# 2021-2022

# **High School Course Catalog**



Vision: To provide an excellent school system empowering students to reach their potential through academics, arts, and athletics.

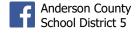
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Anderson School District Five P.O. Box 439 400 Pearman Dairy Rd. Anderson, SC 29622 864.260.5000

### A MESSAGE FROM THE SUPERINTENDENT

Dear Parents and Students:

This course catalog contains information about all areas of our secondary academic program. From dual-credit courses to art-infused curriculum, we offer an abundance of course selections for all Anderson Five students.



With multiple campuses available for students to

attend, we aim to ensure that all students are provided a quality education in a safe environment. If you should have any questions regarding our course selections, please do not hesitate to contact a school counselor. Our goal with this publication is to make sure that parents and guardians are aware of the educational opportunities that exist in Anderson Five, and we appreciate any feedback from those that we serve.

On behalf of our Board of Trustees, I welcome you to the 2021-2022 school year, and I look forward to building upon our record of academic success and excellence.

Sincerely,

Thomas A. Wilson

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Superintendent

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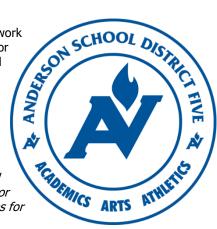
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### **INTRODUCTION**

The Anderson School District Five Program of Studies offers a broad range of coursework designed to provide opportunities for students to complete the required courses for graduation, to obtain admission to the two-year or four-year colleges of their choice, and to fulfill personal interests. Students will be able to complete a rigorous academic program and select technical and academic courses as electives.

As parents and students review this catalog and begin to design a program of studies, they will recognize that each major offers <u>many</u> possibilities.

**Disclaimer:** Anderson School District Five has made every effort to ensure that the information in this catalog is informative and accurate. However, new statutes and regulations may impact, negate, or change the implementation of the programs and/or courses described. This catalog should in no way be seen as a contract, but as guidelines for students as they move through their high school careers.



# INDIVIDUAL GRADUATION PLAN (IGP): DESIGNING A PROGRAM OF STUDIES

One of the most important activities for student success is the development and annual review of an individual graduation plan (IGP). A student's IGP guides course selections for subsequent academic years; reinforces the exploration of educational and career possibilities; supports decisions about postsecondary education and career plans; and tracks courses and graduation requirements.

This course catalog provides course selection information and assists students in planning for grades nine through twelve. Appropriate course selection is crucial in ensuring students graduate college and career ready. Please review this information carefully. Beginning in 8th grade, students and parents will have opportunities to work with a school counselor to develop an IGP. Each year this plan will be reviewed and revisions will be made if necessary. Students may change majors at any time based on career aspirations, abilities, and interests.

The primary goal of Anderson School District Five is to meet the educational needs of all students. In order to accomplish this goal, it is our responsibility to provide a high quality, rigorous instructional program, to encourage all students to enroll in classes which will be challenging, and to enable them to reach their highest level of achievement. To assist in student course registration, school counselors will review the students' academic and test records and the courses selected during the IGP conference with students and their parents. Students who have not met the minimum grade requirements will be placed in classes in which appropriate instruction can be provided.

All high school students, except seniors with prior approval, must register for eight courses each year. This will allow them to earn units beyond the state graduation requirements. Students may register for courses offered at their home campus, Southwood Academy of the Arts, and the Anderson Institute of Technology (AIT). Transportation to and from the satellite campuses will be provided by the district. Enrollment will determine course offerings on each campus.

#### COURSE REGISTRATION

Students will register for classes during their annual IGP conferences. All students, in consultation with their parents and school counselors, will select appropriate courses from their chosen major for the following school year. Students are encouraged to select courses carefully during their IGP conference as classes are scheduled upon student request. Due to scheduling conflicts and changes in course offerings, the school cannot guarantee that students will be scheduled for all courses they request.

During registration, students will select eight courses and identify alternate elective course choices. Careful consideration should be taken in selecting an alternate, or second choice of electives, in the event first choices are not available. Pacing courses over the four years is imperative so students do not have large gaps between core courses; for instance, it would not be advisable for a student to omit English, math, science, social studies and/or world languages from his or her senior schedule.

IGP conferences begin in mid-November and run through early March. Students will notify their counselor if they are making any changes to their course selection. Changes to requests may not be honored after the date established by each school.

Freshmen should register for the following courses:

English1 unit
Math1 unit
Science1 unit
Social Studies1 unit
College and Career Readiness1 unit
Physical Education or JROTC1 unit
Electives 2 units

Students are strongly encouraged to take at least one of each core course (English, math, science, and social studies) for each year that they are enrolled.

# **ANDERSON FIVE PATHWAY PROGRAMS**

Created by the Education and Economic Development Act of 2005, Personal Pathways to Success is designed to give students the educational tools they need to build successful futures. The pathway programs offered at Anderson School District Five provide an opportunity for all students to connect with and engage in an area of interest. Students, along with their parents and counselors, will choose a cluster of study based on career aspirations, abilities, and interests. Within each career cluster, a student will choose a major and take the appropriate courses to support that major. The courses will be discussed and chosen at the student's annual Individual Graduation Plan (IGP) conference. Students may change majors at any time.

School of Fine Arts and Humanities	School of Business Management and Information Systems	School of Engineering, Manufacturing, and Industrial Technology	School of Health Science, Human and Public Services
Arts, Audio-Video Technology and Communication Career Cluster  • Advanced Placement • Arts and Architecture • Digital Art and Design* • English • Journalism and Mass Communication • Media Technology* • Performing Arts • Teaching and Training • Visual Arts • World Languages	Information Technology Career Cluster  • Computer and Information Systems Security/ Information Assurance*  • Networking Systems*  Business Management and Administration Career Cluster  • Business Information Management  Marketing Career Cluster  • Marketing Management	Agriculture, Food, and Natural Resources Career Cluster	Government and Public Administration Career Cluster     Public Service and     Administration  Health Science Career Cluster     Biomedical Sciences PLTW*     Health Science*  Human Services Career Cluster     Cosmetology*  Law, Public Safety, Corrections, and Security Career Cluster     Emergency and Fire     Management Services*     Military

<sup>\*</sup>Majors denoted with an asterisk are offered at the Anderson Institute of Technology (AIT). All other majors are offered at the high school campuses.

# SOUTH CAROLINA HIGH SCHOOL DIPLOMA COURSE REQUIREMENTS

To receive a South Carolina High School Diploma, a student must complete twenty-four units of study. The following are course requirements prescribed by the State Board of Education for high school graduation.

TOTAL 24 un	its
Additional Electives7 ui	nits
Computer Science 1 u	unit
and Technology Course1 ເ	unit
World Language or Career	
Physical Education or JROTC1	unit
Other Social Studies1 ι	unit
U.S. Government 0.5 ι	unit
Economics	unit
U.S. History & Constitution 1 u	unit
Science3 un	nits
Mathematics4 ui	nits
English/Language Arts4 ur	nits

By order of the General Assembly of South Carolina, high schools must offer a Comprehensive Health Education Program. Each student shall receive instruction in Comprehensive Health Education that includes Reproductive Health Education and Pregnancy Prevention Education. Comprehensive Health Education is provided through Physical Education classes. Parents may review instructional materials at the school. If the program conflicts with the family's beliefs, an exception may be requested.

# ADMISSION REQUIREMENTS FOR POST-SECONDARY INSTITUTIONS

All public and private colleges, universities, and technical colleges adhere to admission standards. Students should refer to college catalogs for specific admission procedures and course requirements or seek the assistance of a school counselor in determining these requirements. Students should always take the highest level courses they are capable of completing successfully. Students and parents may also reference the Commission on Higher Education at https://www.che.sc.gov.

Minimum diploma requirements do not prepare a student for admission to college. The responsibility for meeting course and graduation requirements rests with each individual student.

#### **GRADE CLASSIFICATION**

**9th Grade:** A student entering high school for the first time is considered a ninth grader.

**10th Grade:** To be classified as a sophomore, a student must have earned a minimum of 5 units of credit, including 1 English unit, 1 math unit, and 3 additional units.

**11th Grade:** To be classified as a junior, a student must have earned a minimum of 11 units of credit, including 2 English units, 2 math units, 1 science unit, and 6 additional units.

**12th Grade:** To be classified as a senior, a student must have earned a minimum of 16 units of credit, including 3 English units, 3 math units, 2 science units, and 8 additional units.

#### **NINTH GRADE ACADEMY**

The ninth grade academy is a smaller learning community within the high school, designed to ease the transition from middle to high school for rising ninth graders. The majority of the classes are clustered in a designated wing of each high school. Academic and social support is offered through mentoring, teaming, and incentive programs for good grades, attendance, and citizenship.

#### **SPECIAL EDUCATION CURRICULUM**

The district Special Education Program provides curricula tailored to the needs of the individual students served in resource, inclusion, itinerant, and self-contained models. Qualification for these programs is based on criteria mandated by federal law, state regulations, and district policy. A multidisciplinary committee determines whether a student meets the criteria for placement into a program and develops an individualized education plan (IEP) which outlines the educational goals, accommodations, modifications and services provided for each student.

#### **CLASS RANK**

Class rank is one of the most important factors determining college admission. For each student, the ranking will be computed using the final grade in each course in ninth through twelfth grades, including high school credit bearing courses taken in eighth grade.

### **GENERAL INFORMATION**

#### STATE END-OF-COURSE TESTS

The state mandates end-of-course testing for specified courses. Scores from these tests will count 20 percent of each student's grade in that course.

State end-of-course tests are currently given in English 2, Algebra 1, Biology 1, and U.S. History and Constitution.

#### WITHDRAWING FROM A COURSE

With the first day of enrollment in the course as the baseline, students who withdraw from a course within three days in a 45-day course, five days in a 90-day course, or ten days in a 180-day course will do so without penalty.

Students who withdraw from a course after the specified time of three days in a 45-day course, five days in a 90-day course, or ten days in a 180-day course shall be assigned a WF, and the F (as a 50) will be calculated in the student's overall grade point average.

The three-, five-, and ten-day limitations for withdrawing from a course without penalty do not apply to course or course-level changes approved by the administration of a school. Withdrawal limitations for distance learning courses will be established by local districts.

Students who drop out of school or are expelled after the allowed period for withdrawal but before the end of the grading period will be assigned grades in accordance with the following polices:

- The student will receive a WP if he or she was passing the course. The grade of WP will carry no Carnegie units and no quality points to be factored into the student's GPA.
- The student will receive a WF if he or she was failing the course. The grade of WF will carry no Carnegie units but will be factored into the student's GPA as a 50.

#### **RETAKING A COURSE**

Students in grades nine through twelve may retake a course at the same level of difficulty if they have earned a C, D, or an F in that course. The student's record will reflect all courses he or she has taken and the grades he or she has earned.

The student may retake the course either during the current school year or during the next school year but no later than that second year. In addition, the student must retake the course before he or she has enrolled in the next sequential course. The student's transcript will reflect both course instances. Only one course attempt and the highest grade earned for the course will be calculated in the GPA.

A student who has taken a course for a unit of high school credit prior to his or her ninth grade year may retake that course regardless of the grade he or she has earned. A student who retakes a high school credit course from middle school must complete it before the beginning of the second year of high school. In such a case, only the highest grade will be used in figuring the student's GPA.

#### ADVANCED PLACEMENT

Advanced Placement (AP) is a program that offers collegelevel curricula and examinations to high school students. Universities and colleges often grant placement and course credit to students who obtain high scores on the examinations. Advanced Placement that is awarded based on AP Exam scores allows students to skip introductory classes, enter higher-level classes, or fulfill general education requirements. Students are strongly encouraged to visit college/university websites or talk with admissions officers to find out specific policies for earning and using AP credit at the different colleges and universities they are considering.

### **GENERAL INFORMATION**

#### **SOUTHWOOD ACADEMY OF THE ARTS**

Anderson School District Five students have the opportunity to attend Southwood Academy of the Arts, a fine arts campus for high school. Classroom instruction is based on state and national standards. Students will receive specialized instruction in art, drama, music composition, band, strings, chorus, and dance.

### **Entry Criteria:**

To be a high school student at Southwood Academy of the Arts a student must:

- Audition for visual and performance classes.
   Open auditions will be held March 25, 2021 at 4:30 pm. No audition is required for Concert Choral Music 1, Guitar 1, Music Composition 1, or Piano 1.
- 2. Have and maintain a GPA of 2.0 or higher in all classes.
- 3. Have no patterns of serious discipline infractions as determined by the arts review committee.
- Demonstrate active participation and performance in Southwood Academy classes as determined at the yearend review by the arts committee.

(See pages 36-38 for the Visual & Performing Arts courses offered at Southwood Academy of the Arts.)

#### ANDERSON INSTITUTE OF TECHNOLOGY

Anderson Institute of Technology (AIT) is an innovative technical center offering secondary programs in many different areas of study. Student enrollment in AIT will be on a first-come, first-served basis with all students being required to have successfully completed Algebra 1 and English 1. Some of the science-based courses may require successful completion of Biology.

Instruction at AIT will include limited faculty lecture with a focus on hands-on projects in a lab environment. Students who have an interest in attending AIT should meet with their counselor, along with their parents/guardians, to develop an Individual Graduation Plan (IGP) that includes a program of study at AIT beginning in the 9<sup>th</sup> or 10<sup>th</sup> grade.

(See pages 39-63 for the courses offered at AIT.)

#### **DUAL CREDIT COURSES**

In partnership with Anderson University and Tri-County Technical College, Anderson School District Five will allow students to earn dual credit for certain college courses. Dual credit courses are college courses taken during high school for which the student receives both high school and college credit. Students must meet all college enrollment requirements at the participating colleges to be able to participate in the dual credit courses.

Dual credit courses are college courses taught by college faculty. Dual credit courses are for motivated students who have the academic and personal maturity to handle the rigor of a college course. Please note that the college instructors develop the syllabus, course content, teaching methodology, grading scales and procedures for these courses.

If the student finds that he or she is not prepared for the course, dual credit courses may be dropped by the withdrawal date determined by the college or university. Withdrawing from a dual credit course may have a detrimental impact on athletic eligibility. Students should consult their high school counselor before making any withdrawal decisions.

As in most college courses, a minimum number of students must be registered for a dual credit course in order for the course to be held. If the minimum number is not met, the course may be cancelled. Students should always have an alternate plan if a course is cancelled.

A student wishing to take a college level course after school hours or during the summer may do so on his or her own, however this will not count on the high school transcript without <u>prior written</u> administrative authorization.

Students and parents should be aware that there is a cost for dual credit courses.

(See pages 64-67 and 69 for the courses that are approved for dual credit.)

### SOUTH CAROLINA DIPLOMA PATHWAYS SEALS OF DISTINCTION

Students enrolled in South Carolina high schools have the opportunity to earn one or more graduation Seals of Distinction within each diploma pathway that identifies a particular area of focus, beginning with the freshman class of 2018-2019.

Students must meet all requirements set forth in State Board Policy R43-234: State Graduation Requirements related to earning a high school diploma. Students are not required to earn a Seal of Distinction in order to receive a high school diploma.

English I, II, III, IV or higher-level substitutes (AP, IB, or Dual Credit) must be taken to earn all Seals of Distinction.

Changes to the following criteria may continue to be made by the South Carolina Department of Education. Students will need to meet the up-to-date criteria set forth by the SCDE in order to earn the Seals of Distinction. This document serves as a guide only.

#### HONORS SEAL OF DISTINCTION

- A. English: Four courses with at least two at the honors level or higher.
- B. <u>Mathematics</u>: Algebra 1, Geometry, and Algebra 2 with at least two at the honors level or higher and a fourth honors or above mathematics course with Algebra 2 as a prerequisite.
- C. Science: Three units of a lab science including at least one course in biology and one course in chemistry and a third course with biology and chemistry as a prerequisite. At least two of the science courses must be at the honors level or higher.
- D. <u>Social Studies</u>: Three units of social studies including U.S. History and Government/Economics and a third course of the student's choice with at least two at the honors level or higher.
- E. World Language: Two world language courses in the same language other than English for class of 2018-2019 9th graders.
  - Three world language courses in the same language other than English for 2019-2020 entering 9th graders and beyond.
- F. Advanced Coursework: At least four higher-level courses during junior and/or senior years which carry quality points at the honors, Advanced Placement, International Baccalaureate or Dual Enrollment level. Note: Honors and dual credit CTE courses as well as Project Lead the Way courses are included.
- G. GPA: A UGP GPA on the State Uniform Grading Scale of 3.5 or higher.

#### COLLEGE-READY SEAL OF DISTINCTION

- A. English: Four courses as required by the Commission on Higher Education (CHE).
- B. Mathematics: Algebra 1 or equivalent, Geometry, and Algebra 2 with a fourth mathematics course with Algebra 2 as a prerequisite. No honors math credits required.
- C. <u>Science</u>: Three units of a lab science including at least one course in biology and one course in chemistry and a third lab science with biology or chemistry as a prerequisite. Note: South Carolina's physical science course is not counted as a lab science by the Commission on Higher Education.
- D. <u>Social Studies</u>: Three units of social studies including U.S. History and Government/Economics and a third course of the student's choice.
- E. World Language: At least two world language courses in the same language other than English.
- F. Fine Arts: At least one fine arts course.
- G. GPA: A UGP GPA on the State Uniform Grading Scale of 3.0 or higher.

A composite score of 20 on the ACT.

A combined math and evidenced-based reading/writing score of 1020 on the SAT.

#### CAREER SEAL OF DISTINCTION

- A. <u>English</u>: Four English courses aligned to postsecondary goals.
- B. <u>Mathematics</u>: Algebra 1, Geometry, and Algebra 2 or customized math sequence and a fourth math course (including applied math courses) aligned to postsecondary career goals.
- C. <u>Science</u>: Three units of science with at least one course in biology and two courses (including applied science courses) tied to post-secondary career goals.
- D. <u>Social Studies</u>: Three units of social studies.
- E. <u>Career and Technical Education</u>: Completion of a major (aligned courses within a career cluster designated by the district as part of the EEDA) in one of the following national career clusters:
  - 1. Agriculture, Food and Natural Resources
  - 2. Architecture & Construction
  - 3. Arts, A/V Technology & Communications
  - 4. Business Management & Administration
  - 5. Education & Training
  - 6. Finance
  - 7. Government & Public Administration
  - 8. Health Science
  - 9. Hospitality & Tourism
  - 10. Human Services
  - 11. Information Technology
  - 12. Law, Public Safety, Corrections & Security
  - 13. Manufacturing
  - 14. Marketing
  - 15. Science, Technology, Engineering & Math
  - 16. Transportation, Distribution & Logistics
- F. Earn at least one industry-recognized credential.

OR

A Career Readiness Certificate (CRC) at the Silver or higher on WIN.

OR

A semester-long Work-Based Learning (WBL) placement credit.

G. <u>GPA</u>: A UGP GPA on the State Uniform Grading Scale of 2.5 or higher.

#### SPECIALIZATION SEAL OF DISTINCTION

This Seal of Distinction supports the Profile of the South Carolina Graduate by allowing students to concentrate in STEM, World Language, the Arts, or the Military. These requirements are in addition to the requirements of the standard diploma as set forth by State Board Policy. Only one area needs to be completed to qualify.

- A. <u>STEM</u>: Four elective courses beyond the required courses in math, science, and technology with at least two courses at the honors level or higher. The four courses may be in one area of STEM or across the four areas of STEM.
- B. <u>Military</u>: Four courses in JROTC and a score of 31 or higher on the ASVAB assessment.
- C. Arts: Four elective courses in single or multiple areas of the Arts with two or more courses at the honors or AP/IB levels. Successful demonstration of mastery on an externally validated performance task (AP exam of 3 or IB exam of 4 may count if the courses are taken before the senior year).
- D. World Language: Proficiency in a language other than English by completing a four-course concentration in the same language and/or demonstrating proficiency with a score of "Intermediate Low" or higher on the American Council for Teaching a Foreign Language (ACTFL). AP exams of 3 or higher or IB exam of 4 or higher may demonstrate proficiency if courses are taken before the senior year. Limited English Proficiency students may complete the same criteria above but also demonstrate English proficiency with a Level 5 composite score or higher on the ACCESS language proficiency test.
- E. <u>GPA</u>: For all of the specialization endorsements, the student must earn a UGP GPA on the State Uniform Grading Scale of 3.0 or higher.

### **ACADEMIC HONORS AWARDS**

# SOUTH CAROLINA ACADEMIC HONORS AWARD

#### 1. The student shall have:

- a. Completed twenty-four (24) units of high school credit as prescribed below.
- Be eligible for graduation with a state high school diploma.
- c. Earned a minimum grade of B for each semester course in grades 9-12 through the seventh semester.

#### 2. Plus one of the following:

 Earned either a score of 710 or higher on the SAT Evidence-Based Reading and Writing, a score of 690 or higher on the SAT mathematics, a score of 30 or higher on the ACT English, or a score of 33 or higher on the ACT mathematics.

#### - OR -

 Earned a combined score of 1400 on the SAT Evidence-Based Reading and Writing and math sections or an ACT composite score of 31.

Of the twenty-four units earned, eighteen units must be college preparatory coursework, four units in additional electives, and two units in one or more of the following: English, science, social studies, or mathematics.

College Preparatory Coursework includes the following:

•	English (English 1 or above) 4 units
•	Mathematics (Algebra 1 or above) 4 units
•	Laboratory science 3 units
•	Social studies (United States History and 3 units
	Constitution, economics and United States
	Government and one unit of world history,
	world geography or western civilization)
•	Computer science 1 unit
•	Physical education1 unit
•	Foreign language

# ANDERSON SCHOOL DISTRICT FIVE ACADEMIC HONORS AWARD

#### 1. Purpose

This establishes the minimum requirements for a District Academic Achievement Honors Award.

#### Scope

This shall apply to any student who is eligible for and receives a South Carolina high school diploma from a public secondary school in this district.

#### 3. Criteria

- a. The student shall have completed thirty (30) units including the eighteen (18) units as approved by the State Board of Education for college preparatory programs, ten (10) additional elective units, and two additional units in one or more of the following areas: English, science, social studies, or mathematics.
- b. The student shall have earned a minimum grade of B in all courses each semester in grades 9-12.
- c. The student shall have earned a combined score of 1200 or higher on the SAT or a composite score of 25 or higher on the ACT.

### **COLLEGE AND CAREER READINESS HONOR**

Students who meet any one or more of the following college or career readiness criteria will receive an honor cord to wear at graduation.

#### **COLLEGE READINESS**

- Score a composite of 20 or higher on the ACT
- Score a composite of 1020 or higher on the SAT
- Score a 3 or higher on an Advanced Placement (AP) Exam
- Complete at least 6 hours of dual credit coursework with grade C or higher in approved core courses

#### **CAREER READINESS**

- Earn a silver, gold or platinum certificate on the WIN career readiness assessment (given in junior year)
- Score a 31 or higher on ASVAB
- Career and Technology Education (CTE) completer with a national industry credential

### **SOUTH CAROLINA SEAL OF BILITERACY HONOR**

The South Carolina Seal of Biliteracy advances the state's commitment to preparing every learner for college and career readiness in an increasingly international community by recognizing learners who attain levels of proficiency in English and at least one other world language required in the global workforce. Anderson School District Five is proud to participate in this special recognition for students who are both bilingual and biliterate.

South Carolina's Seal of Biliteracy testing includes many languages. The most common are Spanish, French, German, Latin, Mandarin, Russian, Arabic, and Hebrew. Other languages are available and new languages are added each year.

Earning this award gives South Carolina students an opportunity to provide evidence displaying their language proficiency to universities and employers. A statement of accomplishment, the award shows a student's readiness for career and/or college and for engagement as a global citizen. Students who are awarded the South Carolina Seal of Biliteracy will receive a credential from the South Carolina Department of Education.

#### **QUALIFICATIONS**

- Current juniors and seniors are eligible to attain South Carolina's Seal of Biliteracy.
- Students must meet the proficiency requirements specified for English and must take a proficiency exam for at least one additional world language by graduation, regardless of the student applicant's first language.

Students that wish to participate in proficiency testing in order to be considered for the South Carolina Seal of Biliteracy will need to fill out an application. Testing takes place in early February. Please contact your school counselor for more information.

# **COURSE PROGRESSION RECOMMENDATIONS**

The following are *typical* course progression recommendations for students in  $9^{th} - 12^{th}$  grades. Students entering the  $9^{th}$  grade with high school credits will move on to the next level of courses in the progression. Students should see their school counselor for advisement regarding their academic needs and individual progressions.

	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
ENGLISH	English 1 CP/H	English 2 A/B English 2 CP English 2 Honors	English 3 CP/H	English 4 CP/H AP English Literature English 4H/AP Language Dual Credit Courses
	Г	Г	T	T
МАТН	Transition to Algebra Algebra 1 CP Algebra 1 Honors	Algebra 1 A/B Algebra 1 CP Geometry A/B Geometry CP/H	Algebra 2 A/B Algebra 2 CP/H	PreCalculus CP/H Prob & Stats CP/H Calculus CP/H AP Statistics AP Calculus AB AP Calculus BC Dual Credit Courses
SCIENCE	Environmental Science Biology 1 CP/H	Biology 1 CP Biology 2 Forensic Science Chemistry CP/H Physics CP/H AP Biology AP Environmental Science	Biology 2 Forensic Science Chemistry CP/H Physics CP/H Anatomy & Physiology H Earth Science CP/H AP Biology AP Environmental Science AP Chemistry	Biology 2 Forensic Science Chemistry CP/H/AP Physics CP/H/AP Anatomy & Physiology H Earth Science CP/H AP Biology AP Environmental Science Forensic Science Dual Credit Courses
SOCIAL STUDIES	World History CP/H AP Human Geography	Economics CP/H U.S. Government CP/H AP World History AP Psychology	U.S. History and Constitution CP/H AP U.S. History	African American History Law Education Psychology/Sociology AP U.S. Government Dual Credit Courses

# SOUTH CAROLINA UNIFORM GRADING POLICY

The statewide Uniform Grading Scale below is effective for all students beginning in August 2016. The statewide Uniform Grading Scale is used in the computation of the grade point average.

Numerical Average	Letter Grade	College Prep Weighting	Honors Weighting	AP/IB/Dual Credit Weighting
100	Α	5.000	5.500	6.000
99	Α	4.900	5.400	5.900
98	Α	4.800	5.300	5.800
97	Α	4.700	5.200	5.700
96	Α	4.600	5.100	5.600
95	Α	4.500	5.000	5.500
94	Α	4.400	4.900	5.400
93	Α	4.300	4.800	5.300
92	Α	4.200	4.700	5.200
91	Α	4.100	4.600	5.100
90	Α	4.000	4.500	5.000
89	В	3.900	4.400	4.900
88	В	3.800	4.300	4.800
87	В	3.700	4.200	4.700
86	В	3.600	4.100	4.600
85	В	3.500	4.000	4.500
84	В	3.400	3.900	4.400
83	В	3.300	3.800	4.300
82	В	3.200	3.700	4.200
81	В	3.100	3.600	4.100
80	В	3.000	3.500	4.000
79	С	2.900	3.400	3.900
78	С	2.800	3.300	3.800
77	С	2.700	3.200	3.700
76	С	2.600	3.100	3.600
75	С	2.500	3.000	3.500
74	С	2.400	2.900	3.400
73	C	2.300	2.800	3.300
72	C	2.200	2.700	3.200
71	C C	2.100	2.600	3.100
70		2.000	2.500	3.000
69	D	1.900	2.400	2.900
68 67	D D	1.800 1.700	2.300 2.200	2.800 2.700
	_			
66 65	D D	1.600 1.500	2.100 2.000	2.600 2.500
64	D	1.400	1.900	2.400
63	D	1.300	1.800	2.300
62	D	1.200	1.700	2.200
61	D	1.100	1.600	2.100
60	D	1.000	1.500	2.000
59	F	0.900	1.400	1.900
58	F	0.800	1.300	1.800
57	F	0.700	1.200	1.700
56	F	0.600	1.100	1.600
55	F	0.500	1.000	1.500
54	F	0.400	0.900	1.400
53	F	0.300	0.800	1.300
52	F	0.200	0.700	1.200
51	F	0.100	0.600	1.100
0-50	F	0.000	0.000	0.000
WF	F	0.000	0.000	0.000
WP	-	0.000	0.000	0.000

### **COLLEGE AND CAREER READY ASSESSMENTS**

Two tests for college admission are the ACT and the SAT. In addition, many two-year technical colleges require ACCUPLACER in lieu of the ACT or SAT.

### **READY TO WORK ASSESSMENT (WIN)**

The Ready to Work assessment is a workforce education and development tool, comprised of three proctored assessments, Applied Mathematics, Reading for Information, and Locating Information, leading to a work-ready credential. It brings employers, learners/job-seekers, and education/workforce partners together in building a skilled workforce, while keeping and attracting businesses with higher-wage jobs and national economic growth.

The WIN Essential Soft Skills assessment is composed of questions measuring entry-level work tasks and behaviors, including: cooperation with others, resolving conflict and negotiation, solving problems and making decisions, observing critically, and taking responsibility for learning. The assessment items require the learner to choose two answers for each question, the "best" and "worst" answers for handling each situation.

The following certificate levels may be attained:

#### Platinum: Level 6

Successfully obtain a minimum of Level 6 in all assessments to be ready for 99% of jobs in the workforce. Occupations include: architect, chemist, geographer, anesthesiologist, and agricultural engineer.

#### Gold: Level 5

Successfully obtain a minimum of Level 5 in all assessments to be ready for 90% of jobs in the workforce. Occupations include: credit analyst, aircraft mechanic, medical transcriptionist, acute care nurse, and social worker.

#### Silver: Level 4

Successfully obtain a minimum of Level 4 in all assessments to be ready for 65% of jobs in the workforce. Occupations include: insulation installer, roofer, chef, pipe layer, flight attendant, and machinist.

#### Bronze: Level 3

Successfully obtain a minimum of Level 3 in all assessments to be ready for 35% of jobs in the workforce. Occupations include: construction laborer, electrician assistant, cement mason, and dental hygienist.

#### **ASVAB**

The ASVAB is a multi-aptitude battery that measures developed abilities and helps predict future academic and occupational success in the military. It is administered annually to more than one million military applicants, high school and post-secondary students. The ASVAB is offered to juniors and seniors.

#### **ACCUPLACER**

Thousands of area high school juniors participate in Tri-County Technical College's College Readiness Initiative (CRI). The CRI allows high school juniors to get exposure to a college placement assessment called ACCUPLACER, developed by College Board. ACCUPLACER is a suite of tests that determines your knowledge in math, reading, and writing as you prepare to enroll in college-level courses. It is used to identify your strengths and weaknesses in each subject area. Students will receive feedback on their performance from Tri County Tech and can design post-secondary plans with more clarity regarding their readiness for college courses. Students can access information about ACCUPLACER and download a free web-based study app through www.accuplacer.org. ACCUPLACER results are used to determine if Anderson Five students are candidates for dual credit courses through Tri-County Technical College. ACCUPLACER testing is also available at Anderson University.

#### **PSAT**

The PSAT is a practice test for the SAT. <u>Eleventh graders</u> may elect to take the PSAT as a National Merit Qualifying Test. There is a cost students must pay to take this test which is paid directly to the school. This test is offered once a year in October and does not qualify students for admission into college.

#### **ACT**

The ACT assesses high school students' general educational development and their ability to complete college-level work. The multiple-choice tests cover four skill areas: English, mathematics, reading, and science. The writing test measures skill in planning and writing a short essay. Some colleges will require that student applicants submit writing test scores, while others will not. The ACT assessment is achievement-based and tests what students have learned in high school. In addition, it provides test takers with information for career and educational planning as well as a comprehensive profile of the student's work in high school and future plans.

The ACT is administered seven times per year nationally and is typically taken the junior or senior year. For times, registration costs and more information, please visit www.act.org.

#### SAT

The SAT is a multiple-choice, pencil-and-paper test created and administered by the College Board. The purpose of the SAT is to measure a high school student's readiness for college, and provide colleges with one common data point that can be used to compare all applicants. In January 2016 the test was redesigned to test skills that are more predictive of success in college and beyond. The new SAT emphasizes higher-level logic and reasoning skills.

The reading questions are entirely passage-based, giving more opportunities to test a deeper understanding of how the passage is logically constructed and to draw connections between different parts of the passage. Passages will be based on U.S. and World Literature, History/Social Studies, and Science subject matter. Some passages will contain data and require interpretation of data. There is a great emphasis on vocabulary in context, command of evidence, constructing logical arguments, and scientific reasoning. The writing and language section tests grammar and writing logic. All questions are passage-based and focus on logic and expression of ideas, higher-level writing skills, and punctuation

rules. The writing and language section is combined with the reading section for a total maximum score of 800 points. The math section emphasizes practical, realistic scenarios and requires students to take multiple mathematical steps to solve problems. Students are expected to interpret data and graphs, solve algebraic equations, and understand some basic trigonometry. Calculators may be used, but one section of the test does not allow for calculators. The maximum score that can be obtained on the Math test is 800 points.

The essay test is 50 minutes long and provides a passage written by an author who is taking a stance on an issue. The student's job is to analyze how the author builds the argument, including understanding how evidence and rhetorical devices contribute to the argument. The essay is scored on a scale of 2-8 on three traits: reading, analysis, and writing.

The SAT is administered seven times per year nationally and is typically taken the junior or senior year. For times, registration costs and more information, please visit www.collegeboard.org

### SAT vs. ACT COMPARISON CHART

The SAT and the ACT are both nationally administered college entrance exams. While both exams have some similarities, they also have many differences. The SAT tends to test critical-thinking skills while the ACT tends to test straightforward knowledge. Many colleges will accept either or both exams. Some students do better on one exam than the other and many decide to take both. The chart below will help you understand the structure and content of both the SAT and the ACT.

	SAT	ACT
Length & Format	<ul> <li>3 hours + 50-minute essay (optional)</li> <li>Reading - 65 minutes, 52 questions</li> <li>Writing &amp; Language - 35 minutes, 44 questions</li> <li>Math (no calculator) - 25 minutes, 20 questions</li> <li>Math (with calculator) - 55 minutes, 38 questions</li> <li>Optional Essay - 50 minutes</li> <li>All questions are multiple choice except for "grid-in" math questions and optional essay</li> </ul>	<ul> <li>2 hours 55 minutes + 40-minute essay (optional)</li> <li>English - 45 minutes, 75 questions</li> <li>Math - 60 minutes, 60 questions</li> <li>Reading - 35 minutes, 40 questions</li> <li>Science - 35 minutes, 40 questions</li> <li>Optional Essay - 40 minutes</li> <li>All questions are multiple choice except for optional essay</li> </ul>
Scoring	Combined score: 400-1600  Evidence-Based Reading and Writing: 200-800  Math: 200-800  Essay score reported separately  "Cross-Test Scores" report performance on History/Social Studies and Analysis in Science subject areas across entire test  No penalty for incorrect answers	Composite score: 1-36 (average of 4 tests)  • English: 1-36  • Math: 1-36  • Reading: 1-36  • Science: 1-36  • Essay score (2-12) not factored into composite score  • No penalty for incorrect answers

	SAT	ACT
Writing & Language (SAT)/ English (ACT)	<ul> <li>Consists of four passages</li> <li>Revise and edit passages to demonstrate knowledge and ability in:         <ul> <li>Standard English grammar and usage, punctuation, and logical structure</li> <li>Command of evidence</li> <li>Emphasis on the meaning of words in extended contexts</li> <li>Expression of ideas and analysis</li> </ul> </li> <li>Stronger focus on vocabulary</li> </ul>	<ul> <li>Consists of five passages</li> <li>Revise and edit passages to demonstrate knowledge and ability in:         <ul> <li>Standard English grammar and usage, punctuation, and logical structure</li> <li>Rhetorical skills including strategy, organization, and style</li> </ul> </li> <li>Very little emphasis on vocabulary</li> </ul>
Math	<ul> <li>Pre-Algebra through basic Trigonometry</li> <li>Strong emphasis on Algebra, problem solving, and data analysis</li> <li>Calculator prohibited on one section</li> <li>13 "Grid-In" questions (no answer choices)</li> <li>Often describes real-world situations and asks students to use math knowledge to draw conclusions</li> <li>1 Extended Thinking question (4 points)</li> <li>Diagram of formulas is provided</li> </ul>	<ul> <li>Pre-Algebra through basic Trigonometry</li> <li>Strong emphasis on Algebra, Geometry and functions</li> <li>Calculator allowed on entire test</li> <li>Math tested in straightforward manner</li> <li>Extensive range of concepts tested</li> <li>Formulas are not provided</li> </ul>
Reading	<ul> <li>Consists of five passages including:         <ul> <li>Classic or contemporary work of U.S. or world literature</li> <li>One passage or a pair of passages from a U.S. founding document or a text in the Great Global Conversation</li> <li>One passage on a social science topic from a field such as economics, psychology, or sociology</li> <li>Two science passages that examine foundational concepts and developments in Earth science, biology, chemistry, or physics</li> </ul> </li> <li>Focuses on command of evidence, words in context, and reading analysis</li> <li>Order of questions is chronological</li> </ul>	<ul> <li>Consists of four passages including:         <ul> <li>Prose Fiction/Literary Narrative, Social Sciences, Humanities, and Natural Sciences</li> </ul> </li> <li>Focuses on key ideas and details, craft and structure, and integration of knowledge and ideas</li> <li>Very little emphasis on vocabulary</li> <li>Straightforward questions that focus on reading comprehension</li> <li>Order of questions is random</li> </ul>
Science	The SAT does not have a stand-alone science section, but science questions will be included throughout the reading, math, and writing & language tests.	<ul> <li>Measures the interpretations, analysis, evaluation, reasoning, and problem-solving skills required in the natural sciences</li> <li>A reasoning test that rarely requires advanced knowledge of scientific concepts – instead, it focuses on the ability to read and interpret graphs and studies</li> </ul>
Essay	<ul> <li>Analyze a passage and evaluate the author's reasoning and rhetoric</li> <li>Student opinion is discouraged</li> <li>Essay is scored on three traits: reading, analysis, and writing</li> <li>Requires good reading comprehension skills</li> <li>Optional, but required by some schools</li> </ul>	<ul> <li>Effectively compare and contrast different perspectives in a more structured response</li> <li>Student opinion is required</li> <li>Essay is scored on four traits: ideas and analysis, development and support, organization, and language use and conventions</li> <li>Optional, but required by some schools</li> </ul>

### **CAREER READINESS WORK-BASED INITIATIVES**

### **COOPERATIVE EDUCATION (CO-OP)**

Cooperative Education is a structured training program for high school level students. The program coordinates secondary studies with a job role in a field related to the academic and/or technical education objectives. Written training and evaluation plans guide workplace activities in coordination with classroom instruction. Students receive course credit for their Co-Op completion. Academic credit, compensation, and activities are district specific and may vary within the course of study. (Grades 11-12)

# CTE INTERNSHIP, WORK-BASED CREDIT BEARING COURSE

This internship is a structured, work-based credit bearing course that is taken as a culminating unit in a Career and Technology Education (CTE) program. The student is supervised by a content-specific, certified teacher completing a minimum of 120 practical experience hours or the highest number of hours required by the industry-defined competencies within the career pathway. The Work-Based Learning credit-bearing course must be a part of the student's major and/or Individual Graduation Plan (IGP). Regularly scheduled worksite visits are conducted by the supervising teacher and documented.

#### **INTERNSHIP**

An internship is a progressive, school-coordinated experience that places students in real workplace environments so that they develop and practice career-related knowledge and skills needed for a specific level job. An internship provides handson experience in a particular industry or occupation related to a student's career interests, abilities, and goals. The high school intern works regularly during or after school in exchange for the worksite mentor's time in teaching and demonstrating. An internship usually lasts 3–6 months, depending on hours of completion requirements. Internships may or may not include financial compensation. Academic credit, compensation, and activities are district specific and may vary with the course of study. (Grades 10-12)

#### STRUCTURED FIELD STUDY

Structured Field Study is a front-loaded experience with a purpose sponsored by a certified teacher providing opportunities for students to explore different workplaces. The field study is hosted by a representative at the worksite. During the field study, students observe, ask questions, and learn from the experience of being on an actual worksite. Students are well-prepared beforehand to ask questions about employment opportunities, qualifications of job roles, job descriptions, and benefits associated with worksite employment, types of services provided, and general information about the place of employment and its mission. All field studies should be followed up with debriefing activities such as classroom discussion, reports, and follow-up letters to the worksite hosting the experience.

#### JOB SHADOWING

On-Site Job Shadowing is a method of short-term, schoolcoordinated career exploration in which the student is introduced to a particular job role or career by being paired, one-on one, with an employee at the worksite. The student "shadows" (follows) the employee for a specified time to better understand and observe work expectations and requirements of a variety of job tasks. Job shadowing is less intensive than the other WBL methods and is usually the first form of worksite assignment given to a student. Prior to job shadowing, the student should receive formalized instruction about careers and the process of career choice, develop appropriate questions to ask, and know the expectations as related to school rules and guidelines for grooming, dress, and behavior in the workplace. On-Site Job Shadowing does not provide any form of course credit. A classroom speaker is not considered a job-shadowing experience.

Virtual Job Shadowing provides additional work-based learning opportunities for students. A virtual job shadowing experience is assessed for components that constitute quality virtual shadowing, including but not limited to the following: virtual tour of worksite with content provided, the capability to conduct question/answer exchanges, the overall quality of the site's features, and the length of the experience. Each virtual experience should include preparation, engagement, and reflection. (Grades 7-12)

#### **MENTORING**

Mentoring is an experience that engages a student with a particular worksite employee who possesses workplace skills and knowledge to be mastered by the student. The mentor instructs the student, critiques the performance of the student, challenges the student, and works in consultation with classroom teachers and the employer of the student. The relationship generally lasts a year, with the mentor maintaining occasional contact with the student for an additional one to two years. Mentoring experiences seek to build a long lasting relationship during which the mentor and student work on personal development and interpersonal skills. Mentoring does not provide any form of course credit. (Grades 9-12)

#### **SERVICE LEARNING**

Service learning is method in which the student engages in community-service work for a specified number of hours to gain developmental experience. Students and teachers cooperate with local leaders to address community problems and issues, resulting in student service to the community and development of personal, workplace-readiness, academic, and citizenship skills. With close adult supervision, students work on specific activities each week during or after school to develop work skills and life skills and learn how to behave in work situations. Students engage in critical, reflective thinking and experience the relationship of theory and practice. Typically, service learning does not provide any form of course credit. (Grades K-12)

### **ELIGIBILITY REQUIREMENTS FOR INTERSCHOLASTIC ACTIVITIES**

These requirements cover activities such as athletics, chorus, orchestra, cheerleading, band, majorettes, Robotics Team, Math Team, Academic Team, Speech and Debate Team, etc. Any interschool competition is regulated by these requirements. Ninth grade students who have not earned Carnegie units must have been academically promoted from the eighth grade to be eligible for participation in the fall semester activities.

- A. A student, while participating, must be a full-time student as determined by guidelines set forth by the State Department of Education. A student who is repeating a course for which he or she has previously received credit cannot count this course as one required for eligibility; this is considered as monitoring a course.
- To participate in interscholastic athletic activities, students in grades 9-12 must achieve an overall passing average in addition to the following:
  - 1. To be eligible in the first semester a student must pass a minimum of five Carnegie units applicable toward a high school diploma during the previous year. At least two units must have been passed during the second semester or summer school.
  - 2. To be eligible during the second semester the student must meet one of the following conditions:
    - a. If the student met first semester eligibility requirements, he or she must pass the equivalent of four, 1/2 units during the first semester.
    - b. If the student did not meet first semester eligibility requirements, he or she must pass the equivalent of five, 1/2 units during the first semester.
  - 3. Students must satisfy eligibility requirements in the semester preceding participation.
    - Credits earned in a summer school approved by the State Department of Education may apply for first semester eligibility. A maximum of two units per year may be used.
    - b. Students eligible for a first semester sport will be permitted to complete that sport even if it extends into the second semester. Under the current League program, this will apply to participants in basketball and wrestling in the high school and middle school programs.
  - Students with Disabilities:
    - Students diagnosed with a disability and being served in a non-diploma program shall be considered eligible for participation in interscholastic activities if he/she is successfully meeting the requirements of his/her Individual Education Plan.
    - b. Students diagnosed with a disability and being served in a program leading to a state high school diploma must meet all eligibility requirements previously stated for participation in interscholastic activities.

- 5. A course that is dropped after the 20th day of a semester with a failing average will be considered as a failed course when determining academic eligibility for the following semester.
- 6. Credit courses used for eligibility purposes must be courses that are applicable as credit toward a state high school diploma. A student may also use college credit courses provided the student has met or is meeting all requirements for graduation.
- 7. Academic deficiencies may not be made up through enrollment in adult education programs.
- C. A student must not have received a high school diploma or its equivalent.
- D. Academic requirements for students enrolled in the seventh and eighth grades, including first semester ninth graders are:
  - 1. Students passing the sixth, seventh, and eighth grades by academic promotion pursuant to district policy are considered as having met the requirements for academic eligibility for first semester.
  - 2. Students in grades seven and eight must be meeting the school district promotion policy at the end of the first semester in order to be eligible second semester. (Second semester ninth grade students must meet League academic regulations.)
- Schools will follow the procedures outlined in the School Administrators Guide, published by the State Department of Education, in accepting or rejecting credits received by a student while the student is enrolled in private schools, including home schools and/or out-of-state schools.

NOTE: A student failing the seventh or eighth grade is eligible during second semester if he or she has satisfactorily passed first semester work.

### **CREDIT RECOVERY** SC HIGH SCHOOL LEAGUE

A maximum of two credit recovery units may be used toward eligibility, to include the two units presently allowed in summer school. A credit recovery course must be accepted by the State Department of Education for graduation. To be eligible for recovery credits, the student must have received a minimum grade of 50.

NOTE: Credit recovery must be completed by specific dates outlined by the SCHSL. At the time of printing, these dates had not yet been established. Please visit the SC High School League website for updates at schsl.org.



# NCAA Eligibility Center Quick Reference Guide

### NCAA DIVISION I INITIAL-ELIGIBILITY REQUIREMENTS

College-bound student athletes will need to meet the following academic requirements to practice, receive athletics scholarships, and/or compete during their first year. Initial full-time collegiate enrollment is required.

#### **Core Course Requirements**

- Sixteen (16) core courses are required (see chart below for subject-area requirements).
  - Ten of the core courses must be completed before the seventh semester of high school. Seven of the ten must be in English, math or natural/physical science.
- These courses/grades are "locked in" at the start of the seventh semester. They cannot be repeated for grade-point average (GPA) improvement to meet initial-eliqibility requirements for competition.
- Students who do not meet core-course progression requirements may still be eligible to receive athletics aid and practice in the initial year of enrollment by meeting the <u>academic redshirt</u> requirements (see below).

### Core Grade-Point Average

- Only <u>core courses</u> that appear on the high school's List of NCAA Courses on the NCAA Eligibility Center's website (www.eligibilitycenter.org) will be used to calculate a student's core-course GPA. Use the list as a guide.
- Students must earn a core-course GPA minimum 2.300.
- Core-course GPA is calculated using the **best 16 core courses** that meet both progression (10 before seventh semester; seven in English, math or science; "locked in") and subject-area requirements.

#### Test Scores: (SAT/ACT)

- Students must earn the SAT/ACT score that corresponds to the core-course GPA on the Division I sliding scale (see the following page).
  - o SAT: evidence-based reading and math sections.
    - Best subscore from each section is used to determine the SAT <u>combined</u> score for initial eligibility.
  - ACT: English, math, reading and science sections.
    - Best subscore from each section is used to determine the ACT sum score for initial eligibility.
- All SAT and ACT attempts before initial full-time collegiate enrollment may be used for initial eligibility.
- Enter 9999 during SAT or ACT registration to ensure the testing agency reports your score directly to the NCAA Eligibility Center. *Test scores on transcripts will not be used.*

#### DIVISION I Core-Course Requirement (16)

- 4 years of English
- 3 years of math (Algebra I or higher)
- years of natural/physical science(1 year of lab if offered)
- 2 years of social science
- 1 year of additional English, math or natural/physical science
- 4 years of additional courses (any area above, foreign language or comparative religion/philosophy)

# DIVISION I Full Qualifier Requirements \*Athletics aid practice, and

\*Athletics aid, practice, and competition

- √ 16 core courses
  - Ten (10) core courses completed before the start of seventh semester. Seven (7) of the ten must be in English, math or natural/physical science.
  - "Locked in" for core-course GPA calculation
- ✓ GPA minimum 2.300
- ACT/SAT score matching core-course GPA on Division I Sliding Scale (see following page)
- Graduate from high school

# DIVISION I Academic Redshirt Requirements

\*Athletics aid and practice (no competition)

- ✓ 16 core courses
  - No grades/credits "locked in" (repeated courses after the seventh semester begins may be used for initial eligibility)
- ✓ GPA minimum 2.000
- ✓ ACT/SAT score matching core-course GPA on Division I Sliding Scale (see following page)
- ✓ Graduate from high school

Core GPA	SAT Verbal and Math Only	ACT Sum
3.550	400	37
3.525	410	38
3.500	430	39
3.475	440	40
3.450	460	41
3.425	470	41
3.400	490	42
3.375	500 520	42 43
3.350 3.325	530	43
3.300	550	44
3.275	560	45
3.250	580	46
3.225	590	46
3.200	600	47
3.175	620	47
3.150	630	48
3.125	650	49
3.100	660	49
3.075	680	50
3.050	690	50 51
3.025 3.000	710 720	52
2.975	730	52
2.950	740	53
2.925	750	53
2.900	750	54
2.875	760	55
2.850	770	56
2.825	780	56
2.800	790	57
2.775	800	58
2.750 2.725	810 820	59 60
2.700	830	61
2.675	840	61
2.650	850	62
2.625	860	63
2.600	860	64
2.575	870	65
2.550 2.525	880	66
	890	67
2.500	900	68
2.475	910	69
2.450	920	70
2.425 2.400	930 940	70 71
2.375	950	72
2.350	960	73
2.325	970	74
2.300	980	75
2.299	990	76
2.275	990	76
2.250 2.225	1000	77
	1010	78
2.200	1020	79
2.175	1030	80
2.150	1040	81
2.125 2.100	1050 1060	82 83
2.100	1070	84
2.050	1080	85
2.025	1090	86
		86

### NCAA DIVISION II INITIAL-ELIGIBILITY REQUIREMENTS

College-bound student athletes will need to meet the following academic requirements to practice, receive athletics scholarships, and/or compete during their first year. Initial full-time collegiate enrollment is required.

#### **Core Course Requirements**

• To become a full or partial qualifier for Division II, all college-bound student athletes must complete the sixteen (16) core course requirement (see chart below for subject-area requirements).

#### **Core Grade-Point Average**

- Only <u>core courses</u> that appear on the high school's List of NCAA Courses on the NCAA Eligibility Center's website (www.eligibilitycenter.org) will be used to calculate the student's core-course GPA. Use the list as a guide.
- The minimum Division II core GPA required to receive athletics aid, practice, and be eligible for competition as a *full qualifier* is 2.200.
- The minimum Division II core GPA required to receive athletics aid and practice as a partial qualifier is 2.000.

#### **Test Scores: (SAT/ACT)**

- Students must earn the SAT/ACT score that corresponds to the core-course GPA on the Division II sliding scale (see the following page).
  - SAT: evidence-based reading and math sections.
    - Best subscore from each section is used to determine the SAT <u>combined</u> score for initial eligibility.
  - ACT: English, math, reading and science sections.
    - Best subscore from each section is used to determine the ACT <u>sum</u> score for initial eligibility.
- All SAT and ACT attempts before initial full-time collegiate enrollment may be used for initial eligibility.
- Enter 9999 during SAT or ACT registration to ensure the testing agency reports your score directly to the NCAA Eligibility Center. *Test scores on transcripts will not be used.*

#### DIVISION II Core-Course Requirement (16)

- 3 years of English
- 2 years of math (Algebra I or higher)
- years of natural/physical science(1 year of lab if offered)
- 2 vears of social science
- 3 years of additional English, math or natural/physical science
- 4 years of additional courses (any area listed above, foreign language or comparative religion/philosophy)

# DIVISION II Full Qualifier Requirements

\*Athletics aid, practice, and competition

- √ 16 core courses
- ✓ GPA minimum 2.200
- ✓ SAT/ACT score matching
- core-course GPA on the Division II sliding scale (see following page)
- ✓ Graduate from high school

# DIVISION II Partial Qualifier Requirements

\*Athletics aid and practice (no competition)

- ✓ 16 core courses
- ✓ GPA minimum 2.000
- ✓ SAT/ACT score matching
- core-course GPA on the Division II sliding scale (see following page)
- ✓ Graduate from high school

NCAA DIVISION II FULL QUALIFIER SLIDING SCALE				
Core GPA	SAT Verbal and Math Only	ACT Sum		
3.300 & above	400	37		
3.275	410	38		
3.250	430	39		
3.225	440	40		
3.200	460	41		
3.175	470	41		
3.150	490	42		
3.125	500	42		
3.100	520	43		
3.075	530	44		
3.050	550	44		
3.025	560	45		
3.000	580	46		
2.975	590	46		
2.950	600	47		
2.925	620	47		
2.900	630	48		
2.875	650	49		
2.850	660	49		
2.825	680	50		
2.800	690	50		
2.775	710	51		
2.750	720	52		
2.725	730	52		
2.700	740	53		
2.675	750	53		
2.650	750	54		
2.625	760	55		
2.600	770	56		
2.575	780	56		
2.550	790	57		
2.525	800	58		
2.500	810	59		
2.475	820	60		
2.450	830	61		
2.425	840	61		
2.400	850	62		
2.375	860	63		
2.350	860	64		
2.325	870	65		
2.300	880	66		
2.275	890	67		
2.250	900	68		
2.225	910	69		
2.200	920	70 & above		

NCAA DIVISION II PARTIAL QUALIFIER SLIDING SCALE				
Core GPA	SAT Verbal and Math Only	ACT Sum		
3.050 & above	400	37		
3.025	410	38		
3.000	430	39		
2.975	440	40		
2.950	460	41		
2.925	470	41		
2.900	490	42		
2.875	500	42		
2.850	520	43		
2.825	530	44		
2.800	550	44		
2.775	560	45		
2.750	580	46		
2.725	590	46		
2.700	600	47		
2.675	620	47		
2.650	630	48		
2.625	650	49		
2.600	660	49		
2.575	680	50		
2.550	690	50		
2.525	710	51		
2.500	720	52		
2.475	730	52		
2.450	740	53		
2.425	750	53		
2.400	750	54		
2.375	760	55		
2.350	770	56		
2.325	780	56		
2.300	790	57		
2.275	800	58		
2.250	810	59		
2.225	820	60		
2.200	830	61		
2.175	840	61		
2.150	850	62		
2.125	860	63		
2.100	860	64		
2.075	870	65		
2.050	880	66		
2.025	890	67		
2.000	900	68 & above		

For more information, visit the NCAA Eligibility Center website at www.eligibilitycenter.org.

# **MAJORS OFFERED AT THE ANDERSON FIVE HIGH SCHOOLS**

	UNITS
Advanced Placement	
Any four Advanced Placement courses	4
Arts and Architecture	
Art 1 - required	1
Art 2 - required	1
**PLTW Civil Engineering and Architecture	1
**PLTW Introduction to Engineering Design	1
**Business Information Management (3 units re	equired)
Digital Publication Design	1
Image Editing 1	1
Fundamentals of Computing	1
English	
Advanced Placement English Literature and Composition	2
Creative Writing	1
English Composition 1, ENG 101 Dual Credit	1
English Composition 2, ENG 102 Dual Credit	1
Journalism	1
Speech	1
Journalism and Mass Communications	
Advanced Placement English Literature and	
Composition	2
Digital Publication Design	1
English Composition 1, ENG 101 Dual Credit	1
English Composition 2, ENG 102 Dual Credit	1
Journalism	1
Media Technology 1-4	1 each
Speech	1
Media Arts: 1-8 (Yearbook)	1 each
**Marketing Management (3 units required)	
Marketing	1
Marketing Management	1
Entrepreneurship	1
Mathematics	
Honors Calculus - required	1
OR	
Advanced Placement Calculus - required	2
Pre-Calculus - required	1
Advanced Placement Physics	2
Physics	1
Probability and Statistics	1
Probability and Statistics, MAT 120 Dual Credit	1
Military	1
ROTC 1-8	1 each
•	

Unless otherwise noted, all majors require 4 units.

	UNITS	
Performing Arts	UNITS	
Advanced Placement Music Theory	1	
Band Courses		
Chorus Courses		
Dance Courses	1 each 1 each	
Guitar 1	1	
Orchestra Courses	1 each	
Theatre Courses	1 each	
Public Service Administration	1 Cacii	
Advanced Placement European History	2	
Advanced Placement Human Geography	2	
Advanced Placement Psychology	2	
*Advanced Placement U.S. History	2	
Advanced Placement World History	2	
*American Government, PSC 201 Dual Credit	1	
*Macroeconomics, ECO 210	1	
Psychology	0.5	
Sociology	0.5	
*If not used as one of the social studies units required fo graduation	ſ	
Science		
Advanced Placement Biology	2	
Advanced Placement Chemistry	2	
Advanced Placement Environmental Science	1	
Advanced Placement Physics		
Anatomy and Physiology		
Environmental Science		
Physics	1	
Teaching and Training		
*Advanced Placement Psychology		
*Psychology		
Sociology	0.5	
Speech	1	
Teacher Cadet	1	
*Only one Psychology course may be used toward compl	eter	
status		
Visual Arts		
Art 1 - required	1	
Advanced Placement Studio Art: Drawing	2	
Advanced Placement Studio Art: 2D Design	2	
Advanced Placement Studio Art: 3D Design		
Art 2-4		
Media Arts: 1-8 (Yearbook)	1 each	
World Languages		
French 1-4	1 each	
Spanish 1-4	1 each	
Advanced Placement Spanish		

<sup>\*\*</sup>Career and Technology Education (CTE) Major

# **Program of Studies and Course Descriptions**

### ENGLISH/LANGUAGE ARTS

#### **AFRICAN AMERICAN LITERATURE**

1 unit

Prerequisites:

• English 2 with grade C or higher

This course offers an opportunity to study a specialized field of literature and to learn more about African American culture. The course focuses on the contributions of African American writers to American literature; historical and cultural contexts are addressed through the literature by using novels, plays, essays, critical studies, and films. This course is organized by topic to include the literature of African descendants in the United States and continues into the 21st century with contemporary writers. An anthology of writings, which includes poetry, fiction, and non-fiction, is the basic text for the course and is supplemented with additional readings. This course is for students who enjoy analyzing challenging literature and participating in discussions.

#### **ENGLISH 1 COLLEGE PREP**

1 unit

Prerequisites:

• Grade 8 ELA with grade C or higher

This course offers a sustained and structured study of classic and contemporary literature including a study of the four main genres: the novel, the short story, drama, and poetry. Composition, communication, and research standards will be integrated and applied through language arts.

### **ENGLISH 1 COLLEGE PREP A/B** 2 units - 1 unit English, 1 unit elective

Prerequisites:

Grade 8 ELA

This course offers a sustained and structured study of classic and contemporary literature including a study of the four main genres: the novel, the short story, drama, and poetry. Composition, communication, and research standards will be integrated and applied through language arts. This is a year-long course.

#### **ENGLISH 1 HONORS**

1 unit

Prerequisites:

Grade 8 ELA with grade A

This course offers an integrated study of composition and literature. Multi-genre texts are used as a context for the development of writing skills, grammar skills, and vocabulary. Writing instruction focuses on structure and purpose (i.e. analysis, persuasion, entertainment, and information). Emphasis will also be placed on refining research skills.

#### **ENGLISH 2 COLLEGE PREP**

1 unit

Prerequisites:

• English 1 (CP or A/B) with grade C or higher

This course offers a sustained independent and structured study of literary and informational texts. With the focus on world literature, students read a variety of fiction, poetry, drama, and non-fiction literary texts. Composition, communication, and research will be integrated and applied through this course. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade.

### **ENGLISH 2 COLLEGE PREP A/B**

2 units - 1 unit English, 1 unit elective

Prerequisites:

English 1

This course offers a sustained and structured study of literary and informational texts primarily focused on World Literature. In addition, there is an intense focus on essay development with extensive literary analysis, research, and theme development. Students read, analyze, and respond to a variety of fiction, poetry, drama, and non-fiction selections. There is also the integration of communication skills with an emphasis on group work and collaboration to prepare students for college. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade. This is a year-long course.

#### **ENGLISH 2 HONORS**

1 unit

Prerequisites:

• English 1 Honors with grade B or higher

• English 1 CP with grade A

This course is a study of all genres of world literature. Composition, grammar, vocabulary, research projects, and oral presentations are stressed. Emphasis is placed on the development of the four major forms of written discourse, on literary analysis, and on imaginative writing. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade.

#### **ENGLISH 3 COLLEGE PREP**

1 unit

Prerequisites:

• English 2

Students refine their knowledge of language through a focused study of American literature. Emphasis is placed on vocabulary development with words drawn from literature and various other sources. Composition and research skills are refined. Critical thinking, speaking, and presentation skills are developed in group and individual projects.

#### **ENGLISH 3 HONORS**

1 unit

Prerequisites:

• English 2 Honors with grade B or higher

• English 2 CP with grade A

This course focuses on American literature. Composition, grammar, vocabulary, research projects and oral presentations are stressed. Emphasis is placed on creative projects and interpretation and evaluation of literature.

#### **ENGLISH 4 COLLEGE PREP**

1 unit

Prerequisites:

• English 3

This course focuses on British literature. Language history and vocabulary in context are emphasized. Composition, grammar, vocabulary, research projects, and oral presentations are stressed.

Prerequisites:

• English 3 Honors with grade B or higher

• English 3 CP with grade A

This course focuses on British literature. Language history and vocabulary in context are explored. An emphasis on higher-level inquiry is incorporated.

# ENGLISH 4 HONORS/ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION

2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites:

• English 3 Honors with grade A

This course is a hybrid of high school-level British Literature course and college-level AP English Language course, designed for students who are highly motivated, competent in verbal skills, and able to explore complex ideas. This course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction and fiction texts, an introduction to literary criticism, and the decisions writers make as they compose and revise. Students evaluate, synthesize, and cite research to support their arguments. Additionally, they read and analyze rhetorical elements, including images as forms of text, from a range of disciplines and historical periods. Students should be able to read and comprehend college-level texts and produce grammatically correct, cohesive writing.

# ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites:

• English 4 Honors with grade B or higher <u>OR</u>

• English 3 Honors with grade A and approval of the instructor

AP English Literature and Composition is a college-level course designed for students who are highly motivated, competent in verbal skills, and able to explore complex ideas. The course engages students in the critical analysis of literature and developing advanced inference skills. Through the close reading of selected texts, students deepen their understanding of how writers use language to provide both meaning and pleasure. In addition, they use these skills when they write. Students learn to unlock literary puzzles in order to analyze and support arguments both orally and in writing. Reading in an AP course is both wide and deep; students will use this reading to develop advanced writing and oral argument skills. Students should be able to read and comprehend college-level texts and produce grammatically correct, cohesive writing. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college English literature and composition course.

#### CREATIVE WRITING 1 unit

Prerequisites:

• Grade 8 ELA with grade C or higher OR

• English 1 CP with grade C or higher

This is an elective course designed to develop students' expressive writing skills. Students will practice writing techniques used by professional writers, experiment with multiple genres, and develop a personal writing portfolio. The students will be given the opportunity to publish their work.

**ENGLISH GRAMMAR** 

Prerequisites: None

This course is designed to strengthen students' grammar and writing skills in preparation for college work. Students will focus grammatically on sentence analysis, sentence structure, revising, and editing. Writing assignments will introduce and prepare students for a wide range of essay topics used in college.

#### **JOURNALISM 1**

1 unit

Prerequisites:

Grade 8 ELA with grade C or higher
OR

• English 1 CP with grade C or higher

This is an elective course for students wishing to become members of the newspaper, yearbook, or broadcast staff. Students will study the basics of journalism: writing, reporting, designing, editing, photographing, and videotaping. This course has a strong emphasis on technology since newspaper, yearbook, and broadcast are created using a digital format.

#### **JOURNALISM 2**

1 unit

Prerequisites:

- Journalism 1 with grade C or higher OR
- Teacher recommendation from prior experience
- Recommended for grades 10-12

The focus of this course is video broadcast. It is an elective course for students who wish to build on journalistic skills acquired in Journalism 1 in the area of broadcast. This course is structured to teach the basics of television production including skills required for operating equipment, script writing, directing, producing, anchoring, reporting, and editing. Students in this class are responsible for producing the daily televised announcements and various other video productions pertaining to school activities.

#### MEDIA ARTS 1 – 8 (YEARBOOK) 1

1 unit each

Prerequisites:

Application

Students will complete an application to be reviewed by the yearbook advisors. Applications must be approved prior to enrollment in the course. Students involved in this course will be responsible for publishing the yearbook. The program includes study and practice in written journalism as well as extensive work with photography and design editing. The focus of this course is to offer students exposure to professional media by offering analysis in print, advertising, photography, and public relations. Students involved will be the staff that does all feature writing, layout design, photography, and publication of the yearbook. This course is an elective that does not take the place of any required English course.

SPEECH 1 unit

Prerequisites:

English Honors with grade C or higher
 OR

- English CP with grade B or higher
- Recommended for grades 10-12

This is an elective course for students who desire to improve their competence in oral expression and the related skills of listening, organizing, and reasoning. It is designed to offer the novice speaker a number of opportunities to organize and prepare public speaking assignments. The course will also offer a "laboratory setting" where the beginning speaker can actually stand in front of a live audience and present his/her practiced performance. In addition to public speaking, further performance opportunities may be included in the area of public oral reading. Content includes speeches and techniques of research, critical thinking and listening, fundamentals of oral expression, the role of communication in our lives, the communication model, spatial relationships, delivery styles, and the effectiveness of language, gestures, and organization techniques.

### **HEALTH AND PHYSICAL EDUCATION**

#### **FAMILY AND COMMUNITY HEALTH**

1 unit

Prerequisites: None

This course is designed to aid students in understanding both the factors which influence family health and the responsibility for protecting the health of the family and community. It is also designed to aid the class in assessing community health needs and in the wise use of reliable resources.

#### PERSONAL HEALTH AND WELLNESS

1 unit

Prereauisites: None

This course is designed to aid students in understanding their growth and development during adolescence. Emphasis is on student involvement in building his or her stores of factual health information and decision-making skills that reflect responsibility for personal health. The course presents current and authentic information and challenges students to make judgments on objective data. This course will also contain Comprehensive Health Education.

#### PHYSICAL EDUCATION 1

1 unit

Prerequisites: None

Required for graduation, this basic coeducational course is designed as a conditioning program combined with teaching desirable skills in a variety of activities, including participation in team, group, and individual sports. Leadership and sportsmanship are emphasized. Although one unit of physical education is required for a state diploma, one additional unit can be earned as an elective credit. This course will also contain Comprehensive Health Education.

#### PHYSICAL EDUCATION 2 – 8

1 unit each

Prerequisites:

- Physical Education 1
- Teacher permission

These courses are designed for athletes and advanced PE students who wish to develop themselves through athletic weight training and conditioning in order to enhance sport-specific movements and skills. A focus on powerlifting and compound exercises will be stressed along with speed and agility training. Weight room safety is also emphasized.

### **MATHEMATICS**

#### **ALGEBRA 1 COLLEGE PREP**

1 unit

Prereauisites:

• Grade 8 Math with grade B or higher

Areas of instruction included in this course are patterns and geometric figures, probability and statistics, algebraic expressions, real numbers, equations and inequalities, linear functions, and graphs. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade.

#### **ALGEBRA 1 COLLEGE PREP A/B**

2 units - 1 unit math, one unit elective

Prerequisites:

Grade 8 Math

Areas of instruction included in this course are patterns and geometric figures, probability and statistics, algebraic expressions, real numbers, equations and inequalities, linear functions, and graphs. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade. This is a year-long course.

### ALGEBRA 1 HONORS

1 unit

Prerequisites:

• Grade 8 Math with grade A

The honors level course promotes higher levels of rigor and inquiry. Extension activities and additional projects are required of students enrolled in this course. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade.

#### **ALGEBRA 2 COLLEGE PREP**

1 unit

Prerequisites:

- Geometry (CP or Honors) with grade C or higher OR
- Geometry A/B with grade B or higher

This college preparatory course reviews, expands, and applies skills and concepts learned in Algebra 1. The focus is on a broad range of mathematical content, process, and higher order thinking skills.

### **ALGEBRA 2 COLLEGE PREP A/B**

2 units - 1 unit math, one unit elective

Prerequisites:

Geometry

This college preparatory course reviews, expands, and applies skills and concepts learned in Algebra 1. The focus is on a broad range of mathematical content, process, and higher order thinking skills. This is a year-long course.

#### **ALGEBRA 2 HONORS**

1 unit

Prerequisites:

- Geometry Honors with grade B or higher OR
- Geometry CP with grade A

This course is for students who have been highly successful in Algebra 1 and who are likely candidates for AP Calculus. It includes topics traditionally taught in Algebra 2 but with an accelerated pace and additional depth. Extension activities and additional projects are required of students enrolled in this course.

#### **CALCULUS COLLEGE PREP**

1 unit

Prerequisites:

• PreCalculus (CP or Honors) with grade C or higher

This course will provide a basic introduction to the three concepts of calculus: limits, derivatives, and integrals. Students will progress through these topics using algebraic, numerical, graphical, and verbal methods.

#### **CALCULUS HONORS**

1 unit

Prerequisites:

PreCalculus Honors with grade C or higher

• PreCalculus CP with grade B or higher

This course is an applied calculus program for students who have completed PreCalculus but do not wish to take an Advanced Placement course. Students will develop an understanding of limits, continuity, and sequences as well as develop skills of differentiation and integration. Applications will be an emphasis of this course.

#### **GEOMETRY COLLEGE PREP**

1 unit

Prerequisites:

- Algebra 1 (CP or Honors) with grade C or higher OR
- Algebra 1 A/B with grade B or higher

This course is for college preparatory students who have successfully completed Algebra 1. This course covers the mathematical aspects of shapes and their properties. There is extensive work on reasoning skills and abstract ideas, and many connections are made to algebra and real-world situations.

#### **GEOMETRY COLLEGE PREP A/B**

#### 2 units - 1 unit math, one unit elective

Prerequisites:

• Algebra 1

This course bridges the gap between abstract geometrical concepts and real-world applications. Concepts will be introduced through workplace examples so students might apply mathematical principles to real-life situations and develop their capacity for problem solving. Topics include using the tools of geometry, investigating and using the properties of geometric figures, ratio and proportion, trigonometry, similarity and congruence, and measurements. This is a year-long course.

#### **GEOMETRY HONORS**

1 unit

Prerequisites:

- Algebra 1 Honors with grade B or higher <u>OR</u>
- Algebra 1 CP with grade A

This is a course similar in content to Geometry CP but has an accelerated pace and is more in-depth. Higher order thinking skills are stressed. Extension activities and additional projects are required of students enrolled in this course.

#### PRECALCULUS COLLEGE PREP

1 unit

Prerequisites:

• Algebra 2 (CP or Honors) with grade C or higher

This course is designed as a fourth-year college preparatory course for students who have an interest and ability in mathematics. It applies algebraic and geometric concepts to problem solving. It can also serve as a course to reinforce earlier mathematical concepts. It includes topics in analytical geometry and the circular functions.

#### **PRECALCULUS HONORS**

1 unit

Prerequisites:

- Algebra 2 Honors with grade B or higher OR
- Algebra 2 CP with grade A

Trigonometric, polynomial, and transcendental functions are integrated with Algebra and Analytic Geometry. Special emphasis is placed on graphing, limits, and real-world applications. This course is the preparatory course for AP Calculus.

# PROBABILITY AND STATISTICS COLLEGE PREP

1 unit

1 unit

Prerequisites:

• Algebra 2

Topics include an introduction to statistics, probability, and linear correlation and regression. Students will gather, organize, and interpret data related to real life situations in order to draw conclusions. The use of technology, such as computers and graphing calculators, will be emphasized.

# PROBABILITY AND STATISTICS HONORS

Prerequisites:

- Algebra 2 Honors with grade C or higher
- Algebra 2 CP with grade B or higher OR
- Algebra 2 A/B with grade A

This fourth-year college preparatory course will provide students with a basic understanding of probability and statistics. Included topics are introduction to statistics, probability, estimates and sample sizes, hypothesis testing, etc. Students learn to produce data, to put data into a useable form, and to interpret data so that they may draw conclusions about information gathered. The course is designed to help students develop strong problem-solving skills.

#### TRANSITION TO ALGEBRA

1 unit

Prerequisites:

- Grade 8 Math with grade C or D
- MAP scores will be considered

This course will involve direct instruction of content level vocabulary, as well as building key mathematical ways of thinking for students that are aligned with the standards. Teachers will build student confidence and raise competence for success in Algebra. Areas of instruction included in this course are concepts of number quantity, coordinate plane, slope, equations and inequalities, functions, geometric explorations, and the language of Algebra.

#### **ADVANCED PLACEMENT CALCULUS**

#### 2 units - 1 unit AP weight, 1 unit honors weight *Prerequisites:*

• PreCalculus Honors with grade B or higher

This course is a rigorous treatment of the techniques and applications of Calculus and Analytic Geometry. Special emphasis is given to objectives recommended by the College Board. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college calculus course.

#### ADVANCED PLACEMENT STATISTICS

### 2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites:

- Algebra 2 Honors with grade C or higher OR
- Algebra 2 CP with grade B or higher

Advanced Placement Statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Emphasis will be placed on the four broad conceptual themes recommended by the College Board. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college statistics course.

# ARMY LEADER EDUCATION TRAINING (LET)

Housed at Westside High School

JROTC: LET 1 – 2 1 unit each

Prerequisites:

Approval of the instructor

This course is highly recommended for 9th grade students. It is a leadership and character development program which stresses individual motivation and discipline. LET 1-2 cadets learn the basics of military drill, American citizenship, physical fitness, first aid and health-related topics, basic geography, map reading skills, American History, and study skills. The course is conducted in a cooperative learning environment that emphasizes teamwork development. The LET 1 course satisfies the requirements for the state mandated unit in Physical Education.

JROTC: LET 3 – 4 1 unit each

Prerequisites:

- JROTC LET 1 or 2
- Approval of the instructor

Cadets at the LET 3-4 level continue the study of more advanced leadership techniques and their application. Classes continue with more advanced study in American citizenship, career planning, health, methods of instruction, fitness and first aid, advanced geography, map reading and land navigation, and additional American military history.

JROTC: LET 5 – 6 1 unit each

Prerequisites:

- JROTC LET 3 or 4
- Approval of the instructor

At the LET 5-6 level the course becomes more demanding of the student's leadership skills and general military knowledge. This level requires an in-depth study of Drill and Ceremonies. Selected LET 5-6 cadets lead at the platoon and company levels and may hold primary cadet staff positions. Cadets study advanced leadership, military history, and citizenship. They learn command and staff procedures including advanced problem solving and management techniques, personal financial planning, and participation in community and service learning projects. Upon successful completion of LET 5-6, cadets who enlist in the U.S. Armed Forces may earn the E-3 pay grade upon completion of basic training.

JROTC: LET 7 – 8 1 unit each

Prerequisites:

- JROTC LET 5 or 6
- Approval of the instructor

Cadets selected for the LET 7-8 level are cadets who have demonstrated the ability to lead and are shown to have accumulated the experience in general JROTC knowledge and military skills. LET 7-8 cadets are selected to command at the battalion level or are placed in key staff positions. This course requires the practical application of subjects and skills learned in the previous 3 years and is the most demanding of all cadets' capabilities and character.

#### **NAVY**

Housed at T.L. Hanna High School

#### JROTC: NAVAL SCIENCE 1 – 2 1 unit each

Prerequisites: None

This course provides a broad perspective of military skills and knowledge to include military customs and courtesies, our Flag and National Anthem, officer and enlisted opportunities in the military, maritime geography, sea power, naval history, naval ships and their missions, an introduction to navigation and time, basic seamanship, and principles of health education. Beginning cadets also learn basic marching steps both with and without arms. The Naval Science 1 course satisfies the requirements for the state mandated unit in Physical Education.

#### JROTC: NAVAL SCIENCE 3 – 4 1 unit each

Prerequisites:

• JROTC Naval Science 1 or 2

This is a continuation of the basic first year course with increased leadership opportunities and introduction or expansion into Naval leadership, career planning, Naval history, oceanography, rules of the nautical road, Naval operations and communications, intelligence and national security, ship evolutions, and advanced first aid. Upper classmen are afforded off-campus orientation and field trips to military and national points of interest such as Washington, DC, and Navy and Marine boot camp orientations.

#### JROTC: NAVAL SCIENCE 5 – 6 1 unit each

Prereauisites:

• JROTC Naval Science 3 or 4

Cadets at this level are challenged with platoon leader or unit cadet staff officer duties and expand their leadership and scholarship development opportunities. Also, outstanding cadets are chosen to attend the U.S. Naval Academy, U.S. Coast Guard, Boy's and Girl's State, and the S.C. Police Academies during the summer. One-week mini-boot camps emphasizing physical fitness and leadership development are also available. Academic subjects include leadership development laboratories, fundamentals of American democracy, World War II, Korean and Vietnam War Studies, Russian studies, meteorology and weather, astronomy, and survival training.

#### JROTC: NAVAL SCIENCE 7 – 8 1 unit each

Prerequisites: J

• ROTC Naval Science 5 or 6

Cadets may receive assistance filing ROTC-related college scholarship applications. Cadets who have the aptitude and have demonstrated leadership potential for becoming military officers are given priority attention for valuable scholarship appointments. Cadets who have successfully completed three or more years may also enlist with a guaranteed E-3 pay grade after their respective military boot camps. Non-service cadets bound for employment or college are provided leadership training certificates of completion. Academically, the final Naval Science year includes career planning and education, leadership evaluation, the nuclear age, military justice, international law of the sea, national strategy, Naval weapons, and Naval research and development. Other activities planned annually include, but are not limited to, a formal military ball, a formal command inspection, awards ceremonies, advancement and promotion formation, community service projects, parades, and military drills, air rifle, physical fitness, and land navigation competitive meets. Ribbons are earned for participation and individual excellence. Advancement is based on individual military and academic knowledge with cadet rates and ranks paralleling those of the United States Navy.

### **SCIENCE**

All courses in this section are lab sciences with the exception of Environmental Science.

#### ANATOMY AND PHYSIOLOGY HONORS 1 unit

Prerequisites:

- Biology 1 and Chemistry 1 (CP or Honors) with grade C or higher
- Students in grades 11-12

This course is designed for students interested in seeking careers in health services or interested in the basic patterns of the human body. Laboratory activities and research are a part of the classroom activities. Students will engage in research of human diseases and conditions and participate in dissections of vertebrate organisms. Analysis of lab and dissection results will also be performed to facilitate inquiry learning throughout the course. Students who complete Anatomy and Physiology Honors will be well prepared for entrance into Advanced Placement science courses and undergraduate biology courses.

#### **BIOLOGY 1 COLLEGE PREP**

1 unit

Prerequisites (Grade 9):

- Grade 8 Science with grade B or higher AND
- Grade 8 Math with grade C or higher

Prerequisites (Grades 10-12):

Environmental Science

The course includes the study of cells, molecular basis of heredity, biological evolution and the diversity of life, inter-dependence of organisms, matter, energy, and organization in living systems. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade.

#### **BIOLOGY 1 HONORS**

1 unit

Prerequisites:

- GT Science with grade B or higher
- Grade 8 Science with grade A
- <u>AND</u>
   Grade 8 Math with grade A
- Algebra 1 with grade C or higher

This course includes traditional Biology topics taught at a higher level. This course is recommended for those who are planning to take AP Biology. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade.

#### **BIOLOGY 2 COLLEGE PREP**

1 unit

Prerequisites:

• Biology 1 (CP or Honors)

This course expands upon the SC Biology Standards through the addition of plant studies, vertebrate studies, invertebrate studies, and dissections. Students who complete Biology 2 CP will be competent in the following areas: scientific inquiry including dissection, structure and function of cells and their organelles, the flow of energy within and between living organisms, the molecular basis of heredity, biological evolution and the diversity of life, as well as interrelationships among organisms and the biotic and abiotic components of their environments.

#### **CHEMISTRY 1 COLLEGE PREP**

1 unit

Prerequisites:

• Biology 1 and Algebra 1 CP with grade C or higher in each

This course covers atomic and molecular structure, kinetics, gas laws, molecular geometry, bonding, stoichiometry, equilibrium, and organic chemistry. The emphasis is on problem solving and scientific deduction. Laboratory work is essential to this course.

#### **CHEMISTRY 1 HONORS**

1 unit

Prerequisites:

- Algebra 1 Honors with grade B or higher OR
- Algebra 1 CP with grade A

<u>AND</u>

- Biology 1 Honors with grade B or higher <u>OR</u>
- Biology 1 CP with grade A

This course is for highly successful science and Algebra students who are prospective AP Chemistry and/or AP Physics students. It includes traditional Chemistry topics taught at a higher level.

#### **EARTH SCIENCE**

1 unit

Prereauisites:

• Biology 1

Earth Science is a laboratory science course that will require students to use science and engineering practices to explore the history, structure, and properties of the observable universe and Earth. Students will examine the natural and man-made forces that affect the atmosphere, hydrosphere, and geology of Earth and how those forces may affect life now and in the future. The relationship between humans and the natural world will be explored with a focus on sustainable practices.

#### **EARTH SCIENCE HONORS**

1 unit

Prerequisite:

Biology 1 Honors with grade C or higher

Earth Science is a rigorous laboratory course focusing on the study of space, and the geologic and atmospheric forces that shape our world. Through experimentation and investigation, students will explore the earth cycles including the geosphere, hydrosphere, and the atmosphere. Students will learn about scientific inquiry, geologic time, space exploration, the solar system and the universe. Students will use interactive experiences, higher order thinking, collaborative projects, and real-world application through labs and a variety of assessments.

#### **ENVIRONMENTAL SCIENCE**

1 unit

Prerequisites: None

This course is intended to show how organisms are related to their environment and to each other. To achieve this, various types of pollution and their causes are explored. Discussion of energy alternatives and energy depletion is also a topic for this course. At the completion of the course, students should be able to recognize how they make a difference in their environment, whether or not they are a cause of its deterioration, or if they are keeping it livable for future generations. Note: This course is not considered a lab science.

#### **FORENSIC SCIENCE**

Prerequisites:

• Biology 1

This course is designed to engage students in the scientific study of searching and processing crimes scenes. The course involves the detailed discussion of types of physical evidence and the analytical processes that are utilized in a forensic science laboratory. In addition, students will survey careers in forensic science and investigate mock crime scenes. Laboratory activities will give students the opportunity to demonstrate forensic science techniques presented in the course.

#### **PHYSICS COLLEGE PREP**

1 unit

1 unit

Prerequisites:

- Biology 1 and Algebra 1 with grade C or higher in each
- · Chemistry 1

This course introduces the core areas of physics: (1) interactions and forces (patterns of linear motion, forces and changes in motion, interactions and contact forces, and interactions and noncontact forces and fields); (2) interactions and energy (conservation and energy transfer and work, mechanical energy, thermal energy, sound, electricity and magnetism, radiation, and nuclear energy). Students will demonstrate conceptual understanding through short answers, diagrams, and graphs. Students will determine relevant measurements describing a physical system, plan and carry out experiments, analyze data graphically and mathematically using strong algebra skills, and apply the laboratory results to a broad range of situations including applications to technology and everyday life.

#### **PHYSICS HONORS**

1 unit

Prerequisites:

- Biology 1 Honors with grade B or higher OR
- Biology 1 CP with grade A
- Algebra 1 Honors with grade B or higher
- Algebra 1 CP with grade A

<u>AND</u>

• Chemistry 1 Honors with grade B or higher

This course introduces the core areas of physics: (1) interactions and forces (patterns of linear motion, forces and changes in motion, interactions and contact forces, and interactions and noncontact forces and fields); (2) interactions and energy (conservation and energy transfer and work, mechanical energy, thermal energy, sound, electricity and magnetism, radiation, and nuclear energy). Students will demonstrate conceptual understanding through short answers, diagrams, and graphs. Students will determine relevant measurements describing a physical system, plan and carry out experiments, analyze data graphically and mathematically using strong algebra skills, and apply the laboratory results to a broad range of situations including applications to technology and everyday life. Students will engage in deeper discussions and work with higher level mathematical skills (including some trigonometry) in this honors level course designed for highly successful science and algebra students.

#### ADVANCED PLACEMENT BIOLOGY

#### 2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites:

• Biology 1 Honors with grade B or higher

This course features a comprehensive study of molecules, cells, heredity, organisms, and populations. This is a college level course. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college biology course.

#### ADVANCED PLACEMENT CHEMISTRY

#### 2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites:

• Chemistry 1 Honors with grade B or higher

Lab work, problem solving, and analysis are highly emphasized. This is a college level course. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college chemistry course.

# ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

1 unit

Prerequisites:

- Chemistry 1 Honors with grade C or higher
  OR
- Chemistry 1 Honors may be taken concurrently

The goal of the AP Environmental Science course is to 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 humanmade, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. This is a college level course. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college environmental science course.

#### **ADVANCED PLACEMENT PHYSICS**

#### 2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites:

• PreCalculus (CP or Honors) with grade B or higher

Lab work, problem solving, and analysis are predominant characteristics of this course. This is a college level course. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college physics course.

#### AFRICAN AMERICAN HISTORY

1 unit

Prerequisites: None

This is an elective course that focuses on the history of African-Americans, from life in ancient Africa to the election of the first African-American president of the United States. Topics include transatlantic slave trade, establishment of slavery in America, plantation life and slave culture, abolitionism, the Civil War, reconstruction, the rise and fall of Jim Crowe, segregation, the Great Migration, Harlem Renaissance, World War I, the Great Depression, World War II, the Civil Rights Movement, and issues of the modern era. These themes will be explored by using primary source documents (including written documents and audio recordings), literature, music, video clips, and art that depict the complete history of African-Americans.

#### **ECONOMICS COLLEGE PREP**

0.5 unit

Prerequisites: None

This course introduces such concepts as scarcity, cost versus benefits, and supply and demand. A unit on personal finance equips the students with the tools for economic success. There is also a study of the national economy including such topics as the role of the Federal Reserve and major economic indicators. A final component of the course is a study of the global marketplace. A 0.5 unit of Economics is required for graduation.

#### **ECONOMICS HONORS**

0.5 unit

Prereauisites:

- Previous Honors level social studies course with grade B or higher OR
- Previous CP level social studies course with grade A OR
- English Honors with grade B or higher OR
- English CP with grade A

Economics Honors is an intensive study of the American economic system. Topics range from scarcity to supply and demand to America's role in a global economy. Personal finance is also stressed. There is a significant amount of outside reading and research relating to the economy. Critical thinking skills and expository writing will be emphasized throughout the course. A 0.5 unit of Economics is required for graduation.

#### **LAW EDUCATION**

1 unit

Prerequisites: None

The course will place primary emphasis on understanding the fundamental principles and values underlying our Constitution, laws, and legal system. Current issues and debates relating to the law will be discussed. The rights of the individual will be stressed with emphasis on the citizen's role in society. Courtroom visits and a variety of law-related speakers will add to the relevance of this course.

#### **PSYCHOLOGY**

0.5 unit

Prerequisites:

• Recommended for grades 10-12

This course is a social science that includes the following topics: background and history of psychology, the learning of behavior development, behavioral disorders, and intelligence.

#### SOCIOLOGY

0.5 unit

Prerequisites:

• Recommended for grades 10-12

This course is a social science that includes the following topics: background and history of sociology, culture and cultural changes, values, norms, sanctions, groups and group interaction, and social problems.

#### **U.S. GOVERNMENT COLLEGE PREP**

0.5 unit

Prerequisites: None

This course teaches our civil rights and liberties as contained in the United States Constitution, as well as our civic responsibilities. The evolution of government, especially in the United States, is studied in detail. The relationships among the three branches of government at all levels are included. The James B. Edwards Civics Initiative requires students to take the civics test that is published annually by the United States Citizenship and Immigration Services. This test will be given in the U.S. Government classes. A 0.5 unit of U.S. Government is required for graduation.

#### **U.S. GOVERNMENT HONORS**

0.5 unit

Prerequisites:

- Previous Honors level social studies course with grade B or higher OR
- Previous CP level social studies course with grade A

<u>OR</u>

• English Honors with grade B or higher

<u>OR</u>

English CP with grade A

U.S. Government Honors is an intensive study of the American government system. Emphasis is placed on the U.S. Constitution, the relationships among the three branches of government, the historical development of each branch, and key personalities who have molded our government. There is a significant amount of outside reading and research relating to the government. Critical thinking skills and expository writing will be emphasized throughout the course. The James B. Edwards Civics Initiative requires students to take the civics test that is published annually by the United States Citizenship and Immigration Services. This test will be given in the U.S. Government classes. A 0.5 unit of U.S. Government is required for graduation.

# U.S. HISTORY AND CONSTITUTION COLLEGE PREP

1 unit

Prerequisites: None

In the United States History and the Constitution course, students will employ the skills of a historian to explore the foundation of the American Republic and the expansion and disunion of the United States. Students will investigate the impact of American industrialism and capitalism, including being drawn into world wars, on American politics and geopolitics. Through the lens of the Cold War, students will study the contemporary era including the age of technological development, increased civic participation, and political party realignment. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade. A unit of United States History and Constitution is required for graduation.

# U.S. HISTORY AND CONSTITUTION HONORS

1 unit

Prerequisites:

- Previous Honors level social studies course with grade B or higher OR
- Previous CP level social studies course with grade A <u>OR</u>
- English Honors with grade B or higher OR
- English CP with grade A

This course is a survey of American History from the discovery of America to the current era. An introductory summary includes the Age of Discovery, colonial experience, American Revolution, Federal Era and Constitution, western expansion, sectionalism, the War Between the States, and Reconstruction. Primary emphasis is on the late nineteenth century and twentieth century. Topics include industrialization, the world wars, Roaring Twenties, Great Depression, Cold War, Civil Rights Era, and the United States' role in the modern world. Academic emphasis in this course will be on advanced interpretive, critical thinking, and writing skills. Outside reading assignments, as well as research projects, will assist the student in preparing for the Advanced Placement United States History course. The SC state EOCEP (End of Course Examination Program) exam counts 20% of the student's final grade. A unit of United States History and Constitution is required for graduation.

#### WORLD HISTORY COLLEGE PREP

1 unit

Prerequisites: None

This course is a study of the major periods and accomplishments of our world's peoples. It emphasizes significant cultures, regions, individuals and events that have shaped the world. World History highlights the period from 1300 to the present with emphasis on the Renaissance, Age of Discovery, industrialization, nationalism, the world wars, and the Cold War. This course is recommended for college bound students.

#### **WORLD HISTORY HONORS**

1 unit

Prerequisites:

- English 1 Honors with grade B or higher <u>OR</u>
- Taken concurrently with English Honors course

World History Honors is an intermediate-level survey of the key events since 1300. Focus is on those periods and movements which most significantly impacted their time and whose influence is still felt in ours. This approach will seek to develop stronger reading comprehension, expository writing and historical analysis skills in the student. This course is recommended for students interested in academic rigor and future social studies coursework in the Advanced Placement curriculum.

# ADVANCED PLACEMENT HUMAN GEOGRAPHY 2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites (Grade 9):

- English 1 Honors with grade A Prerequisites (Grades 10-12)
- English Honors with grade B or higher or English CP with grade A Advanced Placement Human Geography is an introductory college level course focusing on the study of human geography. The purpose of the course is to introduce students to a systematic study of patterns and processes that have shaped mankind's understanding, use, and alteration of the Earth's surface. Students will learn to use spatial concepts when analyzing human's organization of space, landscapes, and the environmental consequences of their decisions from the local to global level. Students will also be looking for patterns across the cultural landscape, trying to identify trends, and anticipate future phenomena using the scientific methods, research, and tools of geographers. At its core, Human Geography teaches students how to interpret maps, select the correct maps to obtain information, interpret sets of data, and analyze geographic models to effectively evaluate the world we live in.

# ADVANCED PLACEMENT PSYCHOLOGY 2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites:

- English Honors course with grade B or higher <u>OR</u>
- English CP course with grade A
- Recommended for grades 10-12

This course is designed as a college-level course that is an intensive study of human behavior including personality theory, behavioral theories, abnormal behaviors, brain-based disorders, and the life cycle. Much emphasis is placed on outside reading, research techniques, case studies, and writing projects. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college psychology course.

# ADVANCED PLACEMENT U.S. GOVERNMENT

1 unit

Prerequisites:

- English Honors course with grade B or higher <u>OR</u>
- English CP course with grade A
- Honors Government and Economics with grade B or higher is required
- Recommended for grades 10-12

This course provides an analytical perspective on government and politics in the U.S. It involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. Constitutional underpinnings of U.S. government, political beliefs and behaviors, political parties, interest groups and mass media, institutions of national government, public policy, and civil rights and civil liberties are main content areas. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college U.S. government course.

## ADVANCED PLACEMENT U.S. HISTORY 2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites:

- English Honors course with grade B or higher <u>OR</u>
- English CP course with grade A
- Recommended for grades 11-12

This class is a rigorous college-level course that requires a commitment from the student to perform at the highest level. It is an intense study of the American experience from the Age of Discovery through the current era. Extensive reading and demanding research, analysis, and interpretation of documents and data are required. Critical thinking skills are emphasized throughout the course. Considerable emphasis is placed on writing skills to prepare students for the Free-Response and Document Based Questions on the AP U.S. History Examination. Students who have not taken U.S. History and Constitution will also be required to take the SC state EOCEP (End of Course Examination Program) exam, which counts 20% of the student's final grade. A unit of United States History and Constitution is required for graduation. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college U.S. history course.

## ADVANCED PLACEMENT WORLD HISTORY 2 units - 1 unit AP weight, 1 unit honors weight

Prerequisites (Grade 9):

- English 1 Honors with grade A Prerequisites (Grades 10-12)
- English Honors with grade B or higher OR
- English CP with grade A

This course is an intense college-level study of the history of world civilization over the past 10,000 years. Demanding reading, research and writing is required. The course demands commitment and discipline from the student in order to perform well on the Advanced Placement examination. Advanced Placement World History builds on an understanding of cultural, institutional, and technological precedents that, along with geography, set the human stage. The course will have as its chronological framework the period from 8000 B.C.E. to the present. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college world history course.

## **VISUAL AND PERFORMING ARTS**

See pages 36-38 for the Visual & Performing Arts courses offered at Southwood Academy of the Arts.

## **MUSIC**

### **INSTRUMENTAL MUSIC: BAND 1**

1 unit

Prerequisites:

 Music reading and performance ability on percussion, woodwind or brass instruments

Band 1 is offered to entering ninth grade band students for the study and performance of quality band music. Class activities emphasize the development of instrument technique, tone production, tuning, fundamentals of music theory, music reading, and listening skills.

### INSTRUMENTAL MUSIC: BAND 2 – 8 1 unit each

Prerequisites:

Band 1

<u>OR</u>

Audition

Band 2-8 are continuation levels for students with four or more years of previous band experience (including middle school). Odd numbered Band courses (3, 5, and 7) focus on marching band (fall), while even numbered Band courses (2, 4, 6, 8) focus on concert band (spring). Emphasis is on the advancement of instrument technique, the further development of ensemble performance skills, and rehearsal and performance of intermediate level band music.

#### INSTRUMENTAL MUSIC: BAND HONORS 1 unit

- Prerequisites:
- Audition

<u>AND</u>

Contract

Band Honors is an upper-level performance opportunity for accomplished wind and percussion players. Band Honors offers students great variety and challenge in musical performance, including experiences in chamber music, analysis, theory and history. To receive honors credit students are required to complete an honors contract.

### **MUSIC APPRECIATION 1**

1 unit

Prerequisites: None

This course is designed to provide the student with a solid foundation of musical knowledge. In this course, the student will discover that music is not only a means of expressing ourselves but that it is also a documentation of history and culture of society. Students will leave this class with a broad knowledge of various types of music. The goal of this class is to develop students who are more informed about the place of music in history and who will become the audiences for the arts. Students will be engaged in listening and learning activities throughout the year that will include the following musical time periods and genres: Medieval, Renaissance, Baroque, Classical, Romantic, Twentieth Century, Jazz, Rock and Roll, Big Band, Country, Bluegrass, Folk, Opera and Broadway musicals.

## ADVANCED PLACEMENT MUSIC THEORY

1 unit

Prerequisites:

Audition

<u>OR</u>

- Teacher recommendation
- It is highly recommended that students who enroll in this course have a moderate proficiency on an instrument. This includes, but is not limited to: voice, piano, guitar, woodwind instruments, brass instruments, strings instruments, and percussion.
- Recommended for grades 10-12

Students who enroll in AP Music Theory will learn the equivalent of a 1st year college-level music theory course. This includes mastery of music reading, musical notation, aural skills, harmonic and melodic dictation, form and analysis, and basic composition. The AP exam is given at the end of this course and may allow students to receive college credit.

ART 1 1 unit

Prerequisites: None

Art 1 is a foundational course that teaches the fundamentals of art through the elements and principles of design. Students will experiment with different media and be challenged to draw and design from direct observation, while learning complex techniques to help them create and problem solve. This course will be the basis for all advanced art classes. There is a \$20.00 fee for this course.

ART 2 1 unit

Prerequisites:

Art 1

Art 2 is an exploration of media and technique, while building on the foundation of skills acquired in Art 1. Students are given more openended creative problems that allow them the individuality and creativity to make conceptual ideas a means of personal expression. Mediums used are graphite, charcoal, colored pencil, acrylic paint, watercolor, and printmaking. There is a \$20.00 fee for this course.

ART 3 1 unit

Prerequisites:

· Art 2 with grade B or higher

Art students who are enrolled in a level 3 or 4 art class and who are classified as juniors and seniors in high school may apply for Honors weighting. Honors courses are designed for the serious art student who intends to prepare for AP Visual Arts Course(s). They are differentiated by the extensive rigor in thinking processes and additional project/performance assessments above and beyond the general course requirements. Emphasis will be placed on conceptual thinking and problem solving, superior craftsmanship, originality, and self-reflection. To receive honors credit students are required to complete an honors contract. There is a \$20.00 fee for this course.

ART 4 1 unit

Prereauisites:

Art 3 with grade B or higher

Art students who are enrolled in a level 3 or 4 art class and who are classified as juniors and seniors in high school may apply for Honors weighting. Honors courses are designed for the serious art student who intends to prepare for AP Visual Arts Course(s). They are differentiated by the extensive rigor in thinking processes and additional project/performance assessments above and beyond the general course requirements. Emphasis will be placed on conceptual thinking and problem solving, superior craftsmanship, originality, and self-reflection. To receive honors credit students are required to complete an honors contract. There is a \$20.00 fee for this course.

ART 5-8 1 unit each

Prerequisites:

• Previous level art course with grade B or higher

These courses are rigorous level studio courses offered to highly motivated students that have completed Art 1 through 4. Students will continue to increase technical skills and develop a more sophisticated approach to process and subject matter. Students will focus on developing a portfolio of work for college and scholarship applications. There is a \$20 fee for this course.

ART: CERAMICS 1 1 unit

Prerequisites:

Art 1 with grade B or higher

This course will involve creating works of art in clay using a variety of handbuilding processes such as pinching and coils and slabs. Students will learn about various clay bodies and their properties, and how to dig and process natural clay. Students will explore basic glaze chemistry, including mixing their own glazes, loading kilns, and firing their own work. Students will also be exposed to a history of both functional and decorative ceramic arts. There is a \$20.00 fee for this course.

**ART: CERAMICS 2** 

Prerequisites:
• Art - Ceramics 1 with grade B or higher

Ceramics 2 will focus on higher level projects involving pinching, coiling, and slabs, focusing on both functional and decorative ceramics. Students will be expected to work more independently than in Ceramics 1. Students will also learn about clay bodies, glaze chemistry, kiln loading and firing, and ceramic history. There is a \$20.00 fee for this course.

**ART: DIGITAL ARTS** 

1 unit

1 unit

Prerequisites:

• Art 1 with grade B or higher

Do you have a passion for visual art or visual communication? Are you interested in careers in the design, production, display, and presentation fields of digital arts? This introductory design course teaches cores skills using Krita, a free open-source program, Photoshop, and other applications. As you create a detailed still life and other artworks throughout the course, you'll learn the basic elements of visual art: line, shape, form, color, value, space, and texture. You will use what you learn to express yourself in original digital drawings and artwork. There is a \$20.00 fee for this course.

ART HISTORY 1 unit

Prerequisites:

• Recommended for grades 9-12

This course will immerse students in the study of modern visual culture from the mid-nineteenth century to the present. The course involves critical thinking, and the student will develop an understanding and knowledge of diverse historical contexts of architecture, sculpture, painting, and other media. Attention will be given to cultural and technical influences on art production, analysis of individual styles and art works, examination of aesthetic criteria, and recognition of stylistic characteristics.

## PERFORMING ARTS

### **COLOR GUARD 1-8**

1 unit each

Prerequisites:

Audition

The Anderson School District Five Color Guard classes offer instruction in individual and ensemble visual performance. The Color Guard will provide various performance opportunities during the year including football games, pep rallies, marching competitions, parades, and CWEA Winter Guard shows. This course combines dance, drama, performance, and the manipulation of flags, sabers, and rifles into a magical artistry of pageantry.

THEATRE 1 1 unit

Prerequisites: None

This course is designed to introduce students to the world of Theatre Arts. Exercises to build self-esteem, trust and empathy are integrated with the technical aspects of theatre. Basic terminology, vocal and movement exercises, as well as writing activities are incorporated. Students learn the art as an audience member as well as a performer, and build self-confidence by learning about themselves and appreciating the differences and similarities of others. Skills such as communication, concentration, memorization, and imagination will be developed. Interpreting play scripts and understanding the process of theatrical productions are also goals for this class.

## **FRENCH**

FRENCH 1 1 unit

Prerequisites: None

This course is the first in a series to develop the skills of understanding, speaking, reading, and writing French. Students will learn to pronounce and use the basic sounds and intonation patterns of the language. They will master a limited set of structural and lexical objectives to be used in common daily conversational situations. They will also gain a basic knowledge of contemporary French cultures as they participate in language learning activities to develop communicative competence.

FRENCH 2 1 unit

Prerequisites:

• French 1 with grade C or higher

This course will expand students' knowledge of the French language and culture. The major objective of the course is development of the four skills of understanding, speaking, reading, and writing. Students will expand their vocabulary in situations covered in French 1 as well as new areas. They will develop the ability to use complex grammatical structures and a number of verb tenses. Contemporary French culture will be the basis for expanding knowledge in this area.

FRENCH 3 1 unit

Prerequisites:

- French 2 with grade C or higher
- Students who earn grade B or higher may enter Honors level with contract

This course will begin to expand students' learning and activities in the French language and culture to areas of special interest. They will complete the study of the basic grammatical structures and continue development of the four skills using these structures and vocabulary on this level. Throughout the course there will be systematic review of language patterns studied earlier. Although students will continue their study of contemporary culture of the French-speaking world, they will learn about its history, art, and literature.

FRENCH 4 1 unit

Prerequisites:

- French 3 with grade C or higher
- Students who earn grade B or higher may enter Honors level with contract

This course focuses on the improvement of the four skills of reading, listening, speaking, and writing through a study of contemporary French culture, history, art, and literature. A broad range of activities will provide experiences in areas of special interest, such as language careers, drama, music, literature, and art.

## **SPANISH**

SPANISH 1
Prereauisites: None

1 unit

This course is the first in a series to develop the skills of understanding, speaking, reading, and writing Spanish. Students will learn to pronounce and use the basic sounds and intonation patterns of the language. They will master a limited set of structural and lexical objectives to be used in common daily conversational situations. They will also gain a basic knowledge of contemporary Spanish cultures as they participate in language learning activities to develop

SPANISH 2

1 unit

Prerequisites:

• Spanish 1 with grade C or higher

communicative competence.

This course is designed for students to expand their knowledge of the Spanish language and culture. The major objective of the course is development of the four skills of understanding, speaking, reading, and writing. Students will expand their vocabulary in situations covered in Spanish 1 as well as new areas. Reading and class activities will help students acquire the ability to function in the Spanish culture and communicate with native speakers.

SPANISH 3 1 unit

Prerequisites:

- Spanish 2 with grade C or higher
- Students who earn grade B or higher may enter Honors level with contract

This course is designed for students to expand considerably their learning and activities in the Spanish language and culture. They will complete the study of the basic grammatical structures and continue the development of the four skills using these structures and vocabulary on this level. Throughout the course there will be systematic review of language patterns studied earlier. Although students will continue their study of contemporary culture of the Spanish-speaking world, they will learn about its history and art.

SPANISH 4 1 unit

Prereguisites:

- Spanish 3 with grade C or higher
- Students who earn grade B or higher may enter Honors level with contract

This course focuses on the improvement of the four skills of reading, listening, speaking, and writing through a study of contemporary Spanish culture, history, art, and literature. A broad range of activities will provide experiences in areas of special interest, such as language careers, drama, music, literature, and art.

## **ADVANCED PLACEMENT SPANISH LANGUAGE** 1 unit *Prerequisites:*

- Spanish 4 with grade B or higher
- Continuous enrollment in English Honors

This class intensively prepares the students for the AP Exam. Authentic materials will be utilized to enhance vocabulary and communication skills. The "five C's" of the Foreign Language Standards – Communication, Culture, Comparisons, Connections and Communities – will be addressed throughout the semester. Students who successfully complete the course and earn a qualifying score on the required AP examination may earn credit for an introductory college Spanish course.

## **CAREER AND TECHNOLOGY EDUCATION (CTE) COURSES**

The course offerings in this section pertain to CTE classes offered at the high schools only.

## The following courses meet the computer science requirement for graduation:

- Advanced Cyber Security\*
- Advanced Networking\*
- Computer Science Applications PLTW\*
- Computer Science Essentials PLTW\*
- \*Offered at the Anderson Institute of Technology
- \*\*Offered at the high school campuses
- Computer Science Principles PLTW\*
- Computer Science Principles AP\*
- Cyber Security Fundamentals\*
- Cybersecurity PLTW\*
- Fundamentals of Computing\*\*
- Networking Fundamentals\*
- Principles of Engineering PLTW\*

## **Business Information Management**

Required Courses (3 units required)

- Digital Publication Design (1 unit)
- Image Editing (1 unit)
- Fundamentals of Computing (1 unit)\*

## **Marketing Management**

Required Courses (3 units required)

- Marketing (1 unit)
- Marketing Management (1 unit)
- Entrepreneurship (1 unit)

### **DIGITAL PUBLICATION DESIGN**

1 unit

Prerequisites:

Recommended for grades 10-12

This course brings together graphics and text to create professional level publications. Students create, format, illustrate, design, edit/revise, and print publications. Improved productivity of publications is emphasized. Proofreading, document composition, and communication competencies are also included.

### **DIGITAL TECHNOLOGIES**

1 unit

Prerequisites:

• Recommended for grades 10-12

This course introduces students to new and emerging technologies that are impacting the way we utilize information when accessing computers and other technology devices. Students will be introduced to speech recognition software, mobile application, and online collaboration tools. Tablets, iPads, and smartphones will be introduced as tools for personal and business applications.

## **ENTREPRENEURSHIP**

1 unit

Prerequisites:

• Recommended for grades 10-12

This course is designed to provide students with the knowledge and skills leading to the development of a business plan for small business ownership. An important part of the course will be the incorporation of traditional and nontraditional marketing strategies, technology, staffing, and financial considerations.

## **FUNDAMENTALS OF COMPUTING**

1 unit

Prereauisites:

• Algebra 1

This course is designed to allow students to explore a variety of computer science topics, such as web design, human computer interactions, programming, and problem solving. Optional topics include mobile applications, robotics, and digital animation. Students will develop critical thinking, logic, and problem-solving skills relevant to today's technology. This course meets the computer science requirement for graduation.

## **GOOGLE APPLICATIONS**

1 unit

Prereauisites:

• Recommended for grades 10-12

Google Applications is designed to introduce students to many of the applications that Google offers. The course builds on skills beyond the traditional introduction of computer concepts and incorporates emerging technologies using Google Applications. This course will prepare students for learning and working in the 21st century through communication and collaboration tools including the use of Google Drive, Sites, Calendar, Mail, Maps, and more. Real world studentcentered activities will strengthen students' technology skills in the continually changing online Google community.

### **IMAGE EDITING**

1 unit

Prerequisites:

• Recommended for grades 10-12

Students are instructed in the fundamental features of using digital imaging software in editing and designing both photos and graphics. Students also learn the use of technologies related to digital imaging such as: basic computer operations, file sharing across networks, digital scanning, digital photography, preparing documents for output to various types of high-resolution printers, and color calibration. Successful completion of Image Editing 1 will help provide a foundation for continued training as well as complementary training for related course work.

### **MARKETING**

1 unit

Prerequisites:

Recommended for grades 10-12

This course introduces marketing concepts and examines economic, marketing, and business fundamentals, in addition to the marketing functions of selling, promotion, and distribution. This is the basic course in marketing curriculum and should be taken before the specialized courses.

<sup>\*</sup>This course meets the computer science requirement for graduation.

#### ADAPTIVE PE MENTORING

1 unit

Prerequisites:

- Students in grades 11-12
- C average in core subjects
- · Application including 2 teacher recommendations

This course will allow students to assist with the operation of the current adaptive PE class and allow them an opportunity to observe and reflect on the progression of disabilities in a structured environment. It will allow students the exposure needed to consider a career in special education as well as a variety of fields that necessitate accommodations for individuals with disabilities. The target audience will be college ready juniors and seniors. The students will observe and document characteristics of student disabilities and progress made in the areas of gross motor, fine motor, social, and communication skills as well as necessary accommodations made to allow for access/participation. The midterm project will be based on mastery understanding of these skills. In the second quarter, the students will develop activities targeting desired goals for students with disabilities. The final will be a presentation of the results toward the goal, reflecting on the success or adjustments necessary to reach the goal. The activities taught to the students in the physical education class would aim at preparing them for Special Olympics competitions.

#### **COLLEGE AND CAREER READINESS**

1 unit

Prerequisites: None

The primary purpose of this course is to prepare students for academic and professional success both in high school and beyond. There is an emphasis on goal setting, financial literacy, digital literacy, and college and career readiness skills. Students will utilize applied technology skills (with an emphasis on Google apps), improve academic skills (oral presentations, note-taking strategies and research skills, goal setting and planning skills, and Career Readiness assessment preparation), complete personal traits assessments (personality, interests, multiple intelligences, values and skills surveys), explore college alternatives (public and private universities, community colleges, and trade/tech schools), and complete career surveys. Students will complete SC EEDA requirements such as a community service project, structured career exploration, defining a career major, and job shadowing. All assignments and projects are designed to develop the technological knowledge, skills, and confidence necessary to succeed in future academic and professional pursuits. Students will also have the opportunity to complete Microburst, a nationally recognized credential, during this course. Microburst is designed to teach the soft skills needed to be successful in life. Microburst focuses on interpersonal skills, employment basics, communication skills, teamwork, conflict resolution, dependability and reliability, flexibility and adaptability, planning and organization, productivity, and initiative.

#### COLLEGE AND CAREER READINESS 2-4 1 unit each

Prerequisites:

- College and Career Readiness with grade C or higher
- Application

This Program is a college preparedness curriculum targeting motivated students identified in the 9th grade toward advancing their post-secondary goals. Selection criteria is based on grade performance and teacher recommendation. Students will be taught proven study skills, research methods for college and career selection, and necessary soft skills that will propel them to a successful career after high school.

### CCR 2 (10th Grade)

In this course, students will examine the question, "Who am I?" This will be accomplished through a study of growth mindset and an assessment of personal learning styles. Additionally, the students will refine their skills on note taking, study skills, personal planning, collaborative peer study, close reading, and effective writing. Conflict resolution techniques will be studied. The students will complete a College Scholarship project and will prepare for the PSAT.

### CCR 3 (11th Grade)

In this course, students will focus on test preparation. They will prepare for the SAT/ACT and WIN Assessments taken in the junior year. This preparation will involve both test content and test taking strategies. In addition, students will examine life on their own (working, college or both.) Finally, the students will engage in a Legacy project that will intensely involve them in their community through service learning.

### CCR 4 (12th Grade)

In this course, students will continue to prepare for life after graduation by applying to colleges, applying for scholarships, writing a resume, and practicing interviewing skills. They will look at the FASFA process and engage in a Personal Finance project, including budgeting, groceries and nutrition and loans.

### **SAT PREPARATION**

1 unit

Prerequisites:

- Geometry CP
- Students in grades 11-12

This course is designed to assist students in the overall development of critical thinking skills and test-taking strategies. These skills are of utmost importance to achieve desired scores on the verbal and math sections of the SAT and/or the ACT.

## DUAL ENROLLMENT TEACHER CADET 1 unit PROGRAM (CERRA) EXPERIENCING EDUCATION

Prerequisites:

- 3.0 GPA
- Application required
- · Grade 12 only
- Receives Dual Credit weight

The Teacher Cadet course is open to high school students who meet the admission criteria established by the Center for Educator Recruitment, Retention, and Advancement (CERRA). The course is designed to acquaint high school students with the role of the teacher and the teaching professional. Students in the course will have the opportunity to apply for the SC Teaching Fellows Scholarship.

## **Southwood Academy of the Arts**

The course offerings in this section pertain to classes offered at Southwood Academy of the Arts.

## **DANCE**

DANCE 1 1 unit

Prerequisites:

Audition

BEGINNER: This is an entry level course. It introduces dance to the beginner dancer or color guard member. The student will identify and demonstrate movement elements and skills and apply them while performing dance. They will implement choreographic principles, processes, and structures. The student will use dance as a medium to communicate meaning and/or artistic intent. He/she will demonstrate an understanding of dance in various cultures and historical periods. The student will make connections between dance and other arts disciplines, other content areas, and the world.

**DANCE 2 - 10** 

Prerequisites:
Audition

- /

<u>UK</u>

• Previous level Dance course

Teacher recommendation

These courses will focus on intermediate and advanced technique, choreography, dance styles, performance skills, and critical analysis of dance skills. The student will be given more complex assignments to enhance their understanding of dance and choreography. The students that are signed up for these courses will be required to participate in community performances throughout the year. These courses will further the students' exploration of his/her movement qualities and choreographic process and strategies. These students are required to choreograph dance pieces for fall and spring showcases. Honors credit is available for levels 3 and above. To receive honors credit students are required to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts area.

## **MUSIC**

## CONCERT CHORAL MUSIC 1 AND 2 1 unit each

Prerequisites:

- Interest survey
- No audition required

Concert Choral Music is a course designed to challenge singers of various levels to prepare them for Chamber Chorus. Singers study music theory, solfege, music history, sight-singing, and vocal techniques. Choral Music offers students an opportunity to study a variety of repertoire ranging from Renaissance to Contemporary genres. Performance attendance is a requirement for this course. Singers have opportunities to 4perform in local events, state/national festivals, and national competitions. Formal attire will be required and guidelines will be outlined at the beginning of the course. This group also participates in a number of fundraisers to ensure all students receive equal opportunity to participate in every event and trip. There is a \$10.00 fee for this course.

## CHAMBER CHORUS 1 – 10 1 unit each

Prerequisites:

Audition

Chamber Chorus is a course designed to challenge singers of higher levels. Singers study advanced levels of music theory, solfege, music history, sight-singing, and vocal techniques. Chamber Chorus offers students an opportunity to study a variety of repertoire ranging from Renaissance to Contemporary genres. Performance attendance is a requirement for this course. Singers have opportunities to perform in local events, state/national festivals, and national competitions. Formal attire will be required and guidelines will be outlined at the beginning of the course. This group also participates in a number of fundraisers to ensure all students receive equal opportunity to participate in every event and trip. Honors credit is available for levels 3 and above. To receive honors credit students are required to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts area. There is a \$10.00 fee for this course.

## **INSTRUMENTAL MUSIC: GUITAR 1**

1 unit

1 unit each

Prerequisites:

- Interest survey
- No audition required

BEGINNER: This course is a study of basic guitar performance techniques. Students will be asked to perform music both alone and with others in a number of different styles, including rock, pop, blues, R&B, classical, bluegrass, country, folk, funk, and a variety of others. No previous musical training is required. In addition to performance skills, students will learn basic theory concepts, including notational reading, functional harmony, keys, scales, intervals, chords, and the fundamentals of popular music composition.

## INSTRUMENTAL MUSIC: GUITAR 2 – 8 1 unit each

Prerequisites:

Previous level Guitar course

OR

Audition

These courses study intermediate and advanced guitar performance techniques. Students will demonstrate an advanced knowledge of performance abilities, including barre chords, finger picking, major scales, minor scales, pentatonic scales, octatonic scales, whole tone scales, jazz scales, blues scales, and arpeggios. Students will be required to perform both individually and in small groups for the class. Honors credit is available for levels 3 and above. To receive honors credit students are required to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts area.

## INSTRUMENTAL MUSIC: ORCHESTRA 1 – 10

1 unit each

Prerequisites (Levels 1 and 2):

• Previous study and teacher recommendation

Prerequisites (Levels 3 and above):

• Audition or teacher recommendation

This course is a performance class, stressing instrumental technique and ensemble experience. Students will learn aspects of music theory and history. State orchestra events such as Regions, All-State, Solo & Ensemble festival, and Concert Performance Assessment are held each year. In order to participate in these events, students must be enrolled in the class. Students who are receiving credit for orchestra can also be involved in other auditioned performing groups such as Carolina Youth Symphony or Anderson Symphony Orchestra. Students in this course will be grouped by ability level based on audition results each spring. Honors credit is available for levels 3 and above. To receive honors credit students are required to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts area.

### **INSTRUMENTAL MUSIC: PIANO 1**

• *Tea* 

1 unit

Prerequisites:

- · Interest survey
- No audition required

BEGINNER: This course is a study of basic piano technique. No previous musical training is required. Students will learn to read notes and rhythms so they can perform increasingly difficult pieces of piano music.

## INSTRUMENTAL MUSIC: PIANO 2 – 8 1 unit each

Prerequisites:

· Previous level Piano course

<u>OR</u>

• Audition

These courses study intermediate and advanced piano technique. Students will expand their understanding of music theory to facilitate playing advanced repertoire. Students will prepare and perform an assigned piece of music as well as sight-read for the audition. Honors credit is available for levels 3 and above. To receive honors credit students are required to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts area.

#### **MUSIC COMPOSITION 1**

1 unit

Prerequisites:

- Interest survey
- No audition required

This course is a study of the basic concepts related to music production, composition, and song writing. The units covering music production will discuss concepts related to loops, arranging, mixing, mastering, and recording through the use of Garageband and ProTools. Units on composition will discuss the concepts of orchestration, instrumentation, basic music theory, melody, functional harmony, and rhythm through the use of Sibelius and Finale. Units on song writing will discuss musical expression, writing lyrics, and writing melodies. The final project for this course will result in students using all of the skills and programs listed above to write, record, and produce their own song.

## **MUSIC COMPOSITION 2 – 8**

1 unit each

Prerequisites:

- Previous level Music Composition course
- Teacher recommendation.

These courses study intermediate and advanced concepts related to music production, composition, and song writing. Garageband, ProTools, Sibelius, and Finale software is used with particular focus on orchestration, part-writing, and rhythm. The final project for these courses will result in students using all of the skills and programs listed above to write, record, and produce their own song. Honors credit is available for levels 3 and above. To receive honors credit students are required to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts

## **THEATRE**

#### **THEATRE 2 - 10**

1 unit each

Prerequisites:

- Audition
- Teacher recommendation

These courses are designed for the experienced theatre student. The major emphasis of the program is performance. Activities center on ensemble work, monologues, improvisations, script writing, projects, and play productions. Text and lecture provide background information necessary for a number of hands-on projects including, but not limited to: script readings, performance of humorous and dramatic interpretations, monologue and duet scene presentations and script writing. Projects include a Broadway Musical Project and the study of a Shakespeare play culminating in scene performances.

The technical aspects of theatre are also examined and utilized. Audition and production techniques in preparation for being a part of school, community and professional theater productions are also components of this class. Teacher recommendation for continued placement is based on class average, participation, and attendance. Honors credit is available for levels 3 and above. To receive honors credit students are required to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts area.

### ART: 3D DESIGN 1 - 8

1 unit each

Prereauisites:

- · Art 1 with grade C or higher <u>OR</u>
- Audition
- Continuation in the program requires previous level course with arade B or higher
- Recommended for grades 9-12

Level 1 will establish the physical and tactile aspect of the threedimensional form and space. A variety of sculptural materials and techniques that involve planar relationships, mass, volume, and scale will be explored. Levels 2 and above will develop a deeper study of the fundamentals of three-dimensional design. A variety of media. techniques and concepts will be explored in order to emphasize more advanced principles and ideas. Projects will be individualized and of greater scope. Honors credit is available for levels 3 and above. To receive honors credit students are required

to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts area. There is a \$20.00 fee for this course.

#### DRAWING AND PAINTING 1 - 8 1 unit each

Prerequisites:

- · Art 1 with grade C or higher <u>OR</u>
- Audition
- Continuation in the program requires previous level course with grade B or higher

Level 1 will introduce the tools necessary for strong compositional structure. Line, space, and value will integrate areas that involve drawing concepts. Spatial relationships will be explored in painting through proportion, placement, and perspective and will be executed from direct observation. Levels 2 and above will build on observational and technical skills while increasing complexity and difficulty of subject matter. Students will continue to work on gesture, proportion, value, line, and composition with the addition of color, space, abstraction, and time. Color theory, interaction, expressiveness, and design will be considered and emphasized during the creative process. Honors credit is available for levels 3 and above. To receive honors credit students are required to complete an honors contract. Honors credit courses require students to complete an advanced curriculum with rigorous coursework that increases the level of student performance in the arts area. There is a \$20.00 fee for this course.

### **ADVANCED PLACEMENT STUDIO ART CLASSES**

The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. AP Studio Art sets a national standard for performance in the visual arts that contributes to the significant role the arts play in academic environments. Each year the thousands of portfolios that are submitted in AP Studio Art are reviewed by college, university, and secondary school art instructors using rigorous standards. This College Board program provides the only national standard for performance in the visual arts that allows students to earn college credit and/or advanced placement while still in high school. The AP Program is based on the premise that collegelevel material can be taught successfully to secondary school students.

## ADVANCED PLACEMENT STUDIO ART: **2D DESIGN**

## 2 units - 1 unit AP weight, 1 unit honors weight Prereauisites:

• Grades 11-12 by teacher approval only

The 2D Design portfolio involves purposeful decision making about how the elements and principles of art are integrated. The principles and elements help guide artists in making decisions about how to organize an image in order to communicate content. In this portfolio, students are asked to demonstrate an understanding of 2D design through any two-dimensional medium or process, including but not limited, to graphic design, photography, collage, fabric design, weaving, fashion design, illustration, painting, and printmaking. There is a \$20.00 fee for this course.

## **ADVANCED PLACEMENT STUDIO ART: 3D DESIGN**

## 2 units - 1 unit AP weight, 1 unit honors weight Prerequisites:

• Grades 11-12 by teacher approval only

The 3D Design portfolio involves purposeful decision making about how the elements and principles of three-dimensional art are integrated. Students are asked to demonstrate their understanding of design principles as they relate to depth, space, volume, and surface. Three-dimensional approaches include, but are not limited to, figurative/nonfigurative sculpture, architectural models, metal work, ceramics, glass work, installation, performance, assemblage, and 3D fabric/fiber arts. There is a \$20.00 fee for this course.

## ADVANCED PLACEMENT STUDIO ART: **DRAWING**

## 2 units - 1 unit AP weight, 1 unit honors weight Prerequisites:

Grades 11-12 by teacher approval only

The Drawing portfolio is intended to address a very broad interpretation of drawing and media. Line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth, and mark-making can be addressed through a variety of means, which can include painting, printmaking, mixed media, etc. Abstract, observational, and invented works may demonstrate competence and mastery. The range, arrangement, and materials used to make those marks are endless. There is a \$20.00 fee for this course.

## Anderson Institute of Technology (AIT)

The course offerings in this section pertain to classes offered at the Anderson Institute of Technology.

## **CAREER AND TECHNOLOGY EDUCATION**

## **ENROLLMENT**

Courses at The Anderson Institute of Technology (AIT) are open to students enrolled in the 9th through 12th grades at Crescent High School in Anderson School District Three, Pendleton High School in Anderson School District Four and T.L. Hanna High School and Westside High School in Anderson School District Five. (Note: Students repeating 9th grade are NOT eligible to attend AIT.)

Students interested in enrolling in an AIT course will be able to select that course during registration at their high school. Enrollment for each program is limited and competitive and determined by equipment availability, size of laboratory, curriculum content, and overall situations related to student safety and age requirements. Admission priorities are determined by the percent of operations cost from each district (Anderson Five 70%, Anderson Four 15% and Anderson Three 15%). Each high school and/or district may use a criteria in order to attend AIT.

## **FEES**

Due to the materials used in our hands-on, dynamic, and project-based learning programs, each student attending AIT must pay a fee per course taken. Some programs will have additional costs due to required uniforms or additional supplies/safety equipment. AIT programs that require additional fees include Aerospace Engineering, Agricultural Mechanics and Technology, Automotive Technology, Biomedical Sciences (PLTW), Computer and Information Systems, Computer Science, Cosmetology, Digital Art and Design, Electricity, Emergency and Fire Management, Global Logistics and Supply Chain Management, Health Science, Horticulture, Machine Tool Technology, Mechatronics Integrated Technologies, Media Technology, Networking Systems, Plant and Animal Systems, Pre-Engineering (PLTW), and Welding. Please see page 63 for a complete list of fees and club/organization dues.

## **DUAL ENROLLMENT/DUAL CREDIT**

Through Dual Enrollment, AIT students have the opportunity to earn college credit through Tri-County Technical College. Credits earned may be transferred to other technical colleges within the South Carolina Technical College System. Credits may also transfer to 4-year colleges and universities. AIT recommends that students contact the college(s) they wish to attend if they have questions about transferring credits earned through dual enrollment. Through Dual Credit, students have the opportunity to earn high school and college credit. The awarding of dual credit is based on each district's policy.

## **APPRENTICESHIP**

AIT is partnering with local business and industry to offer internships/apprenticeships to students. This partnership allows students to job shadow, learn a trade, and obtain a skilled job. Students can explore different fields of interest

and make life long goals before graduating high school. In the internship/apprenticeship students participate in projects or work alongside practicing professionals as they manage day-to-day challenges. The major benefit of this program is that it gives students the opportunity to implement their classroom learning in the everyday world-of-work.

### SPECIAL SERVICES

Students of all ability levels are welcome at AIT. Students who qualify for special services can enroll in classes based on their career plan, grade level, and attainment of prerequisite requirements.

## **TECHNICAL ADVANCED PLACEMENT (TAP)**

Technical Advanced Placement (or "TAP") is an articulation agreement between AIT and Tri-County Technical College which provides an opportunity for students to exempt certain courses at TCTC. These TAP credits are awarded by an AIT instructor and earned after the completion of the first TCTC course with a grade of "C" or higher in the same program area.

### **CAREER MAJOR CONCENTRATOR**

A career major concentrator is a secondary student who has earned 2 Carnegie units of credit in a state-recognized CTE program. A state-recognized CTE program must be comprised of an approved sequence of career and technology education courses leading to a career goal and must include a minimum of 4 Carnegie units of credit.

### CAREER MAJOR COMPLETER

A *career major completer* is a CTE concentrator who has earned <u>all</u> of the required units in a state-recognized CTE program. A career concentrator pursing a 4-unit CTE program would be designated a *completer* when the 4<sup>th</sup> unit is earned. Some of the benefits of being a *completer* are:

- Academic subject matter taught with relevance to the real world
- Employability skills, from job-related expertise to workplace ethics
- Educational pathways that help students explore interests and careers while progressing through school
- Post-secondary career pathways that include apprenticeship, industry certification, community college certificate/associate degree programs, and four-year college degree programs

## **AIT CAREER MAJOR COMPLETER**

An Anderson Institute of Technology career major completer is a student who has earned 4 units in a chosen Career Pathway as outlined by the AIT Course Guide. Students may be completers in multiple areas or programs of study.

### HONORS FRAMEWORK

### **OVERVIEW**

Students enrolling in the Anderson Institute of Technology will be challenged with high expectations in all programs. The curriculum and instructional framework will be structured to prepare students to become college and career ready as measured by students earning program and course certifications and successfully completing dual enrollment credit for courses relating to their program of study. All students will be required to complete a Capstone Project that may be an individual or a team project. Students enrolled in STEM completer pathways that focus on high level science and math will be required to conduct research using the AIT research framework. Students will be required to complete a four-course sequence of courses that are identified in their completer pathway. The instructional method is one that requires students to own their learning, their behavior, their results and their career. Students are expected to be fully engaged and participate in a team environment and work cooperatively with student partners and adults.

## STUDENT RESEARCH REQUIREMENTS FOR COURSE ONE

- 1. Students will be required to explore and identify problems or questions around a problem of interest related to their program of study.
- Read a nonfiction book and present problems and how to assess.
- Introduction of current issues around problems to be studied.
- 4. Review online journal articles on the topic and complete 4 per course and write a summary and present one in class.
- 5. Attend two lecture series presented by physicians, engineers, and/or lecturers from the community and write reflections.
- 6. Take college credit exam in honors identified courses.

## STUDENT RESEARCH REQUIREMENTS FOR COURSE TWO

- Identify three problems and develop three different ideas and project samples, possible solutions, and identify resources. Students will present and defend ideas. This experience will enable students to narrow down the project ideas to the final two. Students' proposals will be reviewed by peers and Facilitator evaluation.
- Based on peer and Facilitator feedback, students will prepare two 500-750 word written proposals with at least six cited sources for each using APA style. These summaries are submitted electronically to peer team and Facilitator. Students will receive written peer and Facilitator feedback via Edmodo to assist student in selecting problems to study.
- 3. Based on feedback, students will select one problem or question to study and prepare a detailed final written proposal to present to a larger community for public review of proposed problem study. This should include anticipated equipment, facilities, and procedural techniques, type of data, anticipated statistics, journal citations and possible

- mentors. Students will use the AIT research template to frame the research proposal and procedures for conducting the study. Teachers will provide sample research studies conducted by other students.
- 4. Attend as an observer the Junior Science competitions in January and Region One Science Fair at Southern Wesleyan University in March.
- 5. Take college credit exam and any available certifications related to the course.

## STUDENT RESEARCH REQUIREMENTS FOR COURSE THREE

- Development of procedures for conducting study and identify how the study will be conducted, process for research, conducting the study, how the problem will be assessed, and how the data will be collected and analyzed.
- 2. Students will continue to conduct research, solidify problem statements, turn in more research citations, and turn in modified proposals.
- 3. Develop a model to conduct the research and begin proof of concept.
- 4. Take college credit exams and any related certification exams related to the course.

## STUDENT RESEARCH REQUIREMENTS FOR COURSE FOUR

- Students will continue to refine research project proposals, continue further testing, collecting data, analyzing data and presenting in writing research evidence that supports the findings in the final research paper.
- Students will participate in communicating and presenting in public in front of at least 4 Professionally Judged Competitions.
- Competitions will include a final public presentation in May to family, community and professionals to receive final exam grade.
- 4. Students will provide an electronic final copy of their project to be published in the Anderson Institute of Technology Research Journal as a public record of their research and findings.

### **CAPSTONE PROJECT**

## THE FOUR COMPONENTS TO A CAPSTONE PROJECT

- 1. Research (Written)
- 2. Find and interact with mentor
- 3. Develop a Product--Event, product, short film, detailed art piece (welding), AIT recognized Internship
- 4. Present project to non AIT adults

The faculty of each program will determine specific rubrics and outcomes for students based on the four components.

The Capstone Project counts as 10% of the student's final grade in the final (4th unit) course.

## MAJORS OFFERED AT THE ANDERSON INSTITUTE OF TECHNOLOGY

	UNITS
Aerospace Engineering Technology	
Fundamentals of Aerospace Technology	1
Advanced Aerospace Technology	1
Aeronautics Engineering Applications	1
Astronautics Engineering Applications	1
Agricultural Mechanics and Technology	
Agricultural and Biosystems Science	1
Equipment Operation and Maintenance	1
Agricultural Power Mechanics	1
Agricultural Structural Mechanics	1
Automotive Technology	
Automotive Technology 1	2
Automotive Technology 2	2
Automotive Technology 3 - optional	1
Automotive Technology 4 - optional	1
Biomedical Sciences PLTW (3 units required)	
PLTW Principles of Biomedical Sciences	1
PLTW Human Body Systems	1
+Plus at least one of the following:	
PLTW Medical Interventions	1
PLTW Biomedical Innovation	1
Computer and Information Systems Security/Infor Assurance	mation
Cyber Security Fundamentals*	1
Advanced Cyber Security*	1
Networking Fundamentals*	1
Advanced Networking*	1
Computer Science PLTW	
PLTW Computer Science Essentials*	1
PLTW Cybersecurity*	1
PLTW Computer Science Principles*	1
PLTW Computer Science A*	1
Computer Science Principles AP* - optional	1
Cosmetology (8 units required)	
Cosmetology 1	2
Cosmetology 2	2
Cosmetology 3	2
Cosmetology 4	2
Digital Art and Design	
Digital Art and Design 1	2
Digital Art and Design 2	2
Digital Art and Design 2	
Electricity	
Electricity Electricity 1	1
Electricity	
Electricity Electricity 1 Electricity 2 Electricity 3	1 1 1
Electricity Electricity 1 Electricity 2 Electricity 3 Electricity 4	1 1
Electricity  Electricity 1  Electricity 2  Electricity 3  Electricity 4  Emergency and Fire Management Services	1 1 1 1
Electricity  Electricity 1  Electricity 2  Electricity 3  Electricity 4  Emergency and Fire Management Services  Fire Fighter 1	1 1 1 1
Electricity  Electricity 1  Electricity 2  Electricity 3  Electricity 4  Emergency and Fire Management Services  Fire Fighter 1  Fire Fighter 2	1 1 1 1
Electricity  Electricity 1  Electricity 2  Electricity 3  Electricity 4  Emergency and Fire Management Services  Fire Fighter 1  Fire Fighter 2  Global Logistics and Supply Chain Management	1 1 1 1 2 2
Electricity  Electricity 1  Electricity 2  Electricity 3  Electricity 4  Emergency and Fire Management Services  Fire Fighter 1  Fire Fighter 2  Global Logistics and Supply Chain Management  Global Logistics 1 - Introduction to Logistics	1 1 1 1 2 2
Electricity  Electricity 1  Electricity 2  Electricity 3  Electricity 4  Emergency and Fire Management Services  Fire Fighter 1  Fire Fighter 2  Global Logistics and Supply Chain Management  Global Logistics 1 - Introduction to Logistics  Global Logistics 2 - Functional Areas in Logistics	1 1 1 1 2 2 2
Electricity  Electricity 1  Electricity 2  Electricity 3  Electricity 4  Emergency and Fire Management Services  Fire Fighter 1  Fire Fighter 2  Global Logistics and Supply Chain Management  Global Logistics 1 - Introduction to Logistics	1 1 1 1 2 2

	UNITS
Health Science	
Health Science 1 - Foundations of Healthcare Professionals	2
Health Science 2 - Advanced Health Care Applications	2
Medical Terminology - optional	2
Health Science Clinical Study - optional	2
Horticulture	
Agricultural and Biosystems Science	1
Horticulture for the Workplace 1	1
Horticulture for the Workplace 2	1
Nursery, Greenhouse, and Garden Center Technology	1
Machine Technology	
Machine Tool Technology 1	1
Machine Tool Technology 2	1
Machine Tool Technology 3	1
Machine Tool Technology 4	1
Mechatronics Integrated Technologies	
Mechatronics 1 - Electrical Components/Industry Safety	1
Mechatronics 2 - Mechanical Components, Electric Drives/Hand & Power Tool Op	1
Mechatronics 3 - Electro Pneumatics & Hydraulics	1
Mechatronics 4 - Digital Fundamentals & Programmable Controllers	1
Media Technology	
Media Technology 1	1
Media Technology 2	1
Media Technology 3	1
Media Technology 4	1
Networking Systems (3 units required)	
Networking Fundamentals*	1
Advanced Networking*	1
+Plus at least one of the following:	
Cyber Security Fundamentals*	1
Advanced Cyber Security*	1
Plant and Animal Systems	
Agricultural and Biosystems Science	1
Animal Science	1
Small Animal Care	1
Introduction to Veterinary Science	1
Equine Science - optional	1
Pre-Engineering PLTW	
PLTW Introduction to Engineering Design	1
PLTW Principles of Engineering*	1
+Plus at least two of the following:	
PLTW Civil Engineering and Architecture	1
PLTW Computer Integrated Manufacturing	1
PLTW Digital Electronics	1
PLTW Engineering Design and Development	1
Welding Technology	
Welding Technology 1	1
Welding Technology 2	1
Welding Technology 3	1
Welding Technology 4	1

Unless otherwise noted, all majors require 4 units.

<sup>\*</sup>This course meets the computer science requirement for graduation.

## AGRICULTURE, FOOD, AND NATURAL RESOURCES CAREER CLUSTER

## **Agricultural Mechanics and Technology**

Required Courses (4 units required)

- · Agricultural and Biosystems Science (1 unit)
- Equipment Operation and Maintenance (1 unit)
- Agricultural Power Mechanics (1 unit)
- Agricultural Structural Mechanics (1 unit)

#### **Horticulture**

Required Courses (4 units required)

- Agricultural and Biosystems Science (1 unit)
- Horticulture for the Workplace 1 (1 unit)
- Horticulture for the Workplace 2 (1 unit)
- Nursery, Greenhouse, and Garden Center Technology (1 unit)

## **Plant and Animal Systems**

Required courses (4 units required)

- Agricultural and Biosystems Science (1 unit)
- Animal Science (1 unit)
- Small Animal Care (1 unit)
- Introduction to Veterinary Science (1 unit)

#### Optional:

• Equine Science (1 unit)

## AGRICULTURAL AND BIOSYSTEMS 1 unit SCIENCE

Prerequisites:

- Algebra 1 and English 1
- Recommended for grades 9-11

Agricultural and Biosystems Science is the first course for the Animal Science major and the Horticulture major. This course is designed to teach essential concepts and understanding related to plant and animal life including biotechnology, the conservation of natural resources, and the impact of agriculture and natural resource utilization on the environment. Emphasis is placed on the role of agriculture in our society and the importance of agriculture to the welfare of the world. Basic personal and community leadership and safety, and agricultural mechanical technology are included as a part of the instructional program. Each student is expected to design and participate in a supervised agricultural experience. Typical learning activities include hands-on experiences including performing basic principles of plant, soil, and animal science; studying and modeling the significance of humankind's interrelationship with soil, water, and air; and participating in Future Farmers of America (FFA) activities. Students must be prepared to work outside in various weather and climate conditions. There is a fee for this course.

## AGRICULTURAL AND BIOSYSTEMS SCIENCE HONORS

Prerequisites:

- Algebra 1 and English 1
- Recommended for grades 9-11

Agricultural and Biosystems Science Honors is the first course for the Animal Science major and the Horticulture major. This course is designed to teach essential concepts and understanding related to plant and animal life including biotechnology, the conservation of natural resources, and the impact of agriculture and natural resource utilization on the environment. Emphasis is placed on the role of agriculture in our society and the importance of agriculture to the welfare of the world. Basic personal and community leadership and

safety, and agricultural mechanical technology are included as a part of the instructional program. Each student is expected to design and participate in a supervised agricultural experience. Typical learning activities include hands-on experiences including performing basic principles of plant, soil, and animal science; studying and modeling the significance of humankind's interrelationship with soil, water, and air; and participating in Future Farmers of America (FFA) activities. Students must be prepared to work outside in various weather and climate conditions. Honors students will conduct scientific research around a medical topic relating to agriculture and Biosystems, complete an extensive paper on the findings, and present the findings in a public venue. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

### AGRICULTURAL POWER MECHANICS 1 unit

Prerequisites:

- Equipment Operation and Maintenance
- Recommended for grades 10-12

Agricultural Power Mechanics is designed to qualify the student completing the courses for job entry into farm, business, or industrial phases of agricultural mechanics or to continue advanced training in post high school education. A combination of subject matter and activities is designed to teach technical knowledge and skills for entry-level positions in the operation of heavy equipment. Typical instructional activities include hands-on experiences with agricultural power units, participation in personal and community leadership development activities, and planning and participation in FFA activities. There is a fee for this course.

## AGRICULTURAL POWER MECHANICS 1 unit HONORS

Prerequisites:

1 unit

- Equipment Operation and Maintenance Honors
- Recommended for grades 10-12

Agricultural Power Mechanics Honors is designed to qualify the student completing the courses for job entry into farm, business, or industrial phases of agricultural mechanics or to continue advanced training in post high school education. A combination of subject matter and activities is designed to teach technical knowledge and skills for entry-level positions in the operation of heavy equipment. Typical instructional activities include hands-on experiences with agricultural power units, participation in personal and community leadership development activities, and planning and participation in FFA activities. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## AGRICULTURAL STRUCTURAL MECHANICS 1 unit Prerequisites:

- Equipment Operation and Maintenance
- Recommended for grades 10-12

Agricultural Structural Mechanics is designed to qualify the student completing the courses for job entry into farm, business, or industrial phases of agricultural mechanics or to continue advanced training in post high school education. A combination of subject matter and activities is designed to teach technical knowledge and skills for entrylevel positions in selling, selecting, and constructing structures and

utilities. Typical hands-on instructional experiences include the planning and selection of materials for the construction of agricultural facilities, the mechanical practices associated with irrigation and water conservation, erosion control, metal fabrication, participation in personal and community leadership development activities, and planning and participation in Future Farmers of America (FFA) activities. There is a fee for this course.

## AGRICULTURAL STRUCTURAL MECHANICS 1 unit HONORS

Prerequisites:

- Equipment Operation and Maintenance Honors
- Recommended for grades 10-12

Agricultural Structural Mechanics Honors is designed to qualify the student completing the courses for job entry into farm, business, or industrial phases of agricultural mechanics or to continue advanced training in post high school education. A combination of subject matter and activities is designed to teach technical knowledge and skills for entry-level positions in selling, selecting, and constructing structure and utilities. Typical hands-on instructional experiences include the planning and selection of materials for the construction of agricultural facilities, the mechanical practices associated with irrigation and water conservation, erosion control, metal fabrication, participating in personal and community leadership development activities, and planning and participation in Future Farmers of American (FFA) activities. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problemsolving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

### **ANIMAL SCIENCE**

1 unit

Prerequisites:

- Agricultural and Biosystems Science
- Recommended for grades 9-12

Animal Science is designed to provide technical knowledge and skills for entry-level positions in an animal production enterprise by developing competencies concerning the selection, breeding, physiology, nutrition, health, housing, feeding, and marketing of farm and companion animals. Typical instructional activities include handson experiences with the principles and practices essential in the production and management of animals and animal products for economics, recreational, and therapeutic uses; participating in personal and community leadership development activities; and participating in FFA activities. Additionally this course will provide technical knowledge and skills for occupations in the pet industry or the companion animal industry. Skills also relate to the veterinarian or the veterinarian technician career field. There is a fee for this course.

## **ANIMAL SCIENCE HONORS**

1 unit

Prerequisites:

- Agricultural and Biosystems Science (CP or Honors)
- Recommended for grades 9-12

Animal Science Honors is designed to provide technical knowledge and skills for entry-level positions in an animal production enterprise by developing competencies concerning the selection, breeding, physiology, nutrition, health, housing, feeding, and marketing of farm and companion animals. Typical instructional activities include hands-on experiences with the principles and practices essential in the production and management of animals and animal products for economics, recreational, and therapeutic uses; participating in personal and community leadership development activities; and participating in FFA activities. Additionally this course will provide technical knowledge and skills for occupations in the pet industry or the companion animal industry. Skills also relate to the veterinarian or the veterinarian technician career field. Students must be prepared

to work outside in various weather and climate conditions. Honors students will conduct scientific research around a medical topic relating to animal science, complete an extensive research paper on the findings, and present findings in a public venue. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## **EQUINE SCIENCE**

1 unit

Prerequisites:

- Animal Science
- Recommended for grades 10-12

Equine Science is designed to teach essential concepts and practical experience related to the care taking and production of horses. Instruction emphasizes knowledge and understanding of the importance of maintaining, selecting, and managing horses. Basic methods and safety techniques are included in this course. Typical instruction activities include hands-on experiences in saddling, bridling, grooming, and judging horses; feeding and health techniques; and housing design. Students must be prepared to work outside in various weather and climate conditions. There is a fee for this course.

## **EQUINE SCIENCE HONORS**

1 unit

Prerequisites:

- Animal Science Honors
- Recommended for grades 10-12

Equine Science Honors is designed to teach essential concepts and practical experience related to the care taking and production of horses. Instruction emphasizes knowledge and understanding of the importance of maintaining, selecting, and managing horses. Basic methods and safety techniques are included in this course. Typical instruction activities include hands-on experiences in saddling, bridling, grooming, and judging horses; feeding and health techniques; and housing design. Students must be prepared to work outside in various weather and climate conditions. This course is designed to accelerate, extend, and deepen the learning opportunities for students exhibiting superior ability. The curriculum places emphasis on critical and analytical thinking, rational decision making, and inductive and deductive reasoning. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class characteristics and context, creativity, and innovation. There is a fee for this course.

## **EQUIPMENT OPERATION AND MAINTENANCE**

1 unit

Prerequisites:

- Agricultural and Biosystems Science
- Recommended for grades 9-12

Equipment Operation and Maintenance teaches students how to operate and maintain equipment commonly used in the agricultural industry. It includes equipment used in four of the Agriculture, Food and Natural Resources pathways: Horticulture, Plant and Animal Systems, Environmental and Natural Resources Management, and Agricultural Mechanics and Technology. The primary instructional activities include hands-on experiences with agricultural power units; participating in personal and community leadership development activities; planning and implementing a relevant school-to-work transition experience; and participating in FFA activities. There is a fee for this course.

## **EQUIPMENT OPERATION AND MAINTENANCE HONORS**

1 unit

Prerequisites:

- Agricultural and Biosystems Science (CP or Honors)
- Recommended for grades 9-12

Equipment Operation and Maintenance Honors teaches students how to operate and maintain equipment commonly used in the agricultural industry. It includes equipment used in four of the Agriculture, Food and Natural Resources pathways: Horticulture, Plant and Animal Systems, Environmental and Natural Resources Management, and Agricultural Mechanics and Technology. The primary instructional activities include hands-on experiences with agricultural power units; participating in personal and community leadership development activities; planning and implementing a relevant school-to-work transition experience; and participating in FFA activities. Students may contract for honors credit. Honors contracts incorporate studentinitiated research, student collaboration and engagement, projectbased learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## HORTICULTURE FOR THE WORKPLACE 1 1 unit

Prerequisites:

- Agricultural and Biosystems Science
- Recommended for grades 9-12

Horticulture for the Workplace 1 includes organized subject matter and practical experiences related to the culture of plants used principally for ornamental or aesthetic purposes. Instruction emphasizes knowledge and understanding of the importance of establishing, maintaining, and managing ornamental horticultural enterprises. Typical instructional activities include hands-on experiences with propagating, growing, establishing, and managing nursery plants and greenhouse crops; tissue culture techniques; designing landscapes; preparing designs; sales analysis and management; participating in personal and community leadership development activities; and participating in FFA activities. There is a fee for this course.

## HORTICULTURE FOR THE WORKPLACE 1 1 unit HONORS

Prerequisites:

- Agricultural and Biosystems Science (CP or Honors)
- Recommended for grades 9-12

Horticulture for the Workplace 1 Honors includes organized subject matter and practical experiences related to the culture of plants used principally for ornamental or aesthetic purposes. Instruction emphasizes knowledge and understanding of the importance of establishing, maintaining, and managing ornamental horticultural Typical instructional activities include hands-on experiences with propagating, growing, establishing, and managing nursery plants and greenhouse crops; tissue culture techniques; designing landscapes; preparing designs; sales analysis and management; participating in personal and community leadership development activities; and participating in FFA activities. This course is designed to accelerate, extend, and deepen the learning opportunities for students exhibiting superior ability. The curriculum places emphasis on critical and analytical thinking, rational decision making, and inductive and deductive reasoning. Students may contract for honors credit. Honors contracts incorporate studentinitiated research, student collaboration and engagement, projectbased learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. There is a fee for this course.

#### **HORTICULTURE FOR THE WORKPLACE 2**

Prereauisites:

- Horticulture for the Workplace 1
- Recommended for grades 10-12

Horticulture for the Workplace 2 is the second level course designed for programs involved in the Horticulture Career Pathway. The course is a combination of subject matter and planned learning experiences on the principles involved in the culture of plants used principally for ornamental or aesthetic purposes. Instruction emphasized knowledge and understanding of the importance of establishing, maintaining, and managing ornamental horticulture enterprises. There is a fee for this course.

1 unit

## HORTICULTURE FOR THE WORKPLACE 2 1 unit HONORS

Prerequisites:

- Horticulture for the Workplace 1 Honors
- Recommended for grades 10-12

Horticulture for the Workplace 2 Honors is the second level course designed for programs involved in the Horticulture Career Pathway. The course is a combination of subject matter and planned learning experiences on the principles involved in the culture of plants used principally for ornamental or aesthetic purposes. Instruction emphasized knowledge and understanding of the importance of establishing, maintaining, and managing ornamental horticulture enterprises. There is a fee for this course.

## INTRODUCTION TO VETERINARY SCIENCE 1 unit Prerequisites:

- Small Animal Care or Equine Science
- Recommended for grades 11-12

Introduction to Veterinary Science will explore the field of veterinary medicine. Students will study the role of a veterinarian and veterinary technician in the diagnosis and treatment of animal diseases. Topics to be discussed include: veterinary terminology, anatomy and physiology, pathology, genetics, handling and restraint, and physical examinations along with common surgical skills. Students will engage in a variety of laboratory activities and will participate in shadowing and/or other school-to-work experiences. There is a fee for this course.

## INTRODUCTION TO VETERINARY SCIENCE 1 unit HONORS

Prerequisites:

- Small Animal Care Honors or Equine Science Honors
- Recommended for grades 11-12

Introduction to Veterinary Science Honors will explore the field of veterinary medicine. Students will study the role of a veterinarian and veterinary technician in the diagnosis and treatment of animal diseases. Topics to be discussed include: veterinary terminology, anatomy and physiology, pathology, genetics, handling and restraint, and physical examinations along with common surgical skills. Students will conduct independent research on selected small and large animal diseases, write an extensive research document based on their research and present their findings in a public venue. Students will also engage in a variety of laboratory activities and will participate in job shadowing and/or other school-to-work experiences, some of which may take place outdoors in various weather and climate conditions. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## NURSERY, GREENHOUSE, AND GARDEN CENTER TECHNOLOGY

1 unit

Prerequisite:

- Horticulture for the Workplace 2
- Recommended for grades 10-12

Nursery, Greenhouse and Garden Center Technology includes organized subject matter and practical experiences related to the operation and management of nursery, greenhouse or a garden center. Instruction emphasizes knowledge and understanding of the importance of establishing, maintaining, and managing "green industry" enterprises. There is a fee for this course.

## NURSERY, GREENHOUSE, AND GARDEN CENTER TECHNOLOGY HONORS

1 unit

Prerequisite:

- Horticulture for the Workplace 2 Honors
- Recommended for grades 10-12

Nursery, Greenhouse and Garden Center Technology Honors includes organized subject matter and practical experiences related to the operation and management of nursery, greenhouse or a garden center. Instruction emphasizes knowledge and understanding of the importance of establishing, maintaining, and managing "green industry" enterprises. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## **SMALL ANIMAL CARE**

1 unit

Prerequisites:

- Animal Science
- Recommended for grades 10-12

Small Animal Care is designed to teach technical knowledge and skills for occupations in the pet industry or the companion animal industry. Skills also relate to the veterinarian or the veterinarian technician career field. Typical instructional activities include hands-on experiences with cats, dogs, rabbits, fish, etc. participating in personal and community leadership development activities; and planning a relevant school to work transition experience. Students will conduct scientific research around a medical topic relating to small animals, complete an extensive paper on the findings, and present the findings in a public venue. Students must be prepared to work outside in various weather and climate conditions. There is a fee for this course.

### **SMALL ANIMAL CARE HONORS**

1 unit

Prerequisites:

- Animal Science Honors
- Recommended for grades 10-12

Small Animal Care Honors is designed to teach technical knowledge and skills for occupations in the pet industry or the companion animal industry. Skills also relate to the veterinarian or the veterinarian technician career field. Typical instructional activities include handson experiences with cats, dogs, rabbits, fish, etc. participating in personal and community leadership development activities; and planning a relevant school to work transition experience. In addition, students are required to conduct scientific research around a medical topic relating to small animals, write a thorough paper on their findings, and present this work in a public venue. Students must be prepared to work outside in various weather and climate conditions. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## **ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER**

### **Electricity**

Required Courses (4 units required)

- Electricity 1 (1 unit)
- Electricity 2 (1 unit)
- Electricity 3 (1 unit)
- Electricity 4 (1 unit)

## **ELECTRICITY 1**

1 unit

Prereauisites:

- Algebra 1 and English 1
- Recommended for grades 10-11

Electricity 1 is designed to prepare students for entry-level employment as an electrician or in related occupations. Electricity students receive instruction in AC and DC circuitry, communication skills, leadership skills, human relations and employability skills, safety, effective work practices, and in the installation, operation, maintenance, and repair of residential and commercial electrical systems. Laboratory activities provide instruction in all phases of residential and commercial electrical wiring in accordance with the National Electrical Code. Students are introduced to Smart Technology to manage systems. There is a fee for this course.

### **ELECTRICITY 2**

1 unit

Prerequisites:

- Electricity 1
- Recommended for grades 10-11

Electricity 2 is a continuation of Electricity 1. Electricity students receive advanced instruction in AC and DC circuitry, communication skills, leadership skills, human relations and employability skills, safety, effective work practices, and in the installation, operation, repair and residential maintenance. This course will also focus on the installation, repair, and maintenance of commercial and industrial electrical systems. Laboratory activities provide instruction in all phases of residential, commercial, and industrial electrical wiring in accordance with the National Electrical Code. Students will continue their work with Smart Technology to manage systems. Technical Advanced Placement may be available through some SC technical colleges. There is a fee for this course.

#### **ELECTRICITY 3**

1 unit

Prerequisite:

- Electricity 2 with grade C or higher
- Recommended for grades 11-12

Electricity 3 will provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field. This course typically includes safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, commercial, and/or industrial buildings; installing lighting, power circuits, cables, and smart systems; and estimating job costs. As students' progress, their projects become more complex and expansive. A career exploration component may be offered. Students will continue their work with Smart Technology to manage systems. Technical Advanced Placement may be available through some SC technical colleges. There is a fee for this course.

### **ELECTRICITY 4**

1 unit

Prerequisites:

- Electricity 3
- Recommended for grades 11-12

Electricity 4 is a continuation of Electricity 3. Students will explain basic load calculations for residential and commercial including raceway fill, conductor de-rating, and voltage drop. The course will focus on the installation of electrical systems in health care facilities, including the requirements for life safety and critical circuits, and the NEC® installation requirements for electric generators and storage batteries. Students will explain the function and operation of basic electronic devices, including semiconductors, diodes, rectifiers, and transistors. Students will continue to study installation and troubleshooting techniques. Students will continue their work with Smart Technology to manage systems. Technical Advanced Placement may be available through some SC technical colleges. There is a fee for this course.

## ARTS, AUDIO-VIDEO TECHNOLOGY AND COMMUNICATION CAREER CLUSTER

### **Digital Art and Design**

Required Courses (4 units required)

- Digital Art and Design 1 (2 units)
- Digital Art and Design 2 (2 units)

#### Media Technology

Required Courses (4 units required)

- Media Technology 1 (1 unit)
- Media Technology 2 (1 unit)
- Media Technology 3 (1 unit)
- Media Technology 4 (1 unit)

### **DIGITAL ART AND DESIGN 1**

2 units

Prerequisites:

- Algebra 1 and English 1 with grade C or higher in each
- Recommended for grades 10-12

Digital Art and Design 1 prepares students for careers in the graphic design field. Skills may be applied in any media, such as print, digital media, product design, packaging, etc. Most of the standards require students to combine text and graphics to communicate an effective message in the format intended for commercial reproduction. Students are also expected to use industry software and design concepts, principles, and processes to manipulate text and graphics, utilize and output appropriate file formats for Web and print, and meet client expectations. There is a fee for this course.

## **DIGITAL ART AND DESIGN 2**

2 units

Prerequisites:

- Digital Art and Design 1 with grade C or higher
- Recommended for grades 10-12

Digital Art and Design 2 is a continuation of Digital Art and Design1 and includes further study in the graphic field. It also includes portfolio development and presentation, along with a focus on job resume application and interview. Students may be eligible to participate in cooperative work experiences or apprenticeships, which combine career and technology training with supervised work experience in business and industry. There is a fee for this course.

### **MEDIA TECHNOLOGY 1**

1 unit

Prerequisite:

- Algebra 1 and English 1 with grade C or higher in each
- Recommended for grades 10-12

Media Technology 1 will explore the general field of visual communications and will focus primarily on the television and filmmaking industries. Students will get hands-on experience in basic production techniques and will produce video projects for various purposes and audiences. Students will learn to use digital video cameras as well as non-linear editing systems. When possible, students may take field trips; have guest speakers from the media industry and shadow professionals in the field. There is a fee for this course.

#### **MEDIA TECHNOLOGY 2**

1 unit

Prerequisites:

- Media Technology 1
- Recommended for grades 10-12

Media Technology 2 will continue to develop media production skills by writing, producing, directing, shooting and editing video pieces of increasing complexity. Second-year students will continue to develop expertise with professional digital video cameras and non-linear editing systems. A greater focus will be placed on careers in the visual communications industry. Students will begin to specialize in one particular area of mass communications and media production, developing a final project in this area as well as pursuing professional relationships within the industry. This curriculum, methods, and assessments indicate an increased depth of rigor, complexity, challenges, and creativity beyond the CP level course. This course is designed to accelerate, extend, and deepen the learning opportunities for students exhibiting superior ability. The curriculum places emphasis on critical and analytical thinking, rational decision-making, and inductive and deductive reasoning. There is a fee for this course.

### **MEDIA TECHNOLOGY 3**

1 unit

Prereauisites:

- Media Technology 2 with grade C or higher
- Recommended for grades 10-12

Media Technology 3 is an introduction to digital photography using digital cameras and basic image editing software. This course requires no past experience with photography, but it is recommended that the student have a passion for taking and editing photographs. This course includes print production for making black-and-white and color photographs, and studio techniques that include use of Chroma key, portrait lighting, and location, still, scenic, fashion, and portrait photography. A majority of student assignments will be completed outside of the classroom. Some assignments will require students to walk downtown as a group with the instructor during class time to complete projects. Students will work with a partner throughout the course. Students will create and share a photographic portfolio at the end of the course. There is a fee for this course.

## **MEDIA TECHNOLOGY 3 HONORS**

1 unit

Prerequisites:

- Media Technology 2 with grade C or higher
- Recommended for grades 10-12

Media Technology 3 is an introduction to digital photography using digital cameras and basic image editing software. This course requires no past experience with photography, but it is recommended that the student have a passion for taking and editing photographs. This course includes print production for making black-and-white and color photographs, and studio techniques that include use of Chroma key, portrait lighting, and location, still, scenic, fashion, and portrait photography. A majority of student assignments will be completed outside of the classroom. Some assignments will require students to walk downtown as a group with the instructor during class time to complete projects. Students will work with a partner throughout the course. Students will create and share a photographic portfolio at the end of the course. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

1 unit

Prerequisites:

- Media Technology 3
- Recommended for grades 10-12

Media Technology 4 is designed to provide students an introduction to the four basic phases of filmmaking that include development, preproduction, production and post-production. The course covers higher level critical and problem solving skills with an emphasis in digital filmmaking. Students will write, produce, direct, shoot and edit their own short films as upperclassmen projects. These works will be screened in a public venue. There is a fee for this course.

• Media Technology 3 (CP or Honors)

Prerequisites:

- Recommended for grades 10-12

Media Technology 4 is designed to provide students an introduction to the four basic phases of filmmaking that include development, preproduction, production and post-production. The course covers higher level critical and problem solving skills with an emphasis in digital filmmaking. Students will write, produce, direct, shoot and edit their own short films as upperclassmen projects. These works will be screened in a public venue. This course is designed to accelerate, extend, and deepen the learning opportunities for students exhibiting superior ability. The curriculum places emphasis on critical and analytical thinking, rational decision-making, and inductive and deductive reasoning. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## **HEALTH SCIENCE CAREER CLUSTER**

PLTW – Project Lead the Way pathways engage students in hands-on activities, projects, and problems and empower them to solve real-world challenges.

### **Biomedical Sciences PLTW**

Required Courses (3 units required)

- PLTW Principles of Biomedical Sciences (1 unit)
- PLTW Human Body Systems (1 unit)

Plus at least one of the following:

- PLTW Medical Interventions (1 unit)
- PLTW Biomedical Innovation (1 unit)

## **Health Science**

Required Courses (4 units required)

- Health Science 1:
  - Foundations of Healthcare Professionals (2 units)
- Health Science 2:
  - Advanced Health Care Applications (2 units)

#### Optional:

- Medical Terminology (2 units)
- Health Science Clinical Study (2 units)

## **BIOMEDICAL INNOVATION (PLTW)**

1 unit

Prerequisites:

- Medical Interventions
- Recommended for grades 11-12

Biomedical Innovation allows students to design and conduct experiments related to the diagnosis, treatment, and prevention of disease or illness. They apply their knowledge and skills to answer questions to solve problems related to the biomedical sciences. Throughout the course, students are expected to present the results of their work to an adult audience. There is a fee for this course.

#### **BIOMEDICAL INNOVATION HONORS (PLTW)** 1 unit

Prerequisites:

- Medical Interventions Honors
- Recommended for grades 11-12

Biomedical Innovation Honors allows students to design and conduct experiments related to the diagnosis, treatment, and prevention of disease or illness. They apply their knowledge and skills to answer questions to solve problems related to the biomedical sciences. Throughout the course, students are expected to present the results of their work to an adult audience. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## **HEALTH SCIENCE 1: FOUNDATIONS** OF HEALTHCARE PROFESSIONALS

2 units

Prereauisites:

- Algebra 1 and English 1 with grade C or higher in each
- Biology 1
- Recommended for grades 10-11

Health Science 1 is designed to introduce students to the health career field. Through classroom and laboratory instruction, students will learn medical, legal and ethical responsibilities, the potential risks associated with bioterrorism, and the impact on health care workers as they rise to meet the challenging medical crises of the future. Students will also gain knowledge of medical terminology along with anatomy and physiology. Computer programs, demonstrations, guest speakers and models are utilized to enhance the students' learning. There is a fee for this course.

## HEALTH SCIENCE 2: ADVANCED HEALTH CARE APPLICATIONS

2 units

Prerequisites:

- Health Science 1 with grade B or higher
- Recommended for grades 11-12

Health Science 2 offers students the opportunity to develop skills in infection control, vital signs, medical assisting, laboratory assisting, sterile techniques and medical abbreviations through laboratory experience. This course will focus on skills for careers in the fields of nursing and physical therapy. Students will learn basic CPR and First Aid. At the completion of this course the student will be eligible for CPR and First Aid certification. There is a fee for this course.

### **MEDICAL TERMINOLOGY**

2 units

Prereauisites:

- Health Science 2 with grade B or higher
- Grade 12 only

Medical Terminology covers disease processes and how human systems are affected. A portion of this course is for college credit (TAP Credit) in medical terminology. Students may qualify to take the final exam for AHS-104 given by Tri-County Technical College. There is a fee for this course.

#### **HEALTH SCIENCE CLINICAL STUDY**

2 units

Prerequisites:

- Health Science 2 with grade B or higher
- CPR Certification, 2-step PPD Skin (TB) Test, and Transportation
- Grade 12 only

Health Science Clinical Work-based will focus on advanced skills in the lab and health field including nurse assistant skills and direct patient care. Students will have clinical experiences in various health care facilities and earn a CNA certificate if all requirements are met. The students must be able to provide their own transportation to the clinical site, and have current immunizations including 2-step PPD skin (TB) test, background check and some facilities require a drug screen and/or flu vaccine. A copy of the Hepatitis B record is also required. Uniforms are provided for the clinical rotations. Students are responsible for providing their own footwear. There is a fee for this course.

## **HUMAN BODY SYSTEMS (PLTW)**

1 unit

Prerequisites:

- Principles of Biomedical Sciences
- Recommended for grades 10-11

Human Body Systems will examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries. There is a fee for this course.

## HUMAN BODY SYSTEMS HONORS (PLTW) 1 unit

Prerequisites:

- Principles of Biomedical Sciences Honors
- Recommended for grades 10-11

Human Body Systems Honors will examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through

interesting real world cases and often play the role of biomedical professionals to solve medical mysteries. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## MEDICAL INTERVENTIONS (PLTW)

1 unit

Prereauisites:

- Human Body Systems with grade C or higher
- Recommended for grades 11-12

Medical Interventions will investigate a variety of diseases as they follow the lives of a fictitious family. The course is a "How To" manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection, how to screen and evaluate the code in human DNA, how to prevent, diagnose and treat cancer, and how to prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to the wide range of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions are showcased across the generations of the family and provide a look at the past, present and future of biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important roles scientific thinking and engineering design play in the development of interventions of the future. There is a fee for this course.

## **MEDICAL INTERVENTIONS HONORS (PLTW)** 1 unit *Prerequisites:*

- Human Body Systems Honors with grade C or higher
- Recommended for grades 11-12

Medical Interventions Honors will investigate a variety of diseases as they follow the lives of a fictitious family. The course is a "How To" manual for maintaining overall health and homeostasis in the body as students explore how to prevent and fight infection, how to screen and evaluate the code in human DNA, how to prevent, diagnose and treat cancer, and how to prevail when the organs of the body begin to fail. Through these scenarios, students are exposed to the wide range of interventions and reinforces concepts learned in the previous two courses, as well as presenting new content. Interventions may range from simple diagnostic tests to treatment of complex diseases and disorders. These interventions are showcased across the generations of the family and provide a look at the past, present and future of Biomedical science. Lifestyle choices and preventive measures are emphasized throughout the course as well as the important roles scientific thinking and engineering design play in the development of interventions of the future. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## PRINCIPLES OF BIOMEDICAL SCIENCES (PLTW)

1 unit

Prerequisites:

- Algebra 1 and English 1 with grade B or higher in each AND
- Biology with grade B or higher or Biology Honors with grade C or higher
- Recommended for grades 10-11

Principles of Biomedical Sciences will investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, and research Processes. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses. There is a fee for this course.

## PRINCIPLES OF BIOMEDICAL SCIENCES HONORS (PLTW)

Prerequisites:

 Algebra 1 (CP or Honors) and English 1 (CP or Honors) with grade B or higher in each

*AND* 

- Biology with grade B or higher or Biology Honors with grade C or higher (or currently enrolled)
- Recommended for grades 10-11

Principles of Biomedical Sciences Honors will investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, and research Processes. This course provides an overview of all the courses in the Biomedical Sciences program. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## **HUMAN SERVICES CAREER CLUSTER**

## Cosmetology

Required Courses (8 units required)

- Cosmetology 1 (2 units)
- · Cosmetology 2 (2 units)
- Cosmetology 3 (2 units)
- Cosmetology 4 (2 units)

## COSMETOLOGY 1

2 units

Prerequisites:

- Current 11th grader
- English 1 and Algebra 1 with grade C or higher in each
- Pre-entry Interview

Cosmetology 1 introduces students to the field of cosmetology and the related cosmetics arts. Training is done in the classroom and lab. Students will learn basic manipulative skills, safety judgments, proper work habits, professionalism and desirable attitudes necessary to begin a career as a licensed cosmetologist. This course of study includes orientation, safety, life skills, management, professional image, communicating for success, infection control, anatomy and physiology, electricity, properties of the hair, principles of hair design, shampooing, conditioning, haircutting, wet hairstyling, thermal hairstyling, thermal styling, braiding. Students will only work on mannequins in lab work. Student kits will stay at school until the student has been trained to use the tools. There is a fee for this course. Please refer to the fee sheet on page 63.

### **COSMETOLOGY 2**

2 units

Prerequisites:

- Current 11th grader
- English 2 and Math unit with grade C or higher in each
- Cosmetology 1 with grade C or higher
- 250 Cosmetology hours
- Teacher recommendation

Cosmetology 2 is a continuation of Cosmetology 1. Training is done in the classroom and lab. Students will continue working to perfect the skills learned in Cosmetology 1. In this class students will learn

nail diseases and disorders; properties of the hair, scalp, and nails; manicure; pedicure; principles of hair design; and chemical texture service. Students will be able to perform service for the public in a student service salon and will also continue to work on mannequins. Students who are ready will start competing in state and national level competitions. There is a fee for this course. Please refer to the fee sheet on page 63.

## **COSMETOLOGY 3**

2 units

1 unit

Prerequisites:

- Entering 12th grade
- Cosmetology 2 with grade C or higher
- 550 Cosmetology hours

Cosmetology 3 is a continuation of Cosmetology 2. The students will work on perfecting the skills previously studied. In addition, this course will include hair relaxing, color theory, hair color, and study of the skin, facials, makeup, and hair removal. There is a fee for this course. Please refer to the fee sheet on page 63.

### **COSMETOLOGY 4**

2 units

Prerequisites:

- Entering 12th grade
- Cosmetology 3 with grade C or higher
- 750 Cosmetology hours

Cosmetology 4 will prepare the students to take the SC State Board of Cosmetology written and practical exams, salon management, business skills, and job seeking skills. In order to receive credit for the class the student must have earned a minimum of 1000 hours in cosmetology and is required to take SC State Board exams. There is a fee for this course. Please refer to the fee sheet on page 63.

## **INFORMATION TECHNOLOGY CAREER CLUSTER**

## Computer and Information Systems Security/Information Assurance

Required Courses (4 units required)

- Cyber Security Fundamentals (1 unit)
- Advanced Cyber Security (1 unit)
- Networking Fundamentals (1 unit)
- Advanced Networking (1 unit)

### **Networking Systems**

Required Courses (3 units required)

- Networking Fundamentals (1 unit)
- Advanced Networking (1 unit)

Plus at least one of the following:

- Cyber Security Fundamentals (1 unit)
- Advanced Cyber Security (1 unit)

### **ADVANCED CYBER SECURITY**

1 unit

Prerequisite:

- Cyber Security Fundamentals
- Recommended for grades 10-12

Advanced Cyber Security explores the field of information security and assurance with updated content including new innovations in technology and methodologies. It builds on existing concepts introduced in Cyber Security Fundamentals and expands into malware threats, cryptography, organizational security, and wireless technologies. This is the second of two courses that prepare the student to take the CompTIA Security+ certification exam. This course meets the computer science requirement for graduation. There is a fee for this course.

## ADVANCED CYBER SECURITY HONORS 1 unit

Prerequisite:

- Cyber Security Fundamentals
- Recommended for grades 10-12

Advanced Cyber Security Honors explores the field of information security and assurance with updated content including new innovations in technology and methodologies. It builds on existing concepts introduced in Cyber Security Fundamentals and expands into malware threats, cryptography, organizational security, and wireless technologies. This is the second of two courses that prepare the student to take the CompTIA Security+ certification exam. Honor students will identify and research three advanced cyber security problems, develop three different resolution ideas/projects (simple, possible, with unlimited resources) and present and defend ideas. Students should be peer and teacher evaluated. Students may contract for honors credit. Honors contracts incorporate studentinitiated research, student collaboration and engagement, projectbased learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. This course meets the computer science requirement for graduation. There is a fee for this course.

#### ADVANCED NETWORKING

1 unit

Prerequisites:

- Networking Fundamentals
- Recommended for grades 10-12

Advanced Networking is designed to provide students with more classroom and laboratory experience in current and emerging networking technologies. Upon successful completion of this course, students are able to seek employment or further their education and training in the information technology field. Particular emphasis is given to techniques found in math and communication programs. This course meets the computer science requirement for graduation. There is a fee for this course.

#### ADVANCED NETWORKING HONORS

1 unit

Prerequisites:

- Networking Fundamentals
- Recommended for grades 10-12

Advanced Networking Honors is designed to provide students with more classroom and laboratory experience in current and emerging networking technologies. Upon successful completion of this course, students are able to seek employment or further their education and training in the information technology field. Particular emphasis is given to techniques found in math and communication programs. Honor students will identify and research three advanced computer develop three different resolution networkina problems, ideas/projects and defend ideas. Students should be peer and teacher evaluated. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. This course meets the computer science requirement for graduation. There is a fee for this course.

## **CYBER SECURITY FUNDAMENTALS**

1 unit

Prerequisite:

- Algebra 1 and English 1 with grade C or higher in each
- Networking Fundamentals with grade C or higher
- Recommended for grades 10-12

Cyber Security Fundamentals introduces the basic concepts and terminology of cyber security and information assurance. The course examines how the concept of security integrates into the importance of user involvement, security training, ethics, trust, and best practices management. The fundamental skills cover internal and external threats to network security and design, how to enforce network level security policies, how to protect an organization's information, and a broad range of other topics. This course meets the computer science requirement for graduation. There is a fee for this course.

## CYBER SECURITY FUNDAMENTALS HONORS 1 unit Prerequisite:

- Algebra 1 and English 1 with grade C or higher in each
- Networking Fundamentals with grade C or higher
- Recommended for grades 10-12

Cyber Security Fundamentals Honors introduces the basic concepts and terminology of cyber security and information assurance. The course examines how the concept of security integrates into the importance of user involvement, security training, ethics, trust, and best practices management. The fundamental skills cover internal and external threats to network security and design, how to enforce network level security policies, how to protect an organization's information, and a broad range of other topics. Honor students will

identify and research three cyber security problems, develop three different resolution ideas/projects (simple, possible with unlimited resources), and present and defend ideas. Students should be peer and teacher evaluated. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. This course meets the computer science requirement for graduation. There is a fee for this course.

## **NETWORKING FUNDAMENTALS**

1 unit

Prerequisites:

- Algebra 1 and English 1 with grade C or higher in each
- Recommended for grades 10-12

Networking Fundamentals serves as an introductory-level experience for students who are interested in studying network administration. Networking Fundamentals covers the preliminary essentials that a network engineer must know to survive and excel in this rapidly growing industry. Specifically, the course covers the basics of physical layer connectivity, network topologies, and general networking concepts as well as a complete overview of how networking works. Networking is designed to provide students with classroom and laboratory experience in current and emerging networking technologies. Upon successful completion of these courses, students will be able to seek employment or further their education and training in the information technology field. The networking student will benefit most from the curriculum if he or she possesses a strong background in reading, math, and problem solving skills. Particular emphasis is given to the use of critical thinking skills and problemsolving techniques found in math and communication programs. This course meets the computer science requirement for graduation. There is a fee for this course.

#### **NETWORKING FUNDAMENTALS HONORS**

1 unit

Prerequisites:

- Algebra 1 and English 1 with grade C or higher in each
- Recommended for grades 10-12

Networking Fundamentals Honors serves as an introductory-level experience for students who are interested in studying network administration. Networking Fundamentals covers the preliminary essentials that a network engineer must know to survive and excel in this rapidly growing industry. Specifically, the course covers the basics of physical layer connectivity, network topologies, and general networking concepts as well as a complete overview of how networking works. Networking is designed to provide students with classroom and laboratory experience in current and emerging networking technologies. Upon successful completion of these courses, students will be able to seek employment or further their education and training in the information technology field. The networking student will benefit most from the curriculum if he or she possesses a strong background in reading, math, and problem solving skills. Particular emphasis is given to the use of critical thinking skills and problem-solving techniques found in math and communication programs. Honor students will identify and research three computer problems, develop three different resolution ideas/projects and defend ideas. Students should be peer and teacher evaluated. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. This course meets the computer science requirement for graduation. There is a fee for this course.

## LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY CAREER CLUSTER

### **Emergency and Fire Management Services**

Required Courses (4 units required)

- Fire Fighter 1 (2 units)
- Fire Fighter 2 (2 units)

## **FIRE FIGHTER 1**

2 units

Prerequisites:

- 16 years old
- Algebra 1 and English 1
- Recommended for grades 10-12

Fire Fighter 1 includes an overview of the functions and history of the fire service with emphasis on fire suppression and earning the South Carolina Fire Academy Firefighter I certification. The class will integrate individual online learning along with practical skills sessions along with live fire training opportunities. Final evaluations will be written and practical conducted through the South Carolina Fire Academy. Upon successful completion of the testing and Hazmat Operations, a Fire Fighter 1 (FF1) certificate will be issued. There is a fee for this course.

## FIRE FIGHTER 2

2 units

Prerequisites:

- Fire Fighter 1 certification with grade C or higher
- Recommended for grades 10-12

Fire Fighter 2 is designed to take the student to the final level of firefighter, as recognized by the National Fire Protection Association (NFPA) and the International Fire Service Accreditation Congress (IFSAC). Subjects include incident management, building collapse and special rescue, hose tools and appliances, hydrant flow and operability, fire detection and alarm systems, fire cause, pre-incident planning, reports and communications and coordinating fire attack. Courses in advanced first aid and Basic Automobile Extrication will also be covered. Upon successful completion of written and skills testing, the firefighter will receive international recognition as a Firefighter 2. There is a fee for this course.

## MANUFACTURING CAREER CLUSTER

### **Machine Technology**

Required Courses (4 units required)

- Machine Tool Technology 1 (1 unit)
- Machine Tool Technology 2 (1 unit)
- Machine Tool Technology 3 (1 unit)
- Machine Tool Technology 4 (1 unit)

## **Mechatronics Integrated Technologies**

Required Courses (4 units required)

Mechatronics 1:

Electrical Components/Industry Safety (1 unit)

Mechatronics 2:

Mechanical Components, Electric Drives/Hand and Power Op (1 unit)

• Mechatronics 3:

Electro Pneumatics and Hydraulics (1 unit)

Mechatronics 4:

Digital Fundamentals & Programmable Controllers (1 unit)

### **Welding Technology**

Required Courses (4 units required)

- Welding Technology 1 (1 unit)
- Welding Technology 2 (1 unit)
- Welding Technology 3 (1 unit)
- Welding Technology 4 (1 unit)

## MACHINE TOOL TECHNOLOGY 1

1 unit

Prerequisites:

- Algebra 1 and English 1
- Recommended for grades 10-11

Machine Tool Technology 1 is designed to familiarize students with basic skills required by a machinist in the modern machine shop. Basics of shop safety, machine operation, print reading, precision measurement, layout work, and bench work will be mastered by the student. A good understanding of fractions, decimal fractions, and metric measurement is necessary. There is a fee for this course.

### MACHINE TOOL TECHNOLOGY 2 1 unit

Prerequisites:

- Machine Tool Technology 1
- Recommended for grades 11-12

Machine Tool Technology 2 is designed to train students to have employable skills in local machine shops or to enter a post-secondary program at an advanced level. While it takes years to become a skilled machinist, the level 2 completer will be able to enter the workforce on an apprentice level with a good knowledge and skill development of all required SC machine technology competencies. Instruction will be offered in the basics of Computer Numerical Control machining as well as MIG, ARC, and gas welding. Technical Advanced Placement may be available through some SC technical colleges. There is a fee for this course.

#### **MACHINE TOOL TECHNOLOGY 3**

1 unit

Prerequisites:

- Machine Tool Technology 2 with grade C or higher
- Recommended for grades 11-12

Machine Technology 3 is designed to prepare students for postsecondary Computer Numerical Control machining and entry level skills as a CNC operator/programmer. HAAS trainers as well as HAAS and Bridgeport CNC milling machines will be used to train students in real world machining and programming situations. There is a fee for this course.

#### **MACHINE TOOL TECHNOLOGY 4**

1 unit

1 unit

Prerequisites:

- Machine Tool Technology 3
- Recommended for grades 11-12

Machine Tool Technology 4 is designed to provide students the ability to have introductory CAD/CAM experience with MasterCAM software working in parallel with CNC Machines. The students will work on and complete a CAPSTONE project to align with the 4 levels of Machine Tool Technology. There is a fee for this course.

## MECHATRONICS 1: ELECTRICAL COMPONENTS/INDUSTRIAL SAFETY

Prerequisites:

- Algebra 1 and English 1
- Recommended for grades 10-12

Mechatronics 1 prepares students who like to work with their hands as well as their minds through mechanical, instrumentation, electronics, robotics/automation, computer components, and control systems. Mechatronics is a dynamic field that changes daily with the rapid improvements in technology and computer systems. Systems are networked to meet the demands of automated manufacturing processes, and technicians are trained to meet necessary entry level industrial skills and entry into a postsecondary program at a technical college. Mechatronics 1 will focus on direct and alternating circuit theory. The course is designed for students to gain a comprehensive knowledge of direct current (DC) circuit theory and progress to the study of alternating current (AC) circuit theory. DC will include electron theory, Ohm's Law, electrical quantities, and series, parallel, and combination circuits. AC will include electromagnetism, resistive, inductive, and capacitive circuits, transformers, and single and three phase power. DC/AC circuits will involve design, analysis, construction, and troubleshooting of both types of circuits, as well as, electrical safety, and testing instruments. Technical Advanced Placement or Dual credit may be available through some SC technical colleges. There is a fee for this course.

# MECHATRONICS 2: MECHANICAL 1 unit COMPONENTS ELECTRIC DRIVES/HAND & POWER TOOL OP

Prerequisites:

- Mechatronics 1
- Recommended for grades 10-12

Mechatronics 2 involves the principles of electrical and fluid power control and output devices. Beginning with electrical control devices, students will study AC and DC motors, motor control, and general machine operations in a complex mechatronic system. Students will learn the functions and properties of machine control elements along with output devices and the roles they play within an industrial system. Topics covered will include general machine operations and motor control techniques; mechanical components and electric drives; motor sensors, braking and loads; motor efficiency and power; preventive measures and troubleshooting techniques. The second part of

Mechatronics 2 will involve pneumatic and hydraulic devices and controls related to fluid power. Topics will include directional control valves, actuators and cylinders, flow control, pressure control, pumps and regulators, electro-pneumatic control applications and devices. Students will develop, construct, analyze, and troubleshoot both electrical control and fluid power control circuits as related to industrial systems. Programmable Logic Control devices will also be an integral part of these systems related to the automation control of industrial applications. Technical documentation such as data sheets, circuit diagrams, schematics, displacement step diagrams and function charts will be used for students to perform measurements on motors, motor control circuits, and fluid power systems, allowing them to apply troubleshooting strategies to identify, localize and correct malfunctions. Safety issues within these systems will also be discussed. Technical Advanced Placement or Dual credit may be available through some SC technical colleges. There is a fee for this course.

## **MECHATRONICS 3: ELECTRO** PNEUMATICS AND HYDRAULICS

1 unit

1 unit

Prereauisites:

- Mechatronics 2 with grade C or higher
- Recommended for grades 10-12

Mechatronics 3 will provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in this area. This course offers students the opportunity to develop advanced skills in project-based or internship-based experiences. As students' progress, their projects become more complex and expansive. Students will demonstrate hydraulic system safety and explain the principles of hydraulics and hydraulic fluids. Students will identify hydraulic components (supply elements, control valves, and actuators), and explain hydraulic systems (forces, speed, friction, flow, and pressure). Hydraulic pumps, hydraulic motors, and pneumatic safety will be explained. Students will calculate the physical characteristics and compressibility of gases (Pascal's law January, 2017 and Boyle's law). A career exploration component may be offered. There is a fee for this course.

## **MECHATRONICS 4: DIGITAL FUNDAMENTALS AND PROGRAMMABLE CONTROLLERS**

Prereauisites:

- Mechatronics 3
- Recommended for grades 10-12

Mechatronics 4 students demonstrate appropriate usage of electro pneumatics and hydraulics as needed in their role. Students will calculate the peak and effective voltage or current values for an AC waveform, the phase relationship between two AC waveforms, and measure the voltage and current phase relationship in a resistive AC circuit. Students will describe the voltage and current transients that occur in an inductive circuit and define inductive reactance. Students will explain the voltage and current transients that occur in a capacitive circuit and define capacitive reactance. Students will construct circuits showing the relationship between voltage and current in the following types of AC circuits: a. RL circuit b. LC circuit. There is a fee for this course.

#### **WELDING TECHNOLOGY 1**

1 unit

Prerequisites:

- Algebra 1 and English 1
- Recommended for grades 11-12

Welding Technology 1 focuses on the physical properties of metals as well as the testing of welded joints. Students will identify safety hazards associated with cutting, grinding, and welding. Students will develop skills needed in order to flame cut, set up and operate shielded metal arc equipment, produce fillet welds in all positions and groove welds in 2, 3, and 4F positions using the stick weld process. As the student progresses during the semester, he or she will be able to produce welds in the flat, horizontal, vertical, and overhead positions using the Stick welding process. At the completion of this course, successful students will be eligible to test for the AWS D1.1 certification. There is a fee for this course.

## **WELDING TECHNOLOGY 2**

1 unit

Prerequisites:

- Welding 1
- Recommended for grades 11-12

Welding Technology 2 concentrates on the study of advanced cutting and welding techniques. Students fabricate projects from blueprints and design projects. Students will learn gas metal arc (GMAW) and inert gas (GTAW) welding techniques to include set up and operation of equipment, preparation and fit-up of metals, and the execution of welds. With the completion of Welding 2, Technical Advanced Placement may be available through some SC technical colleges. There is a fee for this course.

### **WELDING TECHNOLOGY 3**

1 unit

Prereauisites:

- Welding 2 with grade C or higher
- Recommended for grades 11-12

Welding Technology 3 will provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in this area. This course offers students the opportunity to develop advanced welding skills in project-based or internship-based experiences. As students' progress, their projects become more complex and expansive. A career exploration component may be offered. There is a fee for this course.

NOTE: Art students will have the opportunity to design and develop sculpture in Welding courses.

### **WELDING TECHNOLOGY 4**

1 unit

Prereauisites:

- Welding 3
- Recommended for grades 11-12

Welding Technology 4 will provide hands on experience, problem solving, and critical thinking in the skills needed for careers in this area. Students will explain gas tungsten arc welding (GTAW) safety and equipment. Students will explain filler metals and the use of GTAW shielding gases and equipment. A career exploration component may be offered. There is a fee for this course.

## SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM) CAREER CLUSTER

PLTW – Project Lead the Way pathways engage students in hands-on activities, projects, and problems and empower them to solve real-world challenges.

## **Aerospace Engineering Technology**

Required Courses (4 units required)

- Fundamentals of Aerospace Technology (1 unit)
- Advanced Aerospace Technology (1 unit)
- Aeronautics Engineering Applications (1 unit)
- Astronautics Engineering Applications (1 unit)

## **Computer Science PLTW**

Required Courses (4 units required)

- PLTW Computer Science Essentials (1 unit)
- PLTW Cybersecurity (1 unit)
- PLTW Computer Science Principles (1 unit)
- PLTW Computer Science A (1 unit)

#### Optional:

• Computer Science Principles AP (1 unit)

### **Pre-Engineering PLTW**

Required Courses (4 units required)

- PLTW Introduction to Engineering Design (1 unit)
- PLTW Principles of Engineering (1 unit)

## Plus at least two of the following:

- PLTW Civil Engineering and Architecture (1 unit)
- PLTW Computer Integrated Manufacturing (1 unit)
- PLTW Digital Electronics (1 unit)
- PLTW Engineering Design and Development (1 unit)

### ADVANCED AEROSPACE TECHNOLOGY 1 unit

Prereauisites:

- Fundamentals of Aerospace Technology
- Recommended for grades 9-11

Advanced Aerospace Technology builds on the fundamentals of aerospace of technology and engages students in applying the design process, using tools to collect and analyze data, exploring a deeper level of the science of aviation and discovering how quality control systems work in the aviation field. Students will work collaboratively in teams to design, build and test a wing; plot a course for a plane to take off and land; design, build and test a wing attachment system; test materials under stress; and design, build and test an electric-powered plane. Students will demonstrate their newly acquired knowledge and skills by presenting their innovative ideas, techniques and solutions to business and industry partners. There is a fee for this course.

## ADVANCED AEROSPACE TECHNOLOGY 1 unit HONORS

Prerequisites:

- Fundamentals of Aerospace Technology Honors
- Recommended for grades 9-11

Advanced Aerospace Technology Honors builds on the fundamentals of aerospace of technology and engages students in applying the design process, using tools to collect and analyze data, exploring a deeper level of the science of aviation and discovering how quality control systems work in the aviation field. Students will work collaboratively in teams to design, build and test a wing; plot a course for a plane to take off and land; design, build and test a wing attachment system; test materials under stress; and design, build and test an electric-powered plane. Students will demonstrate their newly

acquired knowledge and skills by presenting their innovative ideas, techniques and solutions to business and industry partners. This course is designed to accelerate, extend, and deepen the learning opportunities for students exhibiting superior ability. The curriculum places emphasis on critical and analytical thinking, rational decision making, and inductive and deductive reasoning. Students may contract for honors credit. Honors contracts incorporate studentinitiated research, student collaboration and engagement, projectbased learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## **AERONAUTICS ENGINEERING APPLICATIONS 1 unit**

Prerequisites:

- Advanced Aerospace Technology
- Recommended for grades 10-12

Aeronautics Engineering Applications is for students who have successfully completed Fundamentals of Aerospace and Advanced Aerospace. Students will learn about systems such as flight control, remote-control vehicles and the virtual world. Students will learn to fly using flight simulators. They will work collaboratively to propose a shift from a VOR navigation system to a GPS system and determine the cost savings. In addition, students will develop rotor blades for helicopters and design and program an unmanned flying vehicle. There is a fee for this course.

## AERONAUTICS ENGINEERING APPLICATIONS HONORS

1 unit

Prereauisites:

- Advanced Aerospace Technology Honors
- Recommended for grades 10-12

Aeronautics Engineering Applications Honors is for students who have successfully completed Fundamentals of Aerospace and Advanced Aerospace. Students will learn about systems such as flight control, remote-control vehicles and the virtual world. Students will learn to fly using flight simulators. They will work collaboratively to propose a shift from a VOR navigation system to a GPS system and determine the cost savings. In addition, students will develop rotor blades for helicopters and design and program an unmanned flying vehicle. This course is designed to accelerate, extend, and deepen the learning opportunities for students exhibiting superior ability. The curriculum places emphasis on critical and analytical thinking, rational decision making, and inductive and deductive reasoning. Students may contract for honors credit. Honors contracts incorporate studentinitiated research, student collaboration and engagement, projectbased learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## ASTRONAUTICS ENGINEERING APPLICATIONS

1 unit

Prerequisites:

- Aeronautics Engineering Applications
- Recommended for grades 10-12

Astronautics Engineering Applications will focus on outer space and underwater applications. During the six projects, they will work collaboratively to design, build and test a laser communication system; develop a plan for space survivability in hostile environments; and utilize software to create a three-dimensional model of a satellite orbit and a team remote vehicle for underwater exploration. Depending on articulation agreements or state policy, students who successfully complete the course may be able to earn dual credit. There is a fee for this course.

## ASTRONAUTICS ENGINEERING APPLICATIONS HONORS

1 unit

Prerequisites:

- Aeronautics Engineering Applications Honors
- Recommended for grades 10-12

Astronautics Engineering Applications Honors will focus on outer space and underwater applications. During the six projects, they will work collaboratively to design, build and test a laser communication system; develop a plan for space survivability in hostile environments; and utilize software to create a three-dimensional model of a satellite orbit and a team remote vehicle for underwater exploration. Depending on articulation agreements or state policy, students who successfully complete the course may be able to earn dual credit. This course is designed to accelerate, extend, and deepen the learning opportunities for students exhibiting superior ability. The curriculum places emphasis on critical and analytical thinking, rational decision making, and inductive and deductive reasoning. Students may contract for honors credit. Honors contracts incorporate student-initiated research. student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## CIVIL ENGINEERING AND ARCHITECTURE 1 unit (PLTW)

Prerequisites:

- · Principles of Engineering
- Recommended for grades 10-11

Civil Engineering and Architecture provides an overview of the fields of Civil Engineering and Architecture while emphasizing the interrelationship and dependence of both fields on each other. Students use state of the art software to solve real world problems and communicate solutions to hands-on projects and activities. This course covers such topics as the roles of civil engineers and architects, project planning, site planning, building design, and project documentation and presentation. There is a fee for this course.

## CIVIL ENGINEERING AND ARCHITECTURE 1 unit HONORS (PLTW)

Prerequisites:

- Principles of Engineering Honors
- Recommended for grades 10-11

Civil Engineering and Architecture Honors provides an overview of the fields of Civil Engineering and Architecture while emphasizing the interrelationship and dependence of both fields on each other. Students use state of the art software to solve real world problems and communicate solutions to hands-on projects and activities. This course covers such topics as the roles of civil engineers and architects, project planning, site planning, building design, and project documentation and presentation. Students may contract for honors

credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## COMPUTER INTEGRATED MANUFACTURING 1 unit (PLTW)

Prerequisites:

- Principles of Engineering
- Recommended for grades 10-11

Computer Integrated Manufacturing is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction to Engineering Design. Students will use computer-controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis, and make appropriate modifications before producing their prototypes. There is a fee for this course.

## COMPUTER INTEGRATED MANUFACTURING 1 unit HONORS (PLTW)

Prerequisites:

- Principles of Engineering Honors
- Recommended for grades 10-11

Computer Integrated Manufacturing Honors is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction to Engineering Design. Students will use computercontrolled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis, and make appropriate modifications before producing their prototypes. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

### **COMPUTER SCIENCE A (PLTW)**

1 unit

Prerequisites:

- Computer Science Principles
- Recommended for grades 11-12

Computer Science Applications focuses on integrating technologies across multiple platforms and networks, including the Internet. Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java and other industry- standard tools. This course prepares students for the AP Computer Science-A course. This course meets the computer science requirement for graduation. There is a fee for this course.

### **COMPUTER SCIENCE A HONORS (PLTW)**

Prereauisites:

- Cybersecurity Honors
- Recommended for grades 11-12

Computer Science Applications Honors focuses on integrating technologies across multiple platforms and networks, including the Internet. Students collaborate to produce programs that integrate mobile devices and leverage those devices for distributed collection and data processing. Students analyze, adapt, and improve each other's programs while working primarily in Java and other industry-standard tools. This course prepares students for the AP Computer Science-A course. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. This course meets the computer science requirement for graduation. There is a fee for this course.

## COMPUTER SCIENCE ESSENTIALS (PLTW) 1 unit

Prerequisites:

- English 1 and Algebra 1 with grade C or higher in each
- Recommended for grades 10-11

Computer Science Essentials exposes students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to make computers work together to put their design into practice. They apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them. This course meets the computer science requirement for graduation. There is a fee for this course.

## COMPUTER SCIENCE ESSENTIALS HONORS (PLTW)

1 unit

1 unit

Prerequisites:

- English 1 and Algebra 1 with grade C or higher in each
- Recommended for grades 10-11

Computer Science Essentials Honors exposes students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to make computers work together to put their design into practice. They apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them. This course meets the computer science requirement for graduation. There is a fee for this course.

## COMPUTER SCIENCE PRINCIPLES (PLTW) 1 unit

Prerequisites:

- Cybersecurity with grade C or higher
- Recommended for grades 11-12

Computer Science Principles introduces students to the foundation concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, Computer Science Principles prepares students for college and career. This course meets the computer science requirement for graduation. There is a fee for this course.

## COMPUTER SCIENCE PRINCIPLES HONORS (PLTW)

RINCIPLES 1 unit

Prerequisites:

- Cybersecurity Honors with grade C or higher
- Recommended for grades 11-12

Computer Science Principles Honors introduces students to the foundation concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications, Computer Science Principles prepares students for college and career. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. This course meets the computer science requirement for graduation. There is a fee for this course.

### COMPUTER SCIENCE PRINCIPLES AP

1 unit

Prerequisites:

- Computer Science Principles and Computer Science Applications with grade B or higher in each
- Recommended for grades 11-12

Computer Science Principles AP helps students to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. This course is designed to accelerate, extend, and deepen the learning opportunities for students exhibiting superior ability. The curriculum places emphasis on critical and analytical thinking, rational decision making, and inductive and deductive reasoning. Students will sit for the AP Computer Science exam. This course meets the computer science requirement for graduation. There is a fee for this course.

## CYBERSECURITY (PLTW)

1 unit

Prerequisites:

- Computer Science Essentials
- Recommended for grades 10-11

Cybersecurity provides students with a broad exposure to the many aspects of digital and information security, while encouraging socially responsible choices and ethical behavior. It inspires algorithmic and computational thinking, especially "outside-the-box" thinking. Students explore the many educational and career paths available to cybersecurity experts, as well as other careers that comprise the field of information security. This course meets the computer science requirement for graduation. There is a fee for this course.

## CYBERSECURITY HONORS (PLTW)

1 unit

Prerequisites:

- Computer Science Essentials Honors
- Recommended for grades 10-11

Cybersecurity Honors provides students with a broad exposure to the many aspects of digital and information security, while encouraging socially responsible choices and ethical behavior. It inspires algorithmic and computational thinking, especially "outside -the-box" thinking. Students explore the many educational and career paths available to cybersecurity experts, as well as other careers that comprise the field of information security. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. This course meets the computer science requirement for graduation. There is a fee for this course.

#### **DIGITAL ELECTRONICS (PLTW)**

Prerequisites:

- · Principles of Engineering
- Recommended for grades 10-11

Digital Electronics is a course of study in applied digital logic. Students will be introduced to digital circuits found in video games, watches, calculators, digital cameras, and thousands of other devices. Students will study the application of digital logic and how digital devices are used to control automated equipment. The use of digital circuitry is present in virtually all aspects of our lives, and its use is increasing rapidly. This course is similar to a first semester college course and is an important course of study for a student exploring a career in engineering or engineering technology. There is a fee for this course.

#### **DIGITAL ELECTRONICS HONORS (PLTW)** 1 unit

Prerequisites:

- Principles of Engineering Honors
- Recommended for grades 10-11

Digital Electronics Honors is a course of study in applied digital logic. Students will be introduced to digital circuits found in video games, watches, calculators, digital cameras, and thousands of other devices. Students will study the application of digital logic and how digital devices are used to control automated equipment. The use of digital circuitry is present in virtually all aspects of our lives, and its use is increasing rapidly. This course is similar to a first semester college course and is an important course of study for a student exploring a career in engineering or engineering technology. Students may contract for honors credit. Honors contracts incorporate studentinitiated research, student collaboration and engagement, projectbased learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. There is a fee for this course.

#### **ENGINEERING DESIGN AND DEVELOPMENT** 1 unit (PLTW)

Prerequisites:

• Civil Engineering and Architecture

<u>OR</u>

• Computer Integrated Manufacturing

<u>OR</u>

- Digital Electronics
- Recommended for grades 10-12

Engineering Design and Development will allow students to work in teams to design and construct the solution to an engineering problem (it can be original, taken from a database of problems, or a national challenge), applying the principles developed in the preceding courses. Students will maintain a journal as part of a portfolio of their work. Each team will be responsible for delivering progress reports and making final presentations of their project to an outside review panel. The completed portfolio will be invaluable as students apply to college. There is a fee for this course.

#### **ENGINEERING DESIGN AND DEVELOPMENT** 1 unit **HONORS (PLTW)**

Prerequisites:

- Civil Engineering and Architecture Honors

1 unit

- · Computer Integrated Manufacturing Honors <u>OR</u>
- Digital Electronics Honors
- Recommended for grades 11-12

Engineering Design and Development Honors will allow students to work in teams to design and construct the solution to an engineering problem (it can be original, taken from a database of problems, or a national challenge), applying the principles developed in the preceding courses. Students will maintain a journal as part of a portfolio of their work. Each team will be responsible for delivering progress reports and making final presentations of their project to an outside review panel. The completed portfolio will be invaluable as students apply to college. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## **FUNDAMENTALS OF AEROSPACE TECHNOLOGY**

1 unit

1 unit

Prerequisites:

- Algebra 1 and English 1 with grade C or higher in each
- · Recommended for grades 9-11

Fundamentals of Aerospace Technology engages students who are curious about aviation and aerospace careers. This course will introduce students to an engineering design process, tools to collect and analyze data, the science of aviation, materials and structures, and safety. Students will participate in real-world experiences such as designing, building and testing a pilot seat, kite, straw rocket and launcher, motor-powered rocket, and a model glider. There is a fee for this course.

## **FUNDAMENTALS OF AEROSPACE TECHNOLOGY HONORS**

Prerequisites:

- Algebra 1 and English 1 with grade C or higher in each
- Recommended for grades 9-11

Fundamentals of Aerospace Technology Honors engages students who are curious about aviation and aerospace careers. This course will introduce students to an engineering design process, tools to collect and analyze data, the science of aviation, materials and structures, and safety. Students will participate in real-world experiences such as designing, building and testing a pilot seat, kite, straw rocket and launcher, motor-powered rocket, and a model glider. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. There is a fee for this course.

## INTRODUCTION TO ENGINEERING DESIGN 1 unit (PLTW)

Prerequisites:

- Grade 8 math with grade A or Algebra 1 with grade B or higher AND
- Grade 8 English with grade A or English 1 with grade B or higher
- Recommended for grades 9-11

Introduction to Engineering Design is a core course in the academy of engineering and an introductory course which develops student problem solving skills, with emphasis placed on the design process and the development of three-dimensional solid models. Students will learn a problem solving design process and how it is used in industry to manufacture a product. They will work from sketching simple geometric shapes to applying a solid modeling computer software package. The Computer-Aided-Design System (CAD) will also be used to analyze and evaluate the product design. The techniques learned and equipment used is state of the art and are currently being used by engineers throughout the United States. There is a fee for this course.

## INTRODUCTION TO ENGINEERING DESIGN 1 unit HONORS (PLTW)

Prerequisites:

- Grade 8 math with grade A or Algebra 1 with grade B or higher AND
- Grade 8 English with grade A or English 1 with grade B or higher
- Recommended for grades 9-11

Introduction to Engineering Design Honors is a core course in the academy of engineering and an introductory course which develops student problem solving skills, with emphasis placed on the design process and the development of three-dimensional solid models. Students will learn a problem solving design process and how it is used in industry to manufacture a product. They will work from sketching simple geometric shapes to applying a solid modeling computer software package. The Computer-Aided-Design System (CAD) will also be used to analyze and evaluate the product design. The techniques learned and equipment used is state of the art and are currently being used by engineers throughout the United States. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to workclass skills, characteristics and context, creativity, and innovation. There is a fee for this course.

### PRINCIPLES OF ENGINEERING (PLTW)

Prereauisites:

- Introduction to Engineering Design
- Recommended for grades 9-11

Principles of Engineering is a core course in the academy of engineering and a broad based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers address concerns about the social and political consequences of technological change. This course meets the computer science requirement for graduation. There is a fee for this course.

1 unit

## PRINCIPLES OF ENGINEERING HONORS 1 unit (PLTW)

Prerequisites:

- Introduction to Engineering Design Honors
- Recommended for grades 9-11

Principles of Engineering Honors is a core course in the academy of engineering and a broad based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers address concerns about the social and political consequences of technological change. Students may contract for honors credit. Honors contracts incorporate student-initiated research, student collaboration and engagement, project-based learning, problem-solving and critical thinking, seminar methods to include the incorporation of writing connections to work-class skills, characteristics and context, creativity, and innovation. This course meets the computer science requirement for graduation. There is a fee for this course.

## TRANSPORTATION, DISTRIBUTION, AND LOGISTICS CAREER CLUSTER

## **Automotive Technology**

Required Courses (4 units required)

- Automotive Technology 1 (2 units)
- Automotive Technology 2 (2 units)

#### Optional:

- Automotive Technology 3 (1 unit)
- Automotive Technology 4 (1 unit)

## **Global Logistics and Supply Chain Management**

Required Courses (4 units required)

- Global Logistics 1: Introduction to Logistics (1 unit)
- Global Logistics 2: Functional Areas in Logistics (1 unit)
- Global Logistics 3: Global Logistics Management (1 unit)
- Global Logistics 4: Logistics and Supply Chain Management (1 unit)

## **AUTOMOTIVE TECHNOLOGY 1**

2 units

Prerequisites:

- Algebra 1 and English 1
- Recommended for grades 10-11

Automotive Technology 1 includes the following areas of instruction: Safety (including personal, shop and environmental), Hand and Power Tools, Shop Equipment, use of Service Information Systems, Precision Measuring Tools, Electrical/Electronic Systems and Basic Vehicle Service. NATEF automobile accreditation model will be used. There is a fee for this course.

### **AUTOMOTIVE TECHNOLOGY 2**

2 units

Prerequisites:

- Automotive Technology 1 with grade C or higher
- Recommended for grades 10-11

Automotive Technology 2 includes the following areas of instruction: Brake Systems, Steering/Suspension Systems and Manual Drivetrain/Axles. The NATEF MLR automobile accreditation model is used. There is a fee for this course.

### **AUTOMOTIVE TECHNOLOGY 3**

1 unit

Prerequisites:

- Automotive Technology 2 with grade C or higher
- Recommended for grades 11-12

Automotive Technology 3 includes the following areas of instruction: Electrical/Electronic Systems review, Engine Fundamentals/ Repair, Engine Performance, Automatic Transmissions/ Transaxles and Heating/ Air-conditioning Systems. The NATEF MLR automobile accreditation model is used. There is a fee for this course.

#### **AUTOMOTIVE TECHNOLOGY 4**

1 unit

Prerequisites:

- Automotive Technology 3
- Recommended for grades 11-12

Automotive Technology 4 provides a coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Transportation, Distribution and Logistics career cluster. Automotive Technology 4 provides exposure to advance technical skill proficiencies and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills and occupation-specific skills, and knowledge of all aspects of the Transportation, Distribution and Logistics career

cluster. Areas covered include Brakes Systems, Steering/Suspension Systems and Manual Drivetrain/Axles as well as Electrical/Electronic Systems review, engine fundamentals and repairs, engine performance, automatic transmissions/transaxles and heating and air conditioning systems (HVAC). The NATEF MLR automotive accreditation model is used. There is a fee for this course.

## GLOBAL LOGISTICS 1: INTRODUCTION TO LOGISTICS

1 unit

Prerequisites:

- Algebra 1 and English 1 with grade C or higher
- Recommended for grades 10-11

Global Logistics 1 engages students in solving contextual problems related to the concepts of supply chains, warehouse location, contingency planning, insourcing and outsourcing, and expanding existing supply chains. These concepts form the basis of global logistics and supply chain management and help students understand how professionals examine options to maximize the use of resources across distribution networks. There is a fee for this course.

## GLOBAL LOGISTICS 2: FUNCTIONAL AREAS IN LOGISTICS

1 unit

Prerequisites:

- Introduction to Logistics
- Recommended for grades 10-11

Global Logistics 2 compels students to explore deeper understandings of the concepts they discovered in the previous course as they navigate projects on warehouse design, inventory management, transportation optimization, information technology, emergency responsiveness, and the supply chain for manufacturing. Students use their experiences in this course to discover ways that professionals minimize the outlay of resources while improving efficiency and ability in the global market. There is a fee for this course.

## GLOBAL LOGISTICS 3: GLOBAL LOGISTICS MANAGEMENT

1 unit

Prerequisites:

- Functional Areas in Logistics with grade C or higher
- Recommended for grades 11-12

Global Logistics 3 offers challenging projects that require students to look at the global implications of the industry in more earnest as they experiment with decisions over intermodal transportation, route selection, international shipping regulations, emergency preparedness, cultural awareness, business ethics, and international trade restrictions related to a distribution strategy. Students develop their understanding of the industry in this course and truly build their awareness of the challenges of doing business in a world with multiple borders that must be traversed. There is a fee for this course.

## GLOBAL LOGISTICS 4: 1 unit LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Prerequisites:

- Global Logistics Management
- Recommended for grades 11-12

Global Logistics 4 allows students to see the implications of all the concepts they learned in the previous three courses as they consider environmental impact, selecting business partners in a global and domestic chain, information technology, and decisions regarding epartners in commerce. Students explore the ongoing need to balance dependability and resource outlay in meeting customer demands around the world. Projects will expand students' decision-making skills as they tackle issues related to transportation, distribution networks and manufacturing. There is a fee for this course.

## WORK-BASED LEARNING/INTERNSHIP OPPORTUNITIES

Note: There are no fees associated with Work-Based Learning/ Internship Opportunities

#### **AEROSPACE ENGINEERING (SREB)** 1 unit Science, Technology, Engineering, and Mathematics **Internship, Work-Based Credit**

Prerequisites:

· Aeronautics Engineering Applications

The Science, Technology, Engineering, and Mathematics Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

#### **AGRICULTURAL MECHANICS AND** 1 unit **TECHNOLOGY**

## Agriculture, Food and Natural Resources Internship, **Work Based-Credit**

Prerequisites:

Agricultural Structural Mechanics

The Agriculture, Food and Natural Resources Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

#### **AUTOMOTIVE TECHNOLOGY** 1 unit Transportation, Distribution, and Logistics Internship, **Work-Based Credit**

Prerequisites:

Automotive Technology 4

The Transportation, Distribution and Logistics Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE complete program.

#### **BIOMEDICAL SCIENCES (PLTW)** 1 unit **Health Science Internship, Work-Based Credit** Prerequisites:

Biomedical Innovation

The Health Science Internship is a structure work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

#### **COMPUTER AND INFORMATION SYSTEMS** 1 unit SECURITY/INFORMATION ASSURANCE

Science, Technology, Engineering, and Mathematics Internship, Work-Based Credit

Prerequisites:

Advanced Networking

The Science, Technology, Engineering, and Mathematics Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

#### **COMPUTER SCIENCE (PLTW)** 1 unit Science, Technology, Engineering, and Mathematics **Internship, Work-Based Credit**

Prerequisites:

Computer Science A

The Science, Technology, Engineering, and Mathematics Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

### COSMETOLOGY

1 unit

## **Human Services Internship, Work-Based Credit**

Prereauisites:

Cosmetology 4

The Human Services Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

### **DIGITAL ART AND DESIGN**

1 unit

## **Arts, Audio-Video Technology and Communications** Internship, Work-Based Credit

Prerequisites:

Digital Art and Design 2

The Arts, Audio-Video and Communications Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

#### **ELECTRICITY**

1 unit

1 unit

## Architecture and Construction Internship, **Work-Based Credit**

Prerequisites:

• Electricity 4

The Architecture and Construction Internship is a structured workbased credit bearing course that is taken as a fifth unit in a CTE completer program.

## **EMERGENCY AND FIRE MANAGEMENT SERVICES**

## Law, Public Safety, Corrections and Security Internship, Work-Based Credit

Prereauisites:

• Fire Fighter 2

The Law, Public Safety, Corrections and Security Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

#### **GLOBAL LOGISTICS AND SUPPLY CHAIN** 1 unit **MANAGEMENT (SREB)**

### Transportation, Distribution and Logistics Internship, Work-Based Credit

Prerequisites:

• Global Logistics 4: Logistics and Supply Chain Management

The Transportation, Distribution and Logistics Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

## **HEALTH SCIENCE**

1 unit

## Health Science Internship, Work-Based Credit

Prerequisites:

• Health Science Clinical Work-Based

The Health Science Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

# HORTICULTURE 1 unit Agriculture, Food and Natural Resources Internship, Work-Based Credit

Prereauisites:

Nursery, Greenhouse, and Garden Center Technology

The Agriculture, Food and Natural Resources Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

## MACHINE TOOL TECHNOLOGY Manufacturing Internship, Work-Based Credit

Prerequisites:

• Machine Tool Technology 4

The Manufacturing Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

## MECHATRONICS INTEGRATED 1 unit TECHNOLOGIES

## Manufacturing Internship, Work-Based Credit

Prereauisites:

Mechatronics 4

The Manufacturing Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

### **MEDIA TECHNOLOGY**

1 unit

## Arts, Audio-Video Technology and Communications Internship, Work-Based Credit

Prerequisites:

Media Technology 4

The Arts, Audio-Video and Communications Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

#### **NETWORKING SYSTEMS**

1 unit

## Information Technology Internship, Work-Based Credit

Prerequisites:

Advanced Cyber Security

The Information Technology Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

### **PLANT AND ANIMAL SYSTEMS**

1 unit

## Agriculture, Food and Natural Resources Internship, Work-Based Credit

Prerequisites:

• Introduction to Veterinary Science

The Agriculture, Food and Natural Resources Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

### PRE-ENGINEERING (PLTW)

1 unit

## Pre-Engineering/Engineering and Industrial Technology Internship, Work-Based Credit

Prerequisites:

• Engineering Design and Development

The Pre-Engineering/Engineering and Industrial Technology Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

#### **WELDING TECHNOLOGY**

1 unit

## Manufacturing Internship, Work-Based Credit

Prerequisites:

Welding Technology 4

The Manufacturing Internship is a structured work-based credit bearing course that is taken as a fifth unit in a CTE completer program.

## 2021-2022 FEES AND CLUB/ORGANIZATION DUES

All fees are paid directly to AIT.

Aerospace Engineering Technology	,	<u>Horticulture</u>	
All courses	\$15.00 each	All courses	\$15.00 each
	_		
Agricultural Mechanics and Techno	<u>logy</u>	Machine Tool Technology	
All courses	\$15.00 each	All courses	\$15.00 each
Automotive Technology		Mechatronics Integrated Technolog	ies
All courses	\$15.00 each	All courses	\$15.00 each
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Biomedical Sciences		Media Technology	
All courses	\$20.00 each	Media Technology 1	\$5.00
		Media Technology 2	\$20.00
Computer and Information System	<u>s</u>	Media Technology 3 and 4	\$30.00 each
Security/Information Assurance			
All courses	\$15.00 each	Networking Systems	
		All courses	\$15.00 each
Computer Science	±45.00 I	<b>D.</b>	
All courses	\$15.00 each	Plant and Animal Systems	<b>415.00</b>
Commentations		Agricultural and Biosystems Science	\$15.00
Cosmetology	<b>#</b> FF0 00	Animal Science	\$20.00
11 <sup>th</sup> Grade Kit (payment plan)*	\$550.00	Small Animal Care	\$15.00
12 <sup>th</sup> Grade Supplies (payment plan)*	\$500.00	Equine Science	\$15.00
<u>Digital Art and Design</u>		Introduction to Veterinary Science (Scrul	os) \$30.00
All courses	\$15.00 each	Pre-Engineering (PLTW)	
All courses	\$15.00 each	All courses	\$15.00 each
Electricity		All codiscs	\$15.00 Cacii
All courses	\$15.00 each	Welding Technology	
7 111 0001303	φ15100 CdC11	Welding Technology 1	\$15.00
<b>Emergency and Fire Management S</b>	Services	Welding Technology 2	\$50.00
Course 1	\$30.00	Welding Technology 3	\$70.00
Course 2	\$50.00	Welding Technology 4	\$70.00
Global Logistics and Supply Chain I		Club/Organization Dues	
All courses	\$15.00 each	FFA	\$10.00
	_	HOSA	\$30.00
Health Science and Medical Termin		SkillsUSA	\$18.00
Health Science 1	\$5.00		
Health Science 2	\$15.00		
Medical Terminology	\$15.00		
CNA	\$30.00		
L		1	

<sup>\*</sup>Materials and fees for Cosmetology 1 and 2 total \$550. Materials and fees for Cosmetology 3 and 4 total \$500. Suggested payment plans are below. These dates and payments are during tax season and at the beginning of each month to help home support. Potential cosmetology students should refer to the cosmetology website for more information.

Date	Cosmetology 1 and 2	Cosmetology 3 and 4
March 1st	\$300	\$200
April 1st	\$150	\$150
May 1st	\$100	\$150

## **DUAL CREDIT OFFERINGS THROUGH ANDERSON SCHOOL DISTRICT 5**

In partnership with **Anderson University** and **Tri-County Technical College**, Anderson School District Five will allow students to earn dual credit for certain college courses. Dual credit courses are college courses taken in high school for which the student receives both high school and college credit. Students must meet all college enrollment requirements at the participating colleges to be able to participate in the dual credit courses. Tuition costs vary and are determined by the college or university.

Dual *enrollment* courses are college courses taken for college credit while the student is still in high school. No high school credit is earned for dual enrollment courses.

The following courses will be offered as college courses. Students are responsible for receiving approval from the college they plan to attend to transfer these credits.

## Anderson University Dual Credit Courses\_

## ART 110 – CREATIVE AND CRITICAL THINKING THROUGH VISUAL ART

1 unit

Prerequisites: None

This course introduces students to the dynamics of visual literacy. It will foster creative and effective thinking methods through critical thinking and reflective practices. Students will explore relationships between creative process and daily life. Students may earn 3 credits towards university transfer.

## BIO 110 – PRINCIPLES OF BIOLOGY 1 1 unit

Prerequisites:

• Must meet prerequisites for MAT 108

Designed for biology and pre-professional majors; introduction to modern biology integrating lecture and laboratory and incorporating experimental and quantitative approaches. Topics covered include macromolecules, cell structure and function; cell interactions and metabolism; classical and modern genetics; and biotechnology. Students may earn 4 credits toward university transfer. (Fall)

## BIO 111 – PRINCIPLES OF BIOLOGY 2 1 unit *Prerequisites:*

Biology 110 with grade C or higher

Continuation of Principles sequence. Emphasis on protozoa and animals as functional units. Topics include diversity, phylogeny, adaptation, morphology, physiology, ecology and behavior. Students may earn 4 credits toward university transfer. (Spring)

### CHE 111 – GENERAL CHEMISTRY 1 1 unit

Prerequisites:

- Score of 530+ on Math SAT or Score of 19+ on Math ACT
- Completion of high school Algebra 2 with grade C or higher Corequisite:
- CHE 113 (Lab)

Fundamental concepts of modern chemistry; topics include properties of the gas, liquid and solid states; atomic structure; chemical bonding; the periodic table; properties of elements and compounds; chemical formulas; nomenclature and equations; thermochemistry and solutions. Laboratory introduces quantitative analysis. Students registering for CHE 111 must attend Recitation. Students may earn 5 credits toward university transfer. (Fall)

## ENG 101 – ENGLISH COMPOSITION AND 1 unit COMMUNICATIONS 1

Prerequisites:

 Score of 500+ on SAT Evidence Based Reading and Writing Section

OR

- Score of 19+ on ACT English, reading or writing sections OR
- ACCUPLACER scores of RPL 25 and EPL 25

Entry into academic discourse through topics of cultural and civic importance and introduction to the fundamentals of college composition, including the writing process, argument, critical reading and thinking skills, research methods, conventions of academic writing, use of technology in the writing process, and oral presentation skills. Students may earn 3 credits towards university transfer.

## ENG 102 – ENGLISH COMPOSITION AND 1 unit COMMUNICATIONS 2

Prerequisites:

• English 101 or equivalent with grade C or higher

Continuation of elements of argument-based writing and oral communication taught in English 101, with an emphasis on composing longer essays, engaging in collaborative work, and creating multimodal rhetoric. Students may earn 3 credits towards university transfer.

## FRE 111 – ELEMENTARY FRENCH 1 unit LANGUAGE AND CULTURE 1

Prerequisites: None

Introduction to pronunciation and structure patterns of simple French sentences, necessary to develop listening, speaking, reading, and writing skills in FRE. An appreciation of French speaking culture underlies the orientation of the course. Students with two or more high school language credits may take the Foreign Language Placement Test during orientation with the option of being placed at a higher level. Students with prior study in educational institutions in which French is the primary language are not allowed to receive credit for the elementary level of the native language. Students may earn 3 credits toward university transfer.

## FRE 112 – ELEMENTARY FRENCH 1 unit LANGUAGE AND CULTURE 2

Prerequisites:

• FRE 111 or Placement Test

Continuation of FRE 111; study of the basic sounds and structures of the French language. An appreciation of French speaking culture underlies the orientation of the course. Students may earn 3 credits toward university transfer.

## GEO 102 – WORLD GEOGRAPHY 1 unit

Prerequisites:

• Must meet prerequisites for ENG 101

This course is the study of physical and cultural factors influencing human activity. Students may earn 3 credits toward university transfer.

## HIS 181 – FOUNDATIONS OF THE MODERN WORLD

1 unit

Prerequisites:

• Must meet prerequisites for ENG 101

Beginning with the rise of civilization and concluding at the eve of the Modern Period (AD 1500) this course provides for the development of critical inquiry by emphasizing the analysis of primary sources. It examines major cultural, social, economic, and political trends of major world civilizations as a means of examining the society in which we live, and our identities and responsibilities as informed Christian world citizens. Students may earn 3 credits toward university transfer.

### **HIS 182 - THE MODERN WORLD**

1 unit

Prerequisites:

Must meet prerequisites for ENG 101

Beginning at the eve of the Modern Period (circa 1500 AD) and concluding in the recent past, this course provides for the development of critical inquiry by emphasizing the analysis of primary sources. It examines major cultural, social, economic, and political trends of major world civilizations as a means of examining the society in which we live, and our identities and responsibilities as informed Christian world citizens. Students may earn 3 credits toward university transfer.

## MAT 108 – FINITE PROBABILITY AND STATISTICS 1

1 unit

Prerequisites:

- Score of 490+ on Math SAT or Score of 16+ on Math ACT AND
- Completion of high school Algebra 2

<u>OR</u>

ACCUPLACER scores of RPL 25 and MPL 30

Introduction to probability and statistics; topics include descriptive statistics; probability; discrete and continuous random variables; the Binomial, Normal, and Student-T probability distributions; and estimation and hypothesis testing; linear correlation and regression. Students may earn 3 credits toward university transfer.

### **MAT 130 - ELEMENTARY CALCULUS**

1 unit

Prerequisites:

• Score of 530+ on Math SAT

<u>AND</u>

- Completion of Algebra 2 with grade C or higher
  OR
- ACCUPLACER scores of RPL 25 and MPL 40.

This course includes the following topics: differentiation and integration of polynomial, rational, logarithmic, and exponential functions and interpretation and application of these processes. Students may earn 3 credits towards university transfer. (Fall)

## MAT 140 – ANALYTICAL GEOMETRY 1 unit AND CALCULUS 1

Prerequisites:

- Score of 600+ on Math SAT or Score of 24+ on the Math ACT OR
- MAT 130

<u>OR</u>

ACCUPLACER score of MPL 45

Introduction to differential and integral calculus; topics include limits, differentiation and applications, integration and applications, and the calculus of the trigonometric functions. Students may earn 4 credits toward university transfer.

### **MUH 110 - MUSIC APPRECIATION**

1 unit

1 unit

Prerequisites: None

Study of representative types and forms of western art music, pop music, and world music. Intended for non-music majors. Students may earn 3 credits toward university transfer.

## PS 101 (POLITICAL SCIENCE) – AMERICAN NATIONAL GOVERNMENT

Prerequisites:

Must meet prerequisites for ENG 101

Study of the constitutional basis of the federal government, including its organization, functions, and services. Students may earn 3 credits toward university transfer.

## PSY 101 – INTRODUCTION TO 1 unit PSYCHOLOGY

Prereauisites:

Must meet prerequisites for ENG 101

Introduction to Psychology is a survey course that provides an overview of the methods, terms, theories and research findings in the field of psychology. By understanding the principles of psychology, students learn and understand more about themselves and others. Students may earn 3 credits toward university transfer.

## SOC 101 – INTRODUCTION TO 1 unit SOCIOLOGY

Prerequisites:

• Must meet prerequisites for ENG 101

This course is an introduction to major subjects in sociology. Main topics include historical development of the discipline, contemporary perspectives, and issues on social stratification, gender, ethnicity, socialization process, formal organizations, and selected social institutions. Students may earn 3 credits toward university transfer.

## SPA 111 – ELEMENTARY SPANISH 1 unit LANGUAGE AND CULTURE 1

Prerequisites: None

An introduction to the sound system and grammatical structure necessary to develop listening, speaking, reading, and writing skills in Spanish. An appreciation of Spanish speaking culture underlies the orientation of the course. A student with two or more high school language credits may take the Spanish Placement Test during orientation with the option of being placed at a higher level. Students with prior study in educational institutions in which Spanish is the primary language are not allowed to receive credit for the elementary level of the native language. Students may earn 3 credits toward university transfer.

## SPA 112 – ELEMENTARY SPANISH 1 unit LANGUAGE AND CULTURE 2

Prerequisites:

• SPA 111 or Placement Test

Continued study of additional verb tenses and grammatical structures and reading assignments of higher complexity. An appreciation of Spanish-speaking culture underlies the orientation of the course. Students may earn 3 credits toward university transfer.

## **Tri-County Technical College Dual Credit Courses**

(Note: Not all courses are offered at the Anderson Campus.)

### **ACC 101 – ACCOUNTING PRINCIPLES**

1 unit

Prerequisites: None

This course introduces basic accounting procedures for analyzing, recording, and summarizing financial transactions, adjusting and closing the financial records at the end of the accounting cycle, and preparing financial statements. Accounting systems for various assets, liabilities, and equities are studied. Students may earn 3 credits towards university transfer.

## ART 101 – ART HISTORY AND 1 unit APPRECIATION

Prerequisites: None

This is an introductory course in the history and appreciation of art, including the elements and principles of the visual arts. Students may earn 3 credits towards university transfer.

## BIO 101 – BIOLOGICAL SCIENCE I 1 unit

Prerequisites:

- Satisfactory placement test scores for ENG 101 or completion of ENG 101, ENG 103, or ENG 100 and RDG 100
- Satisfactory placement test scores for MAT 101 or completion of MAT 101 or MAT 032
- Completion of BIO 105 and CHM 105 replaces MAT and ENG prerequisites
- All prerequisite courses require grade C or higher
- Credit may not be earned for both BIO 101 and BIO 105 or BIO 113

This course is a study of the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, population genetics, natural selection, evolution, and ecology. <u>Laboratory requirement</u> supplements lectures. Students may earn 4 credits towards university transfer.

## BIO 102 – BIOLOGICAL SCIENCE II 1 unit Prerequisites:

Prerequisites:

- Completion of BIO 101 or BIO 113 with grade C or higher
- Credit may not be earned for both BIO 102 and BIO 114

This course is a study of the classification of organisms and structural and functional consideration of all Kingdoms (particularly major phyla as well as viruses). Vertebrate animals and vascular plants are emphasized. <u>Laboratory requirement</u> supplements lectures. Students may earn 4 credits towards university transfer.

### CHM 110 – COLLEGE CHEMISTRY I 1 unit

Prerequisites:

- Satisfactory placement test scores for MAT 109 or MAT 110 or completion of MAT 102, MAT 109, MAT 110
- Reading placement score satisfactory for ENG 101, ENG 103, or ENG 155
- All prerequisite courses require grade C or higher
- Note: High school college prep chemistry is strongly recommended.
- Credit may not be earned for both CHM 110 and CHM 106

This is the first course in a sequence which includes the following topics: atomic and molecular structure, nomenclature and equations, properties, reactions and states

of matter, stoichiometry, gas laws, solutions, and equilibria. Heat processes and molecular structure will also be covered. <u>Laboratory requirement</u> supplements lectures. Students may earn 4 credits towards university transfer.

## CPT 167 – INTRODUCTION TO PROGRAMMING LOGIC

1 unit

Prerequisites: None

This course introduces foundation concepts in structured programming. Problem solving and algorithm development through pseudo code and flowcharting is emphasized. Solutions are developed using the basic control structures of sequential, decision, and iteration. Students may earn 3 credits towards university transfer.

## CPT 170 – MICROCOMPUTER APPLICATIONS

1 unit

Prerequisites:

ACCUPLACER score of RPL 25 is recommended

This course introduces applications software, including word processing, databases, spreadsheets, graphs, and their integration. Students may earn 3 credits towards university transfer.

## ECO 210 - MACROECONOMICS

1 unit

Prerequisites:

• ACCUPLACER scores of RPL 25 and EPL 25 are required

This course includes the study of fundamental principles and policies of a modern economy to include markets and prices, national income accounting, cycles, employment theory and fiscal policy, banking and monetary controls, and the government's role in economic decisions and growth. Credit cannot be awarded for both ECO 210 and ECO 101. Students may earn 3 credits towards university transfer.

### ECO 211 – MICROECONOMICS

1 unit

Prerequisites:

- Satisfactory reading and writing placement scores for ENG 101 or completion of ENG 100, ENG 101, ENG 103, or ENG 155 with grade C or higher
- Satisfactory math placement score for MAT 103 or MAT 120 or completion of MAT 102 with grade C or higher

This course includes the study of the behavior of households and firms, including supply and demand, elasticity, price/output in different market structures, pricing of resources, regulations, and comparative advantage and trade. Credit cannot be awarded for both ECO 211 and ECO 101. Students may earn 3 credits towards university transfer.

## ENG 101 – ENGLISH COMPOSITION I 1 unit

Prereauisites:

ACCUPLACER scores of RPL 25 and EPL 25 are required

This is a (college transfer) course in which the following topics are presented: a study of composition in conjunction with appropriate literary selections, with frequent theme assignments to reinforce effective writing. A review of standard usage and the basic techniques of research are also presented. Students may earn 3 credits towards university transfer.

## ENG 102 – ENGLISH COMPOSITION II 1 unit Prerequisites:

• ENG 101 with grade C or higher

This is a (college transfer) course in which the following topics are presented: development of writing skills through logical organization, effective style, literary analysis and research. An introduction to literary genre is also included. Students may earn 3 credits towards university transfer.

#### **GEO 102 – WORLD GEOGRAPHY**

1 unit

Prerequisites:

- Satisfactory reading and writing placement scores for ENG 101 OR
- Completion of ENG 100, ENG 101, ENG 103 or ENG 155 with grade C or higher

This course includes a geographic analysis of the regions of the world, i.e., North and South America, Europe, Australia, Asia, and Africa. Diversity of each region is emphasized by examining its physical environment, natural resources, social, cultural, economic, and political systems. Students may earn 3 credits towards university transfer.

## HIS 101 – WESTERN CIVILIZATION TO 1689

1 unit

Prerequisites:

 An English placement score satisfactory for ENG 101 is strongly recommended

This course is a survey of western civilization from ancient times to 1689, including the major political, social, economic, and intellectual factors shaping western cultural tradition. Students may earn 3 credits towards university transfer.

## HIS 102 – WESTERN CIVILIZATION POST 1689

1 unit

Prerequisites:

 An English placement score satisfactory for ENG 101 is strongly recommended

This course is a survey of western civilization from 1689 to the present, including major political, social, economic, and intellectual factors which shape the modern western world. Students may earn 3 credits towards university transfer.

## MAT 120 – PROBABILITY AND 1 unit STATISTICS

Prerequisites:

ACCUPLACER scores of RPL 25 and MPL 30 are required

This course includes the following topics: introductory probability and statistics, including organization of data; sample space concepts; random variables; counting problems; binomial and normal distributions; central limit theorem; confidence intervals and test hypothesis for large and small samples; types I and II errors; linear regression and correlation. Students may earn 3 credits towards university transfer.

## MAT 130 – ELEMENTARY CALCULUS 1 unit

Prerequisites:

• ACCUPLACER scores of RPL 25 and MPL 40 are required

This course includes the following topics: differentiation and integration of polynomial, rational, logarithmic, and exponential functions and interpretation and application of these processes. Students may earn 3 credits towards university transfer.

## MAT 140 – ANALYTICAL GEOMETRY 1 unit AND CALCULUS I

Prerequisites:

ACCUPLACER score of MPL 45 is required

This course includes the following topics: derivatives and integrals of polynomial, rational, logarithmic, exponential, trigonometric, and inverse trigonometric functions; curve sketching; maxima and minima of functions; related rates; work; and analytic geometry. Students may earn 4 credits towards university transfer.

## MAT 141 – ANALYTICAL GEOMETRY 1 unit AND CALCULUS II

Prerequisites:

• MAT 140 with grade C or higher

This course includes the following topics: continuation of calculus of one variable, including analytical geometry; techniques of integration;

volumes by integration, and other applications; infinite series, including Taylor series; improper integrals. Students may earn 4 credits towards university transfer.

## MUS 105 – MUSIC APPRECIATION

1 unit

Prerequisites: None

This course is an introduction to the study of music with focus on the elements of music and their relationships, the musical characteristics or representative works and composers, common musical forms and genres of various western and non-western historical style periods, and appropriate listening experiences. Students may earn 3 credits towards university transfer.

## PSC 201 – AMERICAN GOVERNMENT

1 unit

Prerequisites:

ACCUPLACER scores of RPL 25 and EPL 25 are required

This course is a study of national governmental institutions with emphasis on the constitution, the functions of executive, legislative and judicial branches, civil liberties, and the role of the electorate. Students may earn 3 credits towards university transfer.

## **PSY 201 – GENERAL PSYCHOLOGY**

1 unit

1 unit

1 unit

Prereauisites:

ACCUPLACER scores of RPL 25 and EPL 25 are required

This course includes the following topics and concepts in the science of behavior: scientific method, biological bases for behavior, perception, motivation, learning memory, development, personality, abnormal behavior, therapeutic techniques, and social psychology. Students may earn 3 credits towards university transfer.

## SOC 101 – INTRODUCTION TO SOCIOLOGY

Prerequisites:

• ACCUPLACER scores of RPL 25 and EPL 25 are required

This course emphasizes the fundamental concepts and principles of sociology, including culture, socialization, interaction, social groups and stratification, effects of population growth, and technology in society and social institutions. Students may earn 3 credits towards university transfer.

## SPA 101 – ELEMENTARY SPANISH I 1 unit

Prerequisites:

ENG 101 strongly recommended

This course is a study of the four basic language skills: listening, speaking, reading, and writing, including an introduction to the Hispanic culture. Students may earn 4 credits towards university transfer.

## SPA 102 – ELEMENTARY SPANISH II 1 unit

Prerequisites:

 SPA 101, Foreign Language Placement test or Exemption test scores

This course continues development of the basic language skills and the study of the Hispanic culture. Students may earn 4 credits towards university transfer.

#### SPC 205 – PUBLIC SPEAKING

Prerequisites:

 Completion of ENG 101, ENG 103, ENG 155, or ENG 156 with grade C or higher

This course is an introduction to principles of public speaking with application of speaking skills. Students may earn 3 credits towards university transfer.

## TRI-COUNTY TECHNICAL COLLEGE CAREER PATHWAYS FOR SUCCESS

Anderson School District Five and Tri-County Technical College are partnering to offer dual enrollment opportunities for high school students who desire training in one of the specialized technical career programs listed below. Career Pathways for Success (CPS) provides students with the opportunity to enter the workforce in fewer than two years. This seamless connection between secondary and post-secondary curricula in a career area allows students to earn stackable credentials such as certificates, diplomas, and associate degrees, with the option in many cases to continue on to a four-year college or university to earn a bachelor's degree.

Students and parents should review the Career Pathways for Success options and talk with their school counselor or career development facilitator to determine if this option meets their needs. Tri-County Technical College will require students to meet prerequisites such as placement scores on ACCUPLACER before beginning the program of study. Additionally, Tri-County Tech will hold an orientation meeting in the spring, designed specifically for participating dual enrollment students and their parents.

## **Business and Public Services Career Pathways**

- Accounting
- Accounting Office Specialist Emphasis
- Administrative Office Technology
- Administrative Office Technology Medical Emphasis
- Business Administration
- Computer Technology Cybersecurity and Forensics Emphasis
- Computer Technology Network Systems Management Emphasis
- Computer Technology Software and Web Development Emphasis
- Criminal Justice
- Early Care and Education
- Media Arts Production

## **Healthcare Career Pathways**

- Expanded Duty Dental Assisting Diploma
- Emergency Medical Technology
- Medical Assisting Diploma
- Medical Laboratory Technology
- Associate Degree Nursing
- Practical Nursing Diploma
- Pre-Pharmacy Concentration General Technology
- Surgical Technology
- Veterinary Technology

The following pathways are fully funded by the state for students who are in high school and are committed to continuing toward an associate degree in the field after high school graduation.

## **Technical Career Pathways**

- CNC Programming and Operations
- General Engineering
- Heating, Ventilation & Air Conditioning (HVAC)
- Industrial Electronics Technology
- Mechatronics
- Welding

## **QUESTIONS?**

For more information on each pathway, including course recommendations and descriptions, salary information, and certificate, diploma and degree options, visit the Tri-County career pathways website at www.tctc.edu/careerpathways.

Tri-County Technical College contact: Amanda Blanton, ablanton@tctc.edu



The following TCTC pathways courses are considered courses for dual credit; they will be transcribed to both the college transcript and the high school transcript at the weighting specified.

MECHATRONICS	
EEM 117 AC/DC Circuits 1	Dual Credit Weighting
EEM 217 AC/DC Machines with Electrical Codes	Dual Credit Weighting
EEM 161 Industrial Instruments	Dual Credit Weighting
IMT 131 Hydraulics and Pneumatics	Dual Credit Weighting
EEM 118 AC/DC Circuits II	Dual Credit Weighting
QAT 101 Introduction to Quality Assurance	Dual Credit Weighting
IDS 106 Employment Skills Development	CP Weighting
IMT 141 Electrical Control Devices	Dual Credit Weighting
WELDING	
WLD 111 Arc Welding 1	CP Weighting
WLD 115 Arc Welding III	CP Weighting
WLD 109 Gas Metal Arc Welding II	Dual Credit Weighting
EGT 103 Print Reading	Dual Credit Weighting
EGT 114 Welding Print Basics	Dual Credit Weighting
WLD 132 Inert Gas Welding Ferrous	CP Weighting
WLD 154 Pipefitting and Welding	CP Weighting
WLD 204 Metallurgy	Dual Credit Weighting
CNC PROGRAMMING AND OPERATIONS	
EGT 106 Print Reading and Sketching	Dual Credit Weighting
EGT 165 Introduction to CAD/CAM (This course is a half unit.)	Dual Credit Weighting
MTT 121 Machine Tool Theory 1	Dual Credit Weighting
MTT 122 Machine Tool Practice 1	Dual Credit Weighting
MTT 141 Metals and Heat Treatment	Dual Credit Weighting
MTT 105 Machine Tool Math Applications	Dual Credit Weighting
MTT 124 Machine Tool Practice II	Dual Credit Weighting
HVAC	
ACR 101 Fundamentals of Refrigeration Systems	CP Weighting
ACR 105 Tools and Service Techniques 1	CP Weighting
ACR 122 Principles of Air Conditioning	CP Weighting
GENERAL ENGINEERING TECHNOLOGY	
EGR 130 Engineering Technology Applications and Programming	Dual Credit Weighting
EET 113 Electrical Circuits I	Dual Credit Weighting
EET 145 Digital Circuits	Dual Credit Weighting
EET 175 Introduction to Photonics	Dual Credit Weighting
MANUFACTURING WORKS	
COL 120 STEM College and Career Readiness	CP Weighting
MFG 101 Introduction to Manufacturing	Dual Credit Weighting
MFG 102 Applied Learning in Manufacturing ( <i>This course is a half unit.</i> )	Dual Credit Weighting

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Programmable Controllers		Teacher Cadet Program (CERRA) Experiencing	
Media Arts 1 – 8 (yearbook)		Education Dual Enrollment	
Media Technology 1-3		Theatre 1	
Media Technology 3 Honors		Theatre 2-10	
Media Technology 4		Transition to Algebra	
Media Technology 4 Honors		U.S. Government - Advanced Placement	
Medical Interventions (PLTW)		U.S. Government College Prep	
Medical Interventions Honors (PLTW)		U.S. Government Honors	
Medical Terminology		U.S. History - Advanced Placement	
Music Appreciation 1		U.S. History and Constitution College Prep	
Music Composition 1-8		U.S. History and Constitution Honors	
Music Theory - Advanced Placement		Welding Technology 1-4	
Networking Fundamentals		World History - Advanced Placement	
Networking Fundamentals Honors	52	World History College Prep	
Nursery, Greenhouse, and Garden Center		World History Honors	. 30
Technology	45		
Nursery, Greenhouse, and Garden Center			
Technology Honors	45		

(See pages 64-67 and 69 for the courses that are approved for dual credit.)

## **CAMPUS CONTACT INFORMATION**



## **Anderson Five Charter School** 1225 South McDuffie St. Anderson, SC 29624 864.260.5538 www.anderson5.net/domain/4026





## **Anderson Institute of Technology** (AIT)

315 Pearman Dairy Rd. Anderson, SC 29625 864.222.4120 www.anderson5.net/ait



Anderson Institute of Technology



@AIT345



@\_ait345



## **Southwood Academy of the Arts**

1110 Southwood St. Anderson, SC 29624 864.260.5205 www.anderson5.net/southwood



Southwood Academy of the Arts



@SouthwoodAcad



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## T.L. Hanna High School

2600 Highway 81 North Anderson, SC 29621 864.260.5110 www.anderson5.net/tlhanna



T.L. Hanna Yellow Jackets



## **Westside High School**

806 Pearman Dairy Rd. Anderson, SC 29625 864.260.5230 www.anderson5.net/westside



@Westside\_A5



@westside\_a5



## **ANDERSON SCHOOL DISTRICT FIVE**

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