structures, crop selection, and growing systems will be explored. Today's agriculture students are preparing to meet the needs of a growing world.  
*Recommended Prerequisites: Principles of Horticultural Sciences Agriscience or Principles of Agricultural Science*

## Agricultural Food and Natural Resources (cont.)

**Horse Science 5168**  
Grade Levels: 10,11,12 Credit: 1  
Horse Science is designed to develop basic understanding of equine handling, health, maintenance, reproduction, selection and management. Horse populations in the state have continued to grow and their economic impact has increased with this growth. This course is designed to help students prepare for the social and economic impact equine science will have in the 21st century. *Recommended Prerequisites: Agriscience (HQ) and/or Principles of Agricultural Sciences*

**Landscaping & Turf Management 5163**  
Grade Level: 10,11,12 Credit: 1  
This class includes standards to prepare students for creating beautiful environments for homes and businesses. This course includes site analysis and preparation, landscape drawing, plant selection, and installation. Plant science and leadership skills taught in this class will prepare students to meet the demands and careers of this exciting industry.  
*Recommended Prerequisites: Principles of Horticultural Sciences, Agriscience (HQ), or Principles of Agricultural Sciences*

**Leadership & Communications 5169**  
Grade Levels: 10,11,12 Credit: 1  
This course analyzes attributes and capabilities of those in leadership positions, to assist students in the development of their communication skills and interpersonal relationships and other related skills. Most jobs are lost or gained because of the leadership and communication ability a person has. *Recommended Prerequisites: Agriscience (HQ), Principles of Agricultural Sciences, or Principles of Horticultural Sciences*

**Livestock Management 5177**  
Grade Levels: 10,11,12 Credit: 1  
This course provides knowledge and skills needed for successful work (entry level to management) in the livestock industry. The course will complement a student's supervised agricultural experience program by providing management tools. *Recommended Prerequisites: Agriscience (HQ) or Principles of Agricultural Sciences*

**Plant & Soil Science 5161A**  
Grade Levels: 11,12 Credit: 1  
This class is designed to address issues dealing with the use of natural resources and agronomic crops as we see the need for improved management methods to meet the needs of agricultural production while addressing concerns dealing with urbanization and soil conservation. This course is to prepare students with interests in a higher level, science based plant agriculture. FFA and supervised experience will be included. *Prerequisites: Agriscience or Principles of Agricultural Sciences*

**Small Animal Care 5172**  
Grade Levels: 10,11,12 Credit: 1  
This course contains objectives to prepare students for careers in managing and caring for specialty and companion animals. As our population raises more specialty and companion animals for production purposes and personal value, careers that work with these animals in a safe environment will continue to expand.  
*Recommended Prerequisites: Agriscience (HQ) or Principles of Agricultural Sciences*

**Veterinary Science Honors 5176**  
Grade Levels: 11,12 Credit: 1  
This course challenges students to use advanced technologies and medical treatments to maintain the health of animals. The animal health industry continues to grow in importance and prominence as more people purchase animals for pleasure and sustenance.  
*Recommended Prerequisites: Agriscience (HQ) or Principles of Agricultural Sciences*

**Wildlife Management & Recreation 5174**  
Grade Levels: 10,11,12 Credit: 1  
This course emphasizes the awareness of conservation and preservation management practices utilized to ensure the sustainability of our outdoor resources. Integrated academics and experiential learning will build conservation awareness among students. This will, in turn, generate career interests and more responsible land ownership in the community as we enter the 21st century. *Recommended Prerequisites: Agriscience or Principles of Agricultural Sciences, Business Technology Education*

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## BUSINESS

**Accounting I** **3779**  
**Honors 37791**  
**Dual 37793**

Grade Levels: 11,12 Credit: 1  
Accounting introduces concepts and principles based on a double-entry system of maintaining the electronic and manual financial records for a sole proprietorship, a partnership, and a corporation. This course provides access to a computerized workstation for each student to complete financial applications using accounting and spreadsheet software. *Recommended Prerequisites: Algebra I, Computer Application*

### **Advanced Computer Applications 3770**

Grade Levels: 9,10,11,12 Credit: 1  
This course is a capstone course in which students will learn necessary skills in problem solving using current and emerging integrated technology to include a variety of input technologies in the production of professional quality business documents and presentations. The course focuses on student choice, accountability, and performance. This course may articulate to post-secondary education. *Recommended Prerequisites: Computer Applications I*

### **American Business & Legal Systems (ABLS) - 1<sup>st</sup> Semester 3719**

**2<sup>nd</sup> Semester 37194**

**Honors 37195** Grade  
Levels: 11,12 Credit: 1  
This course provides students with an understanding of the legal framework in which American business functions. The students will evaluate the influence of the free enterprise system in a democratic society on daily decisions. Access to the Internet for research should be provided.

### **Banking and Finance 3756**

Grade Levels: 11,12 Credit: 1  
This is a course designed to challenge the student with real banking and financial situations through a partnership with a local financial institution that would bring resources of mentors, seminars, and hands-on experience with day-to-day operations.  
*Recommended Prerequisites: Computer Applications*

**Business Economics (CTE) 3755**  
Grade Levels: 11,12 **Credit: .5**  
This course provides an in-depth study of fundamental concepts, free enterprise trading practices, and the various players in the economic system. Students will explore various careers related to the economy. International trade and economics have become an integral part of business economics. This class must be taken with Personal Finance.

### **Personal Finance (CTE) 3766**

Grade Levels: 10,11,12 **Credit: .5**  
Personal Finance is a course designed to help students understand the impact of individual choices on occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. The co-curricular student organization will provide students with opportunities for leadership development, personal growth, and school/community involvement. This class must be taken with Business Economics

### **Computer Applications 3718**

Grade Levels: 9,10,11,12 Credit: 1  
Computer Applications is designed to develop computer technology skills. Students will use a variety of computer software and hardware tools and features of an electronic information network. Students will explore the social, business, and ethical issues of using computer technology.

### **Desktop Publishing 3741**

Grade Levels: 10,11,12 Credit: 1  
Desktop Publishing will apply keying, formatting, typography, layout, and design skills in developing electronic publishing documents. The student will develop skills in electronic publishing design, layout, composition, and photo journalism. Content provides the opportunity to acquire marketable skills and to prepare for gainful employment and or entry into postsecondary education in the graphic communications industry. *Recommended Prerequisites: Computer Applications I*

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**Business (cont.)**

**eBusiness Communication 3704**

Grade Levels: 10, 11, 12      Credit: 1  
This course is the study of oral, written, and electronic communications in a global society. Components of communication include the sender, the message, the receiver, the feedback, and the channel. The course will address the use of Internet developing concepts, particularly those related to Web browsers, navigators, search engines, online communication methods, home and Web site design concepts, transfer of data, downloading files, security procedures, and Internet navigational tools.

**Financial Planning 3717**

Grade Levels: 9, 10, 11, 12      Credit: .5  
Financial Planning is a course designed to develop skills in the use of financial principles in making business decisions. Students will research job qualifications and employment opportunities in finance. The course includes a study of the allocation of financial resources, the effects of finance and credit institutions on the business community, and the impact of financial decisions on the consumer market. Ethical issues will be explored in this course. **This class must be taken with Spreadsheet Applications.**  
*Recommended Prerequisites: Accounting 1*

**Spreadsheet 3729**

Grade Levels: 9, 10, 11, 12      Credit: .5  
This course involves the use of electronic worksheets used to perform business calculations. This course will apply keying, typography, layout, and design skills in designing worksheets, writing formulas, analyzing data, charting data, and managing data. Team development will also be stressed as students work on spreadsheet project(s). Student proficiency may lead to software certification. **This class must be taken with Financial Planning.**  
*Recommended Prerequisites: Accounting 1*

**Computer Programming 1 3782**

**Computer Programming 2 3783**

**Java Programming 3637**

**Interactive Multimedia**

**1<sup>st</sup> Semester 3746**  
**2<sup>nd</sup> Semester 37462**

Grade Levels: 9, 10, 11, 12      Credit: 1  
In this course students will apply keying, typography, layout, and design skills. The student will be proficient in using interactive multimedia tools to develop electronic presentations. Typography, layout, and design guidelines are applied. Copyright laws and ethical practices are reinforced in creating and formatting various presentations that require imported data/graphics, digital, audio, and video clips. Team development will also be stressed as students work on multimedia project(s). Laboratory facilities and experiences simulate those found in business and industry.  
*Recommended Prerequisites: Keyboarding, Computer Applications I*

**Web Design Applications**

**1<sup>st</sup> Semester 3638**  
**2<sup>nd</sup> Semester 36382**

Grade Levels: 11, 12      Credit: 1  
This is classified as a business class but it is not in the CTE department. This course is a project-based continuation of Web Design Essentials, teaches students work-related skills for advancement into post-secondary education and/or the workplace. The course will provide the concepts and applications that may lead to business industry certification. Course content includes exposure to advanced Web design, graphics, animations, and the complex site design. The course content provides students the opportunity to acquire advanced skills in both theory and practical application of Web design and of leadership and interpersonal skill development.

**Word Processing 3781**

Grade Levels: 9, 10, 11, 12      Credit: 1  
This course builds on the keyboarding skills learned in the elementary school Keyboarding course and the middle school Document Formatting course. The student will use a hands-on approach to develop proficiency in document creation and design. Formatting, typography, and layout and design concepts are applied in document preparation of business letters, forms, invoices, manuscripts, and tabular and columnar. *Recommended Prerequisites: Keyboarding, Document Formatting*



## Family and Consumer Science (FACS)

### Child & Lifespan Development 5625

Grade Levels: 10, 11, 12 Credit: 1

This course prepares students to understand the physical, social, emotional and intellectual growth and development throughout the lifespan. Experiences such as laboratory observations, job shadowing, service learning and laboratory participation will enhance the learning process. Instructional content includes child development theories and research; prenatal development; infants and toddlers; preschool years; middle childhood; adolescence; adulthood; geriatrics; death and dying.

*Recommended Prerequisites: Family & Consumer Sciences (FACS)*

### Culinary Arts 1 5663

Grade Levels: 10, 11, 12 Credit: 1

This course is the first level of Culinary Arts and prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Designed to introduce students to food preparation concepts, terminology and practices in the modern commercial kitchen, the content provides students the opportunity to acquire marketable skills by examining both the industry and its career opportunities and by developing food preparation and skills. Laboratory facilities and experiences offer school-based learning opportunities. *Recommended Prerequisites: Food and Nutrition*

### Culinary Arts 2 5664

Grade Levels: 10, 11, 12 Credit: 1

This course is the second level of Culinary Arts and prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides students the opportunity to acquire marketable skills by demonstrating the principles of safety and sanitation, food preparation skills, and teamwork to manage an environment conducive to quality food production and service operations. This class offers laboratory facilities and experiences offer school-based learning and work-based learning opportunities.

*Recommended Prerequisites: Culinary Arts I, Food and Nutrition*

### Culinary Arts 3 5665

Grade Levels: 11, 12 Credit: 1

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

*Recommended Prerequisites: Culinary Arts 2, Food and Nutrition*

### Family & Consumer Sciences (FACS) 5603

Grade Levels: 9, 10, 11, 12 Credit: 1

FACS is a comprehensive, foundation course designed to assist students in developing core knowledge and skills needed for successful life planning and management. Content includes human development; family and parenting education; resource management; housing and living environments; nutrition and foods; textiles and apparel; leadership development; and career preparation. The course provides a foundation for further study in specialized related career areas.

### Life Connections 5623

Grade Levels: 10, 11, 12 Credit: 1

This course is designed to assist students in making a successful transition from high school into the post high school environment. Students will be empowered to take action for the well-being of them selves and others as they effectively manage the roles and responsibilities created by family, career and community interactions.

### Nutrition & Foods 5609

Grade Levels: 10, 11, 12 Credit: 1

This is a specialized course designed to help students understand the nutrient value, appetite appeal, social significance and cultural aspects of food. Students will examine the role of nutrition in the prevention of health conditions, such as obesity, and the promotion of optimal body performance throughout the life span. Careers in nutrition and food industries will be explored.

*Recommended Prerequisites: Family & Consumer Sciences (FACS)*

## Family and Consumer Science (cont.)

### Teaching As A Profession Dual 5622

Grade Level: 12 Credit: 1

This is a course designed to capture the interest of secondary students as potential teachers, introduce students to teaching as a profession, and foster respect for the teaching profession. Students will gain knowledge and skills that will establish a foundation for a successful pathway to a teaching career. Content standards guide students to discover challenges, opportunities, and rewards of a teaching career. Content includes history and current issues of education; teacher roles, responsibilities, and characteristics; self exploration and understanding; the teacher and learning processes; human growth and development; teaching career opportunities and preparation; and components of instruction. Students will learn through classroom observations and experiences, student organization activities, and the development of a professional portfolio.

*Recommended Prerequisites: None*

## Health Science Education

### Anatomy and Physiology 5517

Grade Levels: 10,11,12 Credit: 1

This is a course in which students will examine human anatomy and physical functions. They will analyze descriptive results of abnormal physiology and evaluate clinical consequences. A workable knowledge of medical terminology will be demonstrated. *Recommended*

*Prerequisites: Health Science*

### Diagnostic Medicine 5521

Grade Levels: 10,11,12 Credit: 1

This course creates a picture of an individual's health status at a single point in time. This could include following careers and career areas: audiologist, cardiology, imaging, medical laboratory, radiography, nuclear medicine, stereotactic radiosurgery, cytotechnology, clinical laboratory technician, pathologists, medical physician, histotechnologist. *Recommended*

*Prerequisites: Health Science*

### Emergency Medical Service EMS Dual 55223

Grade Levels: 10,11,12 Credit: 1

EMS is designed for students interested in a career in pre-hospital or emergency patient care. Career options may include emergency room physician, emergency medical technician, paramedic, or emergency room nurse.

*Recommended Prerequisites: Health Science*

### Forensic Science Honors 55231

Grade Levels: 11,12 Credit: 1

This course is an overview of how science is applied to solving crimes. Topics include history of forensic sciences, collecting of evidence, analyzing results and hands-on applications of many laboratory techniques used in solving crimes and identifying people and future careers. Jobs include forensic nurses, odontologists, pathologists, psychiatrists, medical examiners/coroners, forensic technicians, toxicologists, wildlife specialists, forensic engineers, accountants, computer specialists, aviation and construction accident investigators, forensic photographers, skull reconstructionists, document and polygraph examiners.

*Recommended Prerequisites: Health Science*

### Health Science Education 5526

Grade Levels: 9,10,11,12 Credit: 1

This course is an introduction to broad standards that serve as a foundation for Health Care Occupations and functions across health services. Units included are academics in health care communications systems, legal responsibilities, ethics, teamwork, and safety practices.

### Medical Therapeutics 5527

Grade Levels: 10,11,12 Credit: 1

This course provides knowledge and skills to maintain or change to the health status of an individual over time. This could include such careers or career areas as dental, dietetics, medical assistance, home health, nursing, pharmacy, respiratory, social work, nutritionist, physician, psychiatrist, psychologist, veterinarian, gerontology service provider, medical practice. *Recommended Prerequisites:*

*Health Science*

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## Health Science Education (cont.)

### **Nursing Education 5528**

Grade Levels: 10,11,12

**Credit: 2**

Nursing Education consists of 18 units of study dealing with direct bedside nursing care. Clinical experience will consist of supervised practice in the nursing home, as well as demonstrations in the classroom. Students can be registered by Tennessee Department of Health—after the completion of the course, 100 hours clinical and theory, passing a state test (both written and skills)—and will be job ready. Students may complete a clinical internship following this course. Jobs include registered nurse, clinical nurse specialist, nurse practitioner, nurse midwife, nurse anesthetist, forensic nurse, and other occupations.

*Recommended Prerequisites: Health Science*

## Marketing Education

### **Exploration of Organizational Leadership & Marketing 5039**

Grade Levels: 9,10,11,12

**Credit: 1**

This course is designed to introduce and provide an overview of marketing and organizational leadership, as well as employment opportunities available in these fields. Students will explore important marketing concepts, personality traits, and communication skills. Students will also develop skills in teamwork, conflict resolution, and group problem solving techniques used in business.

### **Marketing & Management 1 5000**

Grade Levels: 10,11,12

**Credit: 1**

This course focuses on the study of marketing concepts and their practical application. Students will examine risks and challenges marketers face to establish a competitive edge. Subject matter includes economics, promotion, pricing, selling, product planning, distribution, and human resource leadership development. Skills in communication, mathematics, economics and psychology are reinforced in this course.

### **Marketing & Management 2 5001**

Grade Levels: 10,11,12

**Credit: 1**

In this course emphasizes is placed marketing concepts and management functions performed by professionals. Students will examine challenges, responsibilities, and risks managers face in today's workplace. Subject matter includes finance, entrepreneurship, risk management, marketing information systems,

purchasing, human resource skills, and leadership development. Communication, interpersonal and mathematics skills are reinforced in this course. *Recommended Prerequisites: Marketing 1*

### **Marketing Co-op 1<sup>st</sup> Semester 5098 2<sup>nd</sup> Semester 50981**

Grade Levels: 11, 12

**Credit: 1**

This course is designed to be a work-based learning opportunity. Students are released at the beginning of 4<sup>th</sup> Block to a marketing-related job. They must also be enrolled in Marketing 1 the same semester. Students will receive credit for both Marketing 1 and work experience.

*Recommended Prerequisites: Must be taken the same semester as Marketing 1*

### **Sports & Entertainment Market 5023**

Grade Levels: 11,12

**Credit: 1**

This is a specialized course designed to offer students an opportunity to gain knowledge and develop skills related to the growing sports and entertainment industry. Students will develop skills in the areas of facility design, merchandising, advertising, public relations/publicity, event marketing, sponsoring, ticket distribution, and career opportunities as they relate to the sports and entertainment industry. *Recommended Prerequisites: Market 1*

### **Travel & Tourism 5003**

Grade Levels: 11,12

**Credit: 1**

This is a growing industry encompassing a variety of businesses and employment opportunities. This course prepares students for gainful employment and/or post-secondary training in the industry of travel and tourism. Content provides students the opportunity to acquire marketable skills by examining both the industry and its career opportunities and by developing the human relations, communications and technical skills needed for advancement.

### **Work Based Learning 5037/5098**

Grade Levels: 11, 12

**Credit: .5**

This class counts as .5 Marketing credit and Marketing substitutes for economics.

### **Personal Finance for Work Based Learning 5038/5098**

Grade Levels: 11, 12

**Credit: .5**

This class counts as .5 Personal Finance credit and is to be taken with Work Based Learning.

# Technology Engineering Education (CTE)

**Engineering 1** **3835**  
Grade Levels: 9,10,11,12 Credit: 1  
This course prepares students to understand and apply technological concepts and processes that are the cornerstone for the high school technology program. Group and individual activities engage students in creating ideas, developing innovations, and engineering practical solutions. Technology content, resources, and laboratory/class-room activities apply student applications to science, mathematics and other school subjects in authentic situations. This course is designed to engage students in exploring and deepening their understanding of engineering.

**Engineering 2** **3836**  
Grade Levels: 10,11,12 Credit: 1  
This course will actively engage student in making and developing, using, and managing technology systems. Students will better understand the role of systems in meeting specific needs and will be able to analyze and understand the behavior and operation of basic technological systems in different contexts. Students will investigate critical historical and emerging issues affecting the creation, development, use, and control of technology.  
*Recommended Prerequisites: Engineering 1*

**Engineering 3 Honors** **3838**  
Grade Levels: 10,11,12 Credit: 1  
This course has been designed as an advanced study for students engaged in themed academies and general technology studies that lead to the capacity to understand how technology's development, control and use is based on design constraints, and human wants and needs. The structure of the course challenges students to use design processes so that they can think, plan, design and create solutions to engineering and technological problems. Students are actively involved in the organized an integrated application of technological resources, engineering concepts, and scientific procedures.  
*Recommended Prerequisites: Engineering 2*

**Engineering 4 Honors** **3839**  
Grade Levels: 11,12 Credit: 1  
In this course, engineering scope, content and professional practices are presented through practical application. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and project-based learning. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics.  
*Recommended Prerequisites: Engineering 3*

## Trade and Industrial Animation/Simulation & Motion Graphics 5773

Grade Levels: 12 Credit: 1  
This is a course that builds on foundational elements of visual communication learned in Digital Arts and Design classes. Course content is designed to develop a strong knowledge in animation and software applications, new media graphics and the latest visual communication technologies that are multi-faceted and essential to the industries. Focus will be on developing understandings of key concepts, processes and strategies that will result in realistic animated characters, digital effects, products and environments. Students will explore career opportunities, develop leadership, teamwork, and creative skills that are requisite in many aspects of life and industry.  
*Recommended Prerequisites: None*

## Automotive: Maintenance & Light Repair 1 (MLR 1) **5812**

Grade Level: 9, 10, 11, 12 Credit: 1  
This course prepares students for entry into subsequent Maintenance and Light Repair courses. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals and basic technician skills. Upon completing the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician.

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**Trade and Industrial (cont.)**

**Automotive: Maintenance & Light Repair 2  
(MLR 2) 5727**

Grade Level 10, 11, 12 Credit: 1  
This course prepares students for entry into subsequent Maintenance and Light Repair courses. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals and basic technician skills. Upon completing the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician.  
*Recommended Prerequisites: Automotive: Maintenance and Light Repair 1*

**Automotive: Maintenance & Light Repair 3  
(MLR 3) 5726**

Grade Level: 10, 11, 12 Credit: 2  
This course prepares students for entry into subsequent Maintenance and Light Repair courses. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals and basic technician skills. Upon completing the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician.  
*Recommended Prerequisites: Automotive: Maintenance and Light Repair 2*

**Career Management 5701**

Grade Levels: 9, 10, 11, 12 Credit: 1  
This is a core course for career clusters. The course provides students with tools for achieving success in their academic, work, and personal lives. Course content emphasizes the basic skills and knowledge needed for employment success, as identified by industry and supported by relevant national standards. All course content is presented in a real-world context, providing concrete opportunities for developing personal and career goals, effective communication skills, teamwork abilities, and successful work attitudes. Upon completion of the course, students will be able to complete the Professional Development Program Level I and Level II of Skills USA or other degree programs in other career and technical youth organizations.

**Construction Core 5814**

Grade Levels: 9, 10, 11, 12 Credit: 1  
This is a course that will introduce students to basic skills and knowledge applicable to all construction trades. Topics covered include safety, construction drawings, site layout, hand and power tools, linear and angular measurements, and application of algebraic and geometric principles to construction problems.

**Carpentry 1 5748**

Grade Levels: 10, 11, 12 Credit: 2  
This is a course that will introduce students to basic skills and knowledge related to residential and commercial carpentry. Topics covered include wood, metal, and concrete building materials; fasteners; hand and power tools; fabrication based on construction plans; and framing of platform and post-and-beam structures, in both wood and metal. This course gives students an introduction to the skill and knowledge base typically required for apprentice carpenters.

*Recommended Prerequisites: Construction Core*

**Carpentry 2 5749**

Grade Levels: 10, 11, 12 Credit: 2  
This is a course in which students will extend their skills and knowledge related to residential and commercial carpentry. Topics covered include stairs, installation and trim of windows and doors, installation and repair of gypsum wallboard, advanced site layout, exterior finish work, thermal and moisture protection, and an introduction to welding. This course gives students a substantial skill and knowledge foundation typically required for apprentice carpenters.

*Recommended Prerequisites: Construction Core, Carpentry 1*

**Criminal Justice 1 5401**

Grade Levels: 9, 10, 11, 12 Credit: 1  
This is the first level of study of criminal justice careers. It will prepare students for work-related knowledge and skills for advancement into the second level of criminal justice careers. Course content focuses on areas comprised of the three components of the criminal justice system, the police, courts, and corrections. New technology and career opportunities in criminal justice are an integral part of the course content.

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## Trade and Industrial (cont.)

### **Criminal Justice 2** **5402**

**Dual 54023**

Grade Levels: 10,11,12 Credit: 1  
This course will offer an in-depth study of criminal justice in which current criminal justice careers issues will be discussed and debated. Local, state, federal, and international laws will be analyzed. Students will have opportunities to participate in mock trials and field trips with criminal justice careers emphasis.

*Recommended Prerequisites: Criminal Justice 1*

### **Criminal Justice 3** **5403**

**Honors 54031**

Grade Levels: 10,11,12 Credit: 1  
This course will provide students with an opportunity to 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 in which the forensic investigator may encounter from initial response to the courtroom. *Recommended Prerequisites: Criminal Justice 2*

### **Digital Art & Design 1** **5825**

Grade Levels: 9,10,11,12 Credit: 1  
This is a course that provides a foundation in visual communication concepts and design strategies. Course content is designed to foster skills and understanding that are essential in modern digital graphics, motion graphics, publishing, Web, film/video, photography, and animation graphic industries. Focus will be on developing understanding of key design concepts and strategies, along with design challenges that translate into creative communication solutions. This class offers exploration of career opportunities, development of leadership, teamwork, collaborative, and technical skills requisite in many aspects of life.

### **Digital Art & Design 2** **5827**

Grade Levels: 10,11,12 Credit: 1  
This is a course that builds on the foundational core elements of visual communication concepts and design strategies, learned in Digital Arts and Design 1. Course content is designed to reinforce skills and support understanding that are essential in modern digital graphics, motion graphics, publishing, Web, film/video,

photography, and animation graphic industries. Students will gain mastery of various applications of design through continued study of typography, style, composition, visual elements, color, and creative technical software. Exploration of career opportunities, development of leadership, teamwork, collaborative and technical skills requisite in many aspects of life and industry, which are creative and multi-faceted will be developed. *Recommended Prerequisites: Digital Art and Design 1*

### **Digital Art & Design 3** **5828**

Grade Levels: 11,12 Credit: 1  
With the confluence of technologies, visual arts and creative practices have changed dramatically over the past several years. Increasingly, the design studio functions as a dynamic and vital space for learning, exploring, and innovation. Course content is selected to broaden the foundation of design concepts and understanding related to modern communication design. This course will foster advanced integrated skills that are essential in digital graphics, motion graphics, publishing, web, film/video, photography, and animation graphic industries. Students will be exposed to real world design challenges in a laboratory facility through projects that simulate industry objectives.

*Recommended Prerequisites: Digital Art and Design 1*

### **Design Yearbook 1-1<sup>st</sup> Semester** **58271**

Grade Levels: 10-12 Credit: 1

### **Design Yearbook 2-2<sup>nd</sup> Semester** **58281**

Grade Levels: 10-12 Credit: 1

### **Introduction to Aerospace** **5809**

Grade Levels: 9,10,11,12 Credit: 1  
This is a course that introduces students to the knowledge and procedures required for the ground school (knowledge) portion of the Federal Aviation Administration (FAA) private pilot license examination. Students explore the history of aviation, career opportunities and paths within aviation, and the regulations governing those careers. The course also introduces principles of aeronautical decision-making, airplane systems, and aerodynamics while preparing student for the course in Flight Theory. Course content prepares students for post-secondary education and advancement in the aerospace industry.

## Trade and Industrial (cont.)

**Theory of Flight** **5811**  
Grade Levels: 10,11,12 Credit: 1  
This is a course that continues and completes the presentation of knowledge and procedures required for the ground school (knowledge) portion of the Federal Aviation Administration (FAA) private pilot license, begun in Introduction to Aerospace. Students will explore the flight environment and weather formation and assess how weather data and other factors impact safety and flight operations. The course also covers Federal Aviation Administration (FAA) regulations affecting private pilot operations; predicting aircraft performance, weight, and balance; types of navigation in pilotage and dead reckoning; aviation physiology and aeronautical decision-making; and cross-country flying. *Recommended Prerequisites: Introduction to Aerospace*

# Tennessee Technology Center (TTC)

Classes taken at TN Technology Center @ Crossville provide high school students with better employment opportunities and/or preparation for college or university. High school students have the opportunity to dual enroll in classes at TTCC as part of their high school schedule. Dual enrollment means credits earned at TTCC lead to advanced placement should a student decide to return to TTCC after high school graduation.

High school students enrolled at TTCC normally attend 1<sup>st</sup> and 2<sup>nd</sup> block or 3<sup>rd</sup> and 4<sup>th</sup> block for the semester. Special permission from the TTCC director is required if a student wishes to attend all day (four blocks) or if a student wishes to take first or fourth block only in Computer-Aided Drafting (CAD).

Most TTCC classes require pre-requisite(s). Please note that TTCC programs may be taken more than one time for additional credits. Please check with your counselor for details.

## AUTOMOTIVE

**TTC-Automotive: Maintenance & Light Repair 4 Dual (MLR 4) 5728**  
Grade Level: 11, 12 Credit: 2  
This course prepares students for entry into subsequent Maintenance and Light Repair courses. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals and basic technician skills. Upon completing the Maintenance and Light Repair courses, students may enter automotive service industry as an ASE Certified MLR Technician. There will be a \$30 fee--\$15 for AC and \$15 for testing.  
*Prerequisites: Maintenance & Light Repair 3*

## COLLISION REPAIR

**TTC- Non-Structural Collision Repair (TTCColRep) 5803**  
Grade Levels: 11, 12 Credit: 2  
*Prerequisites: Transportation Core and/or Teacher approval*  
This program prepares students to analyze non-structural collision damage to a vehicle, determine the extent of the damage and the direction of impact, and initiate an appropriate repair plan. Course content includes metal finishing, body filling, welding, panel replacement, and glass panel replacements. The course prepares students for entry level employment and advanced training in collision repair technology, and post-secondary education.

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## DRAFTING

### **TTC-Computer Aided Drafting (TTCCAD) 5750**

Grade Levels: 11, 12 Credit: 2

*Prerequisites: English I Algebra I  
Basic computer skills*

This first pre-engineering design course is designed to introduce the student to the design process in the architectural profession and to teach the basic "tools-of-the-trade." This course leads the student through a detailed study of the Architecture, Drafting, Engineering and Interior Design professions. This course also focuses on basic two dimensional engineering drawing/drafting skills where emphasis is placed on freehand sketching and Computer Aided Drafting (CAD). Students work in teams on a class project to create a comprehensive set of construction assembly drawings for a mechanical project. The curriculum is certified by the American Design Drafting Association.

### **TTC - Adv Computer Aided Drafting (TTCAdv CAD) 57522** Grade Levels: 11, 12 Credit: 2

*Prerequisites: TTC-Compt Aided Drafting 5750*  
In Advanced CAD, students are introduced to three-dimensional, solid modeling visualization.

## EARLY CHILDHOOD EDUCATION

### **TTC-Early Childhood 1 (TTCChild1) 5650**

Grade Levels: 10, 11, 12 Credit: 2

*Prerequisites: Child Development or Child & Lifespan Develop 5625 and 3 teacher recommendations*

### **TTC-Early Childhood 2 (TTCChild2) 5660**

Grade Levels: 10,11,12 Credit: 2

*Prerequisites: TTC-Early Childhood 1 5650*

### **TTC-Early Childhood 3 (TTCChild3) 5661**

Grade Levels: 10, 11, 12 Credit: 2

*Prerequisites: TTC--Early Childhood 5660*  
Early Childhood Education (ECED) prepares students for employment in entry-level positions in occupations related to childcare. Emphasis in the course is upon applying knowledge of how children grow and develop, guiding children's behavior, as well as planning and supervising

activities, which are developmentally appropriate for children. These skills are obtained through a hands-on day care center environment for children ages 3 to 5. These courses prepare students for future CDA (Child Development Associates) credential course work for Early Childhood Education Teachers.

## ELECTRONICS

### **TTC-Electronics 1 (TTCElec1) 5390**

Grade Levels: 11, 12 Credit: 2

*Prerequisites: Algebra I*

This program is designed for students seeking careers in the fields of Industrial, Computer, and Telecommunication Electronics. This program helps to build a basic understanding and familiarization of safety and common core electronic principles such as basic direct current circuit components, their operation and the proper usage of DC testing equipment, tools, and procedures.

### **TTC-Electronics 2 (TTCElec2) 5390**

Grade Levels: 11, 12 Credit: 2

*Prerequisites: TTCC-Electronics 1*

This program is a continuation of Electronics Technology 1. This program helps to build a basic understanding and familiarization of common core electronic principles in direct current circuit operation including complex DC circuits and the proper usage of electronic testing equipment, tools, and procedures used in those circuits.

### **TTC-Electronics 3 (TTCElec3) 5390**

Grade Levels: 11, 12 Credit: 2

*Prerequisites: TTCC-Electronics 2*

This program is a continuation of Electronics Technology 2. This program helps to build a basic understanding and familiarization of common core electronic principles in alternating current circuit components, their operation and the proper usage of AC testing equipment, tools, and procedures.

### **TTC-Electronics 4 (TTCElec4) 5390**

Grade Levels: 11, 12 Credit: 2

*Prerequisites: TTCC-Electronics 3*

This program is a continuation of Electronics Technology 3. This program helps to build a basic understanding and familiarization of common core electronic principles in alternating current circuit operation including RL and RC series and parallel circuits, and the proper usage of AC testing equipment, tools, and procedures used in those circuits.



## MACHINE TOOL TECHNOLOGY

### **TTC-Principles of Machining (TTCMfg) 5838**

Grade Levels: 11, 12      Credit: 2

*Prerequisites: Algebra I*

This course focuses on the essential principles that must be mastered for a person to be effective in the Machine Tool Technology trade.

Machinists and the machine tool trade often touch a part of everyone's life without them knowing it. The items produced within the trade can range from jewelry to aerospace parts.

Students will be trained in the proper use and safety of milling machines, conventional lathes, drill presses and surface grinders. Students will learn to interpret blue-prints and basic machining mathematics. The course is intended for students who are interested in learning to manufacture useful tools and component parts for numerous applications. Whenever possible, students are allowed to manufacture parts of their own design as well. The course also counts as Dual Credit toward the TTC diploma.

### **TTC-Principles of Machining & Manufacturing (TTCMfg) 5837**

Grade Levels: 11, 12      Credit: 2

*Prerequisites: TTCC-Principles of Machining 5838*

This course builds on Principles of Machining 5838. The student advances to more complex machining operations and specialized attachments. This course also utilizes training in the operation and programming of computer numerical controlled (C.N.C.) milling machines, lathes and wire electro-discharge machines. Training is also provided in computerized machining and design software. Using Dual Credit this course prepares the student for the final components of the TTC Machinist I diploma as well as the ability to work as an entry level machinist.

## WELDING

### **TTC-Introduction to Welding 1 (TTCWeld1) 5819**

Grade Levels: 11, 12      Credit: 2

*Prerequisites: Algebra I  
Construction Core or  
Agricultural Mechanics*

In this course students will learn basics skills and knowledge related to cutting and welding applications. Course content includes safe practices, career research, leadership development, and basic arc welding and thermal cutting skills.

### **TTC-Basic Principle Welding 2 (TTCWeld2) 5747**

Grade Levels: 11, 12      Credit: 2

*Prerequisites: TTC-Introduction to Welding 5819*

This course is designed to follow Introduction to Welding, in which students will learn more advanced skills and knowledge related to cutting and welding applications. Development of welding and cutting skills will be continued in the context of a series of projects.

### **TTC-Adv Welding Applications 3 (TTCWeld3) 5746**

Grade Levels: 11, 12      Credit: 2

*Prerequisites: TTC-Basic Principles of Welding 5747*

This course is third in a series designed to give the student additional practice and instruction in welding procedures and processes common in industry. Specific operations such as grinding, flame cuttings metal preparation, and the use of tools and equipment related to welding are included. Instruction in related math, physical properties of metal, and effects of heat, shrinkage, basic joint design, layout, and fabrication is included. American Welding Society Entry Level I.

***THE END 2-8-2013<sub>njh</sub>***