



**High School
Student Handbook
&
Course Catalog**

Table of Contents

| | |
|---|-----------|
| Directory of Schools and Centers | 5 |
| School Counseling Services | 6 |
| Additional Services Provided by School Counselors..... | 6 |
| College and Career Readiness | 7 |
| Graduation Requirements | 7 |
| Profile of a Virginia Graduate..... | 7 |
| Standard Unit of Credit..... | 8 |
| Verified Unit of Credit..... | 8 |
| Locally Awarded Verified Credit..... | 8 |
| Sequential Electives..... | 8 |
| Standard Diploma: Graduation Requirements..... | 9 |
| Advanced Studies Diploma: Graduation Requirements..... | 9 |
| Additional Requirements for Graduation..... | 10 |
| Standard Diploma with Credit Accommodations..... | 10 |
| Applied Studies Diploma..... | 10 |
| Certificate of Program Completion..... | 11 |
| Diploma Seals..... | 11 |
| The Right to a Free Public Education | 11 |
| Specific Honor Designations for Graduates | 12 |
| Honor Graduate..... | 12 |
| Valedictorian and Salutatorian..... | 12 |
| Standards of Learning End-of-Course Tests | 12 |
| Transfers into a Virginia Public High School | 13 |
| Awarding of Credits for Transfer Students..... | 14 |
| I.S.A.E.P. Program Information | 15 |
| English Learner (EL) Program | 15 |
| Block Scheduling | 16 |
| Attendance | 16 |
| Make-up Work | 16 |
| Grading Scale (grades 3-12) | 16 |
| Averaging Credit Grades in a 4 X 4 Block Schedule..... | 17 |
| Dual Enrollment Grading Scale..... | 18 |
| Grade Point Average Determination..... | 18 |
| Weighted Credits | 18 |
| Repeat Courses | 19 |

| | |
|--|-----------|
| Changing and Dropping Courses | 19 |
| Honor Roll | 19 |
| Promotion Requirements | 20 |
| Summer School | 20 |
| Accelerated and Honors Courses | 20 |
| College and Career Pathways..... | 21 |
| Uniform Certificate of General Studies (UCGS)..... | 21 |
| Social Sciences Transfer Degree..... | 21 |
| Student Enrollment | 22 |
| Athletic Eligibility | 22 |
| NCAA Eligibility..... | 22 |
| Career and Technical Education Programs | 22 |
| Industry Certifications..... | 23 |
| Chesapeake Career Center..... | 23 |
| CCC Dual Enrollment (High School and College Credit) Programs..... | 23 |
| EVMS Health Science Academy..... | 24 |
| Other Scheduling Options | 24 |
| Governor’s School for the Arts..... | 24 |
| STEM Academy- Grassfield HS..... | 24 |
| International Baccalaureate Program - Oscar Smith HS..... | 25 |
| Science and Medicine Academy- Deep Creek HS..... | 25 |
| College and Career Pathways | 25 |
| Uniform Certificate of General Studies (UCGS)..... | 25 |
| Social Sciences Transfer Degree..... | 25 |
| Early College Scholars..... | 26 |
| Chesapeake Virtual Academy (CVA) | 26 |
| Non-CPS Virtual Course Procedure..... | 27 |
| Directory of Course Offerings and Descriptions | 28 |
| ART COURSE OFFERINGS..... | 28 |
| ENGLISH COURSE OFFERINGS..... | 34 |
| ENGLISH ELECTIVE COURSE OFFERINGS..... | 38 |
| English Language (EL) Course Offerings..... | 43 |
| WORLD LANGUAGE COURSE OFFERINGS..... | 44 |
| MATHEMATICS COURSE OFFERINGS..... | 49 |
| MUSIC COURSE OFFERINGS..... | 57 |
| PE AND HEALTH COURSE OFFERINGS..... | 64 |
| SCIENCE COURSE OFFERINGS..... | 66 |
| HISTORY AND SOCIAL SCIENCE COURSE OFFERINGS..... | 78 |

| | |
|---|------------|
| HISTORY AND SOCIAL SCIENCE ELECTIVE COURSE OFFERINGS..... | 84 |
| SPECIAL EDUCATION..... | 89 |
| CAREER AND TECHNICAL EDUCATION OFFERINGS..... | 90 |
| BUSINESS AND INFORMATION TECH COURSE OFFERINGS..... | 91 |
| FAMILY AND CONSUMER SCIENCES COURSE OFFERINGS..... | 95 |
| MARKETING EDUCATION COURSE OFFERINGS..... | 99 |
| TECHNOLOGY EDUCATION..... | 103 |
| CAREER CONNECTIONS COURSE OFFERINGS..... | 108 |
| CHESAPEAKE CAREER CENTER COURSE OFFERINGS..... | 110 |
| IMPORTANT WEBSITES..... | 121 |

Directory of Schools and Centers

Deep Creek High School

2900 Margaret Booker Drive
Chesapeake, Va 23323
Phone: 757.558.5302
Fax: 757.558.5305

Grassfield High School

2007 Grizzly Trail
Chesapeake, Va 23323
Phone: 757.558.4749
Fax: 757-558-9240

Great Bridge High School

301 West Hanbury Road
Chesapeake, Va 23322
Phone: 757.482.5191
Fax: 757.482.5559

Hickory High School

1996 Hawk Boulevard
Chesapeake, Va 23322
Phone: 757.421.4295
Fax: 757.421.2190

Indian River High School

1969 Braves Trail
Chesapeake, Va 23325
Phone: 757.578.7000
Fax: 757.578.7004

Oscar Smith High School

1994 Tiger Drive
Chesapeake, Va 23320
Phone: 757.548.0696
Fax: 757.548.0531

Western Branch High School

1968 Bruin Place
Chesapeake, Va 23321
Phone: 757.638.7900
Fax: 757.638.7904

Chesapeake Career Center

1617 Cedar Road
Chesapeake, Va 23322
Phone: 757.547.0134
Fax: 757.547.2391

Chesapeake Center for Student Success

605 Providence Road
Chesapeake, Va 23325
Phone: 757.578.7046
Fax: 757.578.7068

Chesapeake Virtual Academy

1421 Kristina Way
Chesapeake VA, 23320
(757) 547-1416

School Counseling Services

The **Virginia Board of Education** has implemented Standards of Learning to prepare high school graduates to compete in a global economy. In alignment with these standards, **comprehensive school counseling programs** support all students, Pre-K through 12th grade, in their academic, career, and personal/social development. Professional school counselors collaborate with parents, teachers, administrators, and the community to promote student success and achievement.

Chesapeake Public Schools' counseling program, pursuant to the **Standards of Quality**, ensures equitable access to counseling services for all students. These services align with the academic mission of public education and aim to enhance student learning outcomes.

- **Academic Counseling-** Supports students and families with curricular choices, academic planning, test interpretation, and post-secondary opportunities.
- **Career Counseling-** Provides students and families with resources to explore career options, plan for the workforce, apprenticeships, or higher education pathways.
- **Personal/Social Counseling-** Helps students develop self-awareness, positive conflict resolution, goal-setting, and interpersonal skills to reflect their abilities and interests.

The school counseling program focuses on helping students:

- Resolve problems that impact learning.
- Develop positive attitudes toward education.
- Acquire effective study, decision-making, and problem-solving skills.
- Understand themselves and others.
- Build responsibility for personal behavior.
- Explore the world of work and career opportunities.

Additional Services Provided by School Counselors

- Collaboration with parents, teachers, and school staff.
- Informational programs and activities.
- Identification and support of students with special needs.
- Crisis intervention and management.
- Referrals and partnerships with community agencies.
- Support groups for students.
- Career and Technical Education guidance.

The **school counseling program** in Chesapeake Public Schools is a collaborative, sequential initiative designed to address the needs of all students. By providing academic, career, and personal/social support, the program ensures students are well-prepared to meet the challenges of education and the workforce.

College and Career Readiness

In accordance with the *Regulations Establishing Standards for Accrediting Public Schools in Virginia (SOA)*, all middle and high school students are required to develop and maintain a Personal Learning Plan and Academic and Career Plan (ACP) that align with their academic and career goals. Key components of the ACP include:

- A program of study for high school graduation.
- A postsecondary career pathway reflecting the student's academic and career interests.

The ACP must be developed in line with the guidelines set by the Virginia Board of Education and signed by the student, the student's parent or guardian, and a designated school official. Students are encouraged to work closely with their school counselors and families throughout the academic planning process. By actively engaging in academic and career planning, students can ensure they are on track to meet graduation requirements and pursue meaningful postsecondary opportunities.

Graduation Requirements

According to the Virginia Department of Education, in order to earn a diploma and graduate from a Virginia high school, students must meet specific requirements for **standard units of credit** and **verified units of credit**. These requirements are outlined in the Virginia Board of Education's [Regulations Establishing Standards for Accrediting Public Schools in Virginia](#) (Standards of Accreditation, 8VAC20-131).

Credits Required: The number of standard and verified credits varies based on the diploma type and the year the student entered ninth grade. Detailed information about credit requirements can be found on the VDOE webpages for each diploma type:

- [Advanced Studies Diploma](#)
- [Standard Diploma](#)
- [Applied Studies Diploma](#)
- [Other Diplomas & Certificates](#)

Profile of a Virginia Graduate

The [Profile of a Virginia Graduate](#) describes the knowledge, skills, experiences, and attributes that students must attain to be successful in college and/or the workforce and to be "life ready." Life-ready as defined by the VDOE means the graduate must:

- Achieve and apply appropriate academic and technical knowledge;
- Demonstrate productive workplace skills, qualities, and behaviors (workplace skills);
- Build connections and value interactions with others as a responsible and responsive citizen (community engagement and civic responsibility); and
- Align knowledge, skills and personal interests with career opportunities (career exploration).

Standard Unit of Credit

A standard credit is a credit awarded for a course in which the student successfully completes 140 clock hours of instruction and the requirements of the course. An academic term in high school is one semester unless the student is on an A/B schedule, and then a term is defined as a year. An academic term on the middle school level is defined as one year.

Verified Unit of Credit

In accordance with [8VAC20-131-110](#)(B) of the Standards of Accreditation, a "verified unit of credit" or "verified credit" is a credit awarded for a course in which a student earns a standard unit of credit and completes one of the following:

- Achieves a passing score on a corresponding end-of-course SOL test.
- Achieves a passing score on an additional test, as defined in 8VAC20-131-5, as a part of the Virginia Assessment Program.
- Meets the criteria for the receipt of a locally awarded verified credit (see below) when the student has not passed a corresponding SOL test.

Locally Awarded Verified Credit

To be eligible to earn locally awarded verified credits in English, mathematics, science, or history/social science, a student must:

- Pass the high school course,
- Score within a 375-399 scale score range on any administration of the Standards of Learning test after taking the test at least twice, and
- Demonstrate achievement in the academic content through an appeal process administered at the local level.

Credit accommodations for students with disabilities earning a Standard Diploma are not subject to the limit on the number of locally awarded verified credits that may be earned. More information on credit accommodations is available on the [VDOE Credit Accommodations](#) webpage.

Graduation requirements differ for students who began ninth grade prior to the 2018-2019 school year and those who entered ninth grade in the 2018-2019 school year and thereafter.

Sequential Electives

Sequential electives” means any series of courses that are used to fulfill the elective requirements for a Standard and an Advanced Studies Diploma in which the content increases or expands in scope and sequence as students move through the various levels of the courses. The two sequential electives may be in any discipline as long as the courses are **NOT** specifically required for graduation.

A two-credit course, regardless of content, can fulfill the sequential elective graduation requirement if course content builds on itself and creates a foundation for further education or training or preparation for employment and is not required for graduation.

| Standard Diploma: Graduation Requirements | | |
|--|-------------------------|-------------------------|
| | Credits Required | |
| Minimum Credit Requirements | Credits | Verified Credits |
| English | 4 | 2 |
| Math - Courses shall include at least two different course selections from among: Alg 1, Geom, AFDA, Alg 2 | 3 | 1 |
| Laboratory Science - Courses shall include selections from at least two different science disciplines | 3 | 1 |
| History & Social Science - Courses shall include U.S. and Virginia History and U.S. and Virginia Government and one other World History or Geography course | 3 | 1 |
| Health & PE | 2 | - |
| World Language Fine Arts or CTE - Courses shall include one credit in fine or performing arts or CTE. | 2 | - |
| Economics and Personal Finance | 1 | - |
| Electives - Must include at least two sequential electives | 4 | - |
| Standard Diploma Total | 22 | 5 |

| Advanced Studies Diploma: Graduation Requirements | | |
|--|-------------------------|-------------------------|
| | Credits Required | |
| Minimum Credit Requirements | Credits | Verified Credits |
| English | 4 | 2 |
| Math - Courses shall include at least three different course selections from among: Alg 1, Geom, AFDA, Alg 2 or other math courses above Alg 2 | 4 | 1 |
| Laboratory Science - Courses shall include selections from at least three different science disciplines | 4 | 1 |
| History & Social Science - Courses shall include U.S. and Virginia History and U.S. and Virginia Government and two other World History or Geography course | 4 | 1 |
| Health & PE | 2 | - |
| World Language - Courses shall include 3 credits of one language or two credits of two languages | 3 | - |
| Fine Arts or CTE - a computer science course credit may be considered a CTE course credit | 1 | - |
| Economics and Personal Finance | 1 | - |
| Electives - Must include at least two sequential electives | 3 | - |
| Advanced Studies Diploma Total | 26 | 5 |

Additional Requirements for Graduation

(For Standard and Advanced Diploma students)

- **AP, Honors, IB, Dual Enrollment, Work-Based Learning, or CTE Credential** - Students shall (i) complete an Advanced Placement, honors, International Baccalaureate, or dual enrollment course; **OR** (ii) complete a high-quality work-based learning experience, as established by Board guidelines; **OR** (iii) earn a CTE credential (completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness assessment).
- **Virtual Course** - Students shall successfully complete one virtual course, which may be a non-credit-bearing course or a required or elective credit-bearing course that is offered online.
- **First Aid, CPR, and AED Training** - Students shall be trained in emergency first aid, cardiopulmonary resuscitation (CPR), and the use of automated external defibrillators (AED), including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. *Students with an IEP or 504 Plan that documents that they cannot successfully complete this training shall be granted a waiver from this graduation requirement.*
- **Demonstration of the 5 C's** - In accordance with the Profile of a Virginia Graduate, students shall acquire and demonstrate foundational skills in Virginia's 5 C's: critical thinking, creative thinking, collaboration, communication, and citizenship.

Standard Diploma with Credit Accommodations

Credit accommodations provide alternatives for students with disabilities to earn the standard and verified credits required to graduate with a Standard Diploma.

Credit accommodations for students with disabilities may include:

- Alternative courses to meet the standard credit requirements
- Modifications to the requirements for locally awarded verified credits
- Additional tests approved by the Board of Education for earning verified credits
- Adjusted cut scores on tests for earning verified credits
- Allowance of work-based learning experiences through career and technical education (CTE) courses

While credit accommodations provide alternate pathways and flexibility, students receiving accommodations must earn the 22 standard credits and five verified credits required to graduate with a Standard Diploma.

Applied Studies Diploma

This diploma is available to students with disabilities who complete the requirements of their IEP and who do not meet the requirements for other diplomas. [Understanding the Applied Studies Diploma](#) (PDF) is here to assist families with understanding everything they need to know related to this specific diploma option.

Certificate of Program Completion

Students who successfully complete all academic coursework required for either the advanced studies or standard diploma, but who need to continue to take a Standards of Learning (SOL) test(s) or other means to earn the required verified credits, will be awarded a Certificate of Program Completion. Students who are awarded a Certificate of Program Completion may continue to take the necessary SOL test(s) for a period of up to three years from the date on which the Certificate of Program Completion was awarded in order to upgrade the certificate to a standard or advanced studies diploma. In extenuating circumstances, the three-year period may be extended by the Superintendent.

Diploma Seals

The requirements for [diploma seals](#) are included as part of the standards that outline the requirements for graduation. Students meeting specific requirements for graduation and demonstrating exemplary performance may receive the following diploma seals for recognition:

- Governor's Seal
- Board of Education Seal
- Board of Education's Career & Technical Education Seal
- Board of Education Diploma Seal for Science, Technology, Engineering, and Mathematics (STEM)
- Board of Education's Excellence in Civics Education Seal
- Board of Education's Seal of Biliteracy
- Board of Education's Seal for Excellence in Science and the Environment

The Right to a Free Public Education

General Education Students: Students who do not meet graduation requirements according to accreditation standards and are under 20 years of age as of August 1 of the school year are entitled to a free public education.

Students with Disabilities: Students with an Individualized Education Program (IEP) who do not meet graduation requirements have the right to a free and appropriate public education until age 21, inclusive.

English Language Learners: Students for whom English is a second language, who entered Virginia schools for the first time after their twelfth birthday, and are under 22 years of age as of August 1 of the school year, are entitled to a free public education.

Specific Honor Designations for Graduates

Honor Graduate

The distinction of honor graduate is awarded to all students who have met the requirements for the standard or advanced studies diploma and who graduate with a 3.0 or greater weighted grade point average in all credit-bearing classes. Credit-bearing classes are those defined in the Standards of Accreditation as receiving a standard unit of credit (8 VAC 20-131-110). Exceptions to these requirements cannot be made by an I.E.P. team. Determination is made by the averaging of grades after final examinations have been given and final grades have been derived in June of the senior year.

Valedictorian and Salutatorian

The determination of valedictorian and salutatorian is made based on the weighted grade point average at the end of the 2nd semester of the senior year. The student with the highest rank at the end of the senior year will be declared the valedictorian of the graduating class. The student with the second-highest rank at the end of the senior year will be declared the salutatorian. In cases where more than one student has the same numerical average, all students with that average will be given the same classification.

- In addition, a student may not be enrolled in high school for more than eight consecutive semesters, starting from their initial enrollment in ninth grade.
- The eight consecutive semesters shall be counted continuously from that point, regardless of whether or not he/she remains continuously enrolled in school. On the student's final transcript, the final class rank, including valedictorian (number one in class) and salutatorian (number two in class), is calculated following graduation.
- Determination of student involvement in graduation exercises is made by the school principal.

Standards of Learning End-of-Course Tests

Students must take all end-of-course Standards of Learning (SOL) tests following course instruction required to fulfill graduation requirements or federal accountability. **Students who successfully complete a course and who achieve a passing score on an end-of-course SOL test or a substitute test for that course shall be awarded a verified credit.** End-of-course tests that are available are listed in the following chart. A score of 400 is considered passing/proficient.

High School SOL End-of-Course Tests Available for Verified Credit:

- English 11 Reading World History I
- English 11 Writing World History II
- Algebra I VA & US History
- Algebra II Earth Science
- Geometry Biology
- Integrated Reading and Writing Chemistry
- World Geography

Students entering the ninth grade in the fall of 2018 (Class of 2022) and beyond must earn five verified credits. Please refer to the Diploma Options for specific verified credit requirements.

Testing Accommodations

Testing accommodations may be available to students with disabilities, students with 504 plans, or students with limited English proficiency.

Transfers into a Virginia Public High School

Graduation requirements – in compliance with 8VAC 20-131-60 – for a student transferring into a Virginia public school for the first time in grades 9-12, depends on the grade the student is transferring into and when in the school year the student is transferring.

A student is considered to have transferred

- at the beginning of the school year if 20 or fewer hours of instruction have been completed.
- during the school year, if more than 20 hours of instruction have been completed.

Requirements for First-time Transfers to a Virginia Public School by Grade Level and School Year Overview are summarized in the following table.

| | |
|--|--|
| At the beginning of or during 9th grade | All requirements of 8VAC20-131-51 for the Standard diploma and Advanced Studies diploma. |
| At the beginning of or during 10th grade | All requirements of 8VAC20-131-51 for the Standard diploma and Advanced Studies diploma . |
| At the beginning of 11th grade | All requirements of 8VAC20-131-51 for the Standard diploma and Advanced Studies diploma . Students transferring above the 10th grade from schools or other education programs that do not require or give credit for health and PE shall not be required to take these courses to meet graduation requirements. |

| | |
|--|---|
| <p>During 11th grade or at the beginning of 12th grade</p> | <p>All requirements of 8VAC20-131-51 for the Standard diploma and Advanced Studies diploma, except only two verified credits required: English and mathematics, if mathematics testing required by federal law, otherwise verified credit may be of student's own choosing.</p> <p>Students transferring above the 10th grade from schools or other education programs that do not require or give credit for health and PE shall not be required to take these courses to meet graduation requirements.</p> |
| <p>During 12th grade</p> | <p>All requirements of 8VAC20-131-51 for the Standard diploma and Advanced Studies diploma, except only two verified credits required: English and mathematics, if mathematics testing required by federal law, otherwise verified credit may be of student's own choosing.</p> <p>Students transferring above the 10th grade from schools or other education programs that do not require or give credit for health and PE shall not be required to take these courses to meet graduation requirements.</p> <p>Students should be given every opportunity to earn a diploma following the graduation requirements in 8VAC20-131-51. If not possible, arrangements should be made for the student's previous school to award the diploma.</p> |

Students transferring in grades kindergarten through 8 from Virginia public schools or nonpublic schools accredited by one of the approved accrediting constituent members of the Virginia Council for Private Education (VCPE) shall be given recognition for all grade-level work completed. The academic record of students transferring from all other schools shall be evaluated to determine appropriate grade placement.

Awarding of Credits for Transfer Students

A secondary school shall accept credits toward graduation received from Virginia nonpublic schools accredited by one of the approved accrediting constituent members of the VCPE. (8VAC20-131-60.D)

Students transferring from a non-accredited school or home school seeking credits for previously completed course work must verify credits earned in grades nine or above by one of the following:

1. Presenting an official transcript from a correspondence school or other private institution approved by the VCPE; **or**
2. Successfully completing a Chesapeake Public Schools end-of-course examination in the appropriate content areas of English, history and the social sciences, mathematics, and science; **or**

3. Meeting the following requirements:
 - a. Providing evidence of attainment of a percentile rank of 80 or above on achievement tests that have been approved by the Board of Education and which have been administered in the previous twelve months; **and**
 - b. Providing evidence of successful academic performance in previous public or accredited private school experiences (e.g., report cards, school records, work samples); **and**
 - c. Successfully completing a semester (high school term) of coursework in Chesapeake Public Schools (if student transfers in after the start of the school year).

High school credits granted will be recorded as **pass/fail**, and they will not be used in determining the cumulative grade point average or class rank.

If determining the appropriate placement of the student requires more than one day, the student will be placed in the grade level or in the courses that seem appropriate based on the evidence available. Such placement, however, may be temporary, and parents or legal guardians should be informed by the principal or designee.

I.S.A.E.P. Program Information

The Individual Student Alternative Education Plan (ISAEP) program prepares students at risk of dropping out of public high school to take the General Educational Development (GED®) test while developing career and technical education skills. The ISAEP program fulfills compulsory attendance requirements for students who are between 16 and 18 years of age.

English Learner (EL) Program

The goal of the EL program is to teach English to non-English speakers so they can develop the appropriate skills to meaningfully communicate, successfully acquire the subject content, and participate proficiently on local and state assessments. Students who learn a language other than English as a first language can be identified to receive services based on the results of a standardized diagnostic assessment. Those who qualify meet with a teacher during the regular school day for instruction in all content areas while focusing on immersion in the English language. Instructions follow the state-adopted curricula of the World-Class Instructional Design and Assessment (WIDA) standards. In conjunction with the WIDA standards, the teacher reinforces skills and concepts of the regular curricula to meet the needs of students at various levels. Frequency and length of contact time with the teacher is dependent upon each student's language level per the diagnostic test, teacher observations, and administration and parent consensus. Per federal law, all EL students are assessed annually to measure individual progress in the acquisition of the English language.

Block Scheduling

Chesapeake Public High schools operate on a 4 x 4 semester plan. In the 4 x 4 semester plan, the school day is divided into four instructional blocks, approximately 90 minutes each, and the school year is divided into two semesters. During the first semester, students are enrolled in four courses that meet daily. At the end of the first term, students receive one credit for each course successfully completed and enroll in four additional courses for the second semester. In this scheduling arrangement, it is possible to earn thirty-two credits in four years without attending summer school. **Freshmen, sophomores, and juniors must take four courses/credits each semester.** With the approval of the principal, seniors may have the option of taking three courses per semester. However, most colleges want a rigorous course of study; therefore, seniors are encouraged to continue taking four courses each semester. No student should be allowed to enroll in more than eight credit-bearing courses during the school year. Exceptions should only be considered for seniors who may need additional credits in order to meet graduation requirements.

Attendance

[Student attendance requirements](#) are outlined in the Student Handbook. Students should report to classes on time. Regular school attendance is important in the academic development of the student. Excessive and unexcused absences from school are harmful to such development.

Make-up Work

The expectation is for all students to complete assignments on time. Students are encouraged to communicate with their teacher regarding [make-up work and late work](#). Families should communicate with their student's teachers regarding any attendance concerns. There may be extenuating circumstances to consider.

Grading Scale (grades 3-12)

Teachers will use the approved numerical scale in recording students' grades during a marking period. Each marking period letter grade on the report card will reflect the numerical average of the grades earned. NOTE: Dual Enrollment courses will utilize the grading scale of the college or university as noted in the Dual Enrollment contract.

Grading Scale

| Range | Letter Grade |
|----------|--------------|
| 93 – 100 | A |
| 90 – 92 | A- |
| 87 – 89 | B+ |
| 83 – 86 | B |
| 80 – 82 | B- |
| 77 – 79 | C+ |
| 73 – 76 | C |
| 70 – 72 | C- |
| 67 – 69 | D+ |
| 64 – 66 | D |
| Below 64 | E |

Averaging Credit Grades in a 4 X 4 Block Schedule

The final grade is determined by averaging the student's four marking period grades and the final exam grade in credit-bearing courses.

1. The school year is divided into two semesters.
2. Each semester consists of four marking periods. The four marking period grades and the exam grade will be used to determine the final grade. Each carries a weight of twenty percent.
3. Grades for year-long courses (A/B alternating block and the Governor's School for the Arts) will be considered interim grades at the 01, 03, 05, and 07 reporting periods. These grades will not be used to determine the final grade for the semester.
4. CCC classes that are 2.0 credits each semester will have four marking periods and the exam grade to determine the final grade for the semester. CCC classes that are 3.0 credits, and full-year courses will use all eight marking periods and two exams to determine final grades.
5. As required by School Board Policy 6-44, all grades are subject to improvement based upon the timely completion of make-up work.
6. Students are expected to demonstrate consistent effort and mastery of the Standards of Learning and the curriculum objectives. Final grades should be in the best interest of the child. Marking period/exam grades (especially "E's) need to be closely monitored to ensure that the final letter grade is accurately reflected. Suppose a student has two passing grades, using marking period or exam grades. In that case, an electronic grading chart will be utilized for failing grades of an "E" to use as a reference when determining final letter grades.

Dual Enrollment Grading Scale

Beginning September 2014 all Dual Enrollment courses will use the Community College grading scale:

| Grade | Range | Quality Points |
|--------------|--------------|-----------------------|
| A | 90-100 | 4.0 |
| B | 80-89 | 3.0 |
| C | 70-79 | 2.0 |
| D | 60-69 | 1.0 |
| E | 0-59 | 0.0 |

Grade Point Average Determination

Once final letter grades have been determined for all courses taken, the letter grades are changed to the corresponding quality points on the modified ten-point scale. The “assigned” quality point is now multiplied by the credit value of the course, and the total number of quality points is divided by the total number of attempted credits. The result will be the unweighted grade point average. At this time, the weighted value of specific classes will be added to the unweighted grade point average.

A- 4.0 points; A- 3.7 points; B+ 3.3 points; B 3.0 points; B- 2.7 points; C+ 2.3 points; C 2.0 points; C- 1.7 points; D+ 1.3 points; D 1.0 points; E 0.0 points

Weighted Credits

Specific courses have been approved for additional quality point weight, which is added to the grade point average. These courses are approved because they are academically demanding. The courses are identified as honors, advanced placement, IB, SMA, GSA, dual enrollment, or STEM Academy classes. After the students’ averages have been calculated, a weight of .025 is added to the grade point average for each honors credit completed successfully and a weight of .05 is added to the grade point average for each credit in an advanced placement or dual enrollment class completed successfully. Students who transfer into the Chesapeake Public Schools will be given weighted credit for courses passed successfully in other school divisions if the specific courses are weighted in the Chesapeake Public Schools.

Weighted credit will not be awarded unless courses are weighted in the Chesapeake Public Schools.

Repeat Courses

If a student **passes** a course and elects to repeat the course, the student will receive credit for the higher grade. The lower grade will remain on the student's cumulative record (transcript) but will not be calculated in the grade point average. If a student fails a class and elects to repeat the course, the original grade of "E" will remain on the transcript, and the "E" will be used in the calculation of the grade point average.

Changing and Dropping Courses

Students are expected to follow the schedule of courses for which they register. However, circumstances may arise which give valid reasons for changing a schedule or dropping a course. Adjustments will be made only when, in the judgment of the principal, the reason for the change is valid.

Note: If a student requests to drop a course during the drop/add period, written notice must be received by the school's counseling department within the first five days of that class. A student may not drop a course and add a new course after the first five days of a class.

Honor Roll

Honor roll is determined at the end of each marking period. All students with a 3.0 or greater weighted grade point average, with no grade lower than a C, in all courses (credit-bearing or non-credit-bearing classes) are given the distinction of the honor roll.

There are three Honor Roll distinctions: Superintendent's Honor Roll, Principal's Honor Roll, and Honor Roll.

Superintendent's Honor Roll Award

3.85 – 4.00 GPA (with no grade lower than A-)

Principal's Honor Roll Award

3.50 – 3.84 GPA (with no grade lower than B-)

Honor Roll Award

3.00 – 3.49 GPA (with no grade lower than C)

Promotion Requirements

Promotion in grades ten through twelve shall be based upon the number of standard credits earned. Designation of students by class (i.e., sophomore, junior, senior) shall be based upon the criteria that follow:

- **9th grade (freshman) to 10th grade** – The successful completion of 5 standard credits.
- **10th grade (sophomore) to 11th grade** – The successful completion of 10 standard credits.
- **11th grade (junior) to 12th grade** – The successful completion of 16 standard credits.
- **12th grade (senior) to graduation (Standard Diploma)** – The successful completion of 22 standard credits in state-prescribed areas of study and 5 verified credits, **including** at least 2 in English, 1 in mathematics, 1 in science, and 1 in social science.
- **12th grade (senior) to graduation (Advanced Studies)** – The successful completion of 26 standard credits in state-prescribed areas of study and 5 verified credits, **including** at least 2 in English, 1 in mathematics, 1 in science, and 1 in social science.

Note: Each principal shall make provisions for appropriate graduation exercises and shall determine student eligibility for participation in such exercises.

Summer School

Summer school for students in grades six through twelve is held each year. Information regarding course offerings will be distributed in the Spring. Summer school is conducted for approximately eight weeks each summer. Students who desire to attend summer school should obtain an application from the school's counseling department. Students who plan to attend summer school outside of Chesapeake should consult with their principal prior to summer school registration to determine whether credits earned elsewhere will be accepted toward graduation in Chesapeake. Courses offered in summer school are based on the number of students needing the course and the availability of teachers. Specific information in regard to fees, registration, and transportation may be obtained from the school counseling office of the student's zoned school.

Accelerated and Honors Courses

We offer a range of honors, Advanced Placement (AP) and Dual Enrollment (DE) courses designed to challenge and engage motivated students who seek a more rigorous academic experience. These courses are tailored to provide in-depth exploration of subjects, foster critical thinking skills, and prepare students for advanced studies beyond high school.

College and Career Pathways

House Bill 1184 was passed by the 2012 General Assembly. HB1184 allows high school students to work towards a TCC degree or certificate while still in high school. There are currently two options. Students may earn a Uniform Certificate of General Studies (UCGS) or a Social Sciences Associate's transfer degree through TCC while earning a high school diploma. The UCGS and the Social Sciences Associate's transfer degree require coursework using Dual Enrollment (DE) and specific Advanced Placement (AP) classes. Students pursuing the Social Sciences Associate's degree will need to have earned high school math credit in middle school. A brief description of each program and its requirements follows. The classes and grade levels listed below are the recommended sequences, but an individual 4-year plan may be created for each student. Please note both AP exams and TCC credits have a cost value associated with them.

Uniform Certificate of General Studies (UCGS)

The Uniform Certificate of General Studies (UCGS) is a one-year college program in which all courses are transferable and satisfy lower-division general education requirements at any Virginia public institution of higher education.

UCGS Highlights

- 9th Grade - Students should complete Algebra 1, Geometry, and Honors Biology.
- 10th Grade- Student should be completing the 3rd year of world language and taking Honors Chemistry and AP European History. They will also take 1 take course at TCC the summer after 10th grade.
- 11th Grade- Student will take 3 AP classes. Students will take one class at TCC during the year and/or in the summer.
- 12th Grade- Students will take Dual Enrollment College Composition

*Total tuition costs are approximately \$810. (This does not include textbook and AP exam fees).

Social Sciences Transfer Degree

Upon successful completion of the program, students will earn college credits and an Associate's Degree.

Social Science Associate's Degree Highlights

- 9th Grade- Student should be scheduled for Algebra 2, Trig, Biology, and Chemistry.
- 10th Grade- Students will take 2 AP classes during the school year and 3 classes at TCC during the summer before 11th grade.
- 11th Grade- Student will take 1 DE and 3 AP classes during the school year, along with 3 courses at TCC the summer before 12th grade.
- 12th Grade- Students will take 1 DE and 2 TCC courses during the school year.

Student Enrollment

The requirements to attend a public school in the City of Chesapeake are outlined in the [Enrollment Eligibility](#) section of the CPS Student Handbook.

Athletic Eligibility

The Virginia High School League and NCAA regulations can be found in the [Chesapeake Public Schools Athletic Handbook](#) and in the [Student Handbook](#). See your Athletic Director if you have questions.

NCAA Eligibility

To play sports in an NCAA Division I or Division II college or university, a student must register with the NCAA Eligibility Center. The NCAA Eligibility Center is available for students to register, view their certification status, and answer general information questions they may have about the initial eligibility requirements. Please visit the [NCAA website](#) to print a copy of the Guide for College-Bound Students.

Career and Technical Education Programs

Students graduating from high school will need advanced technical, communication, and mathematical skills, greater problem-solving abilities, and teamwork skills. Many jobs will require training beyond high school. Career and Technical Education (CTE) programs offer career and technical experiences for students to explore a wide range of high-wage, high-skill, high-demand career pathways. Whether a student plans to attend college, seek an apprenticeship, join the military, or begin work right after high school, CPS provides opportunities to support every student's career aspirations.

These programs are strengthened by incorporating the opportunity to achieve sought-after industry credentials and growing opportunities for dual enrollment credit. Students work with their school counselor to decide which option is right for them. During this process, students have a wide variety of courses to choose from at their home high school, at [Chesapeake Career Center](#), or [Tidewater Community College](#).

In high school, we offer Technology Education, Family & Consumer Science, Business and Information Technology and Marketing Education, Teachers for Tomorrow, Air Force Junior Reserve Officers Training Corps (AFJROTC), Chesapeake Career Center, The STEM Academy at Grassfield High School, as well as Project Lead the Way Courses at the Science and Medical Academy at Deep Creek High School.

Industry Certifications

Industry certification or state licensure is verification from a recognized industry, trade, professional association, or state agency that a student has attained various levels of achievement based on industry or state standards. The certifying exam is standardized and graded independently of the school. High School Industry certifications allow students in certain Career and Technical Education courses to work toward a selected industry credential or state license while pursuing a high school diploma. Students who earn a credential by passing a certification or licensure examination may earn up to two student-selected verified credits to meet graduation requirements.

The benefits of certification or licensure may include:

- evidence of technical preparation;
- greater earning potential;
- increased job opportunities for entry into and/or advancement in a career path.

Chesapeake Career Center

The Chesapeake Career Center (CCC) prepares students for successful entry into the workforce or post-secondary institutions by providing career, technical, and academic skills and offering valuable industry credentials. CCC courses are yearlong, two-block programs; students will earn three credits for each program. Courses at CCC are competency-based, which includes theory, hands-on industry job skills, and workplace readiness training.

Upon successful completion of courses at CCC, students are prepared to test for related industry credentials, certifications, or state licensure. Students enrolled in programs at CCC are provided transportation to and from their high schools.

Admission to CCC is through application. For more information, please see your counselor, go to the [CCC website](#), or contact CCC at (757) 547-0134.

CCC Dual Enrollment (High School and College Credit) Programs

| | |
|-------------------------------|---------------------------------|
| DE Auto Body Repair | DE Early Childhood Education |
| DE Cybersecurity Fundamentals | DE Electricity |
| DE Advanced Cybersecurity | DE Emergency Medical Technician |
| DE Automotive Tech | DE Mechatronics |
| DE Basic Machining | DE Pharmacy Tech |
| DE Early Childhood Education | DE Welding |

EVMS Health Science Academy

The EVMS Health Sciences Academy is a multi-year, tuition-free enrichment program providing high school students with an opportunity to explore diverse career paths in health care. The program includes lectures, workshops, and hands-on activities and culminates with a capstone project. Among the many topics covered are human anatomy, suturing, ultrasound, first aid, and sports medicine. Participants are also able to interact with physicians and other healthcare professionals through group shadowing experiences. Upon completion of the program, each participant is awarded a Certificate of Achievement. An approved application is required. Students may apply for the program during the spring semester of their 9th-grade year. Based on EVMS Health Science Academy criteria, students currently enrolled in another academy (STEM, IB, SMA) program are not eligible to apply. Visit the [EVMS Health Science Academy webpage](#) for more information.

Other Scheduling Options

Governor's School for the Arts

The Governor's School for the Arts is a regional secondary arts school sponsored by the Virginia Department of Education and the public school divisions of Chesapeake, Franklin, Isle of Wight County, Norfolk, Portsmouth, Southampton County, Suffolk, and Virginia Beach. Students take academic classes at their home schools and attend the Governor's School in the afternoon during the regular school year. The Governor's School is located at the Perry Family Arts Center, 1542 49th St, Norfolk, VA 23508. There are no tuition fees for these credit-bearing weighted (0.025 per credit) courses. Transportation is provided to and from the students' home schools. The Governor's School for the Arts is designed to provide a highly specialized, intensive arts program for talented students who are considering arts-oriented careers or who wish to develop their talents to a high degree. The school seeks to prepare students for continued advanced study at the university or conservatory level. The Governor's School for the Arts offers intensive programs in the following areas: **Dance, Vocal Music, Theater and Film, Instrumental Music, Visual Arts, and Musical Theatre.**

Students must apply to the [Governor's School for the Arts](#) and complete an audition process prior to being accepted. The application for audition is available from school counselors for students in grades eight through eleven. Additional information regarding the application process is available from school counselors or by contacting the Chesapeake Public Schools Office of Gifted Education at (757) 494-7600. or the Governor's School for the Arts at (757) 451-4711.

STEM Academy- Grassfield HS

The Governor's STEM Academy is a four-year high school program that features a curriculum designed for students with an interest in Science, Technology, Engineering, and Math (STEM). The Governor's STEM Academy is hosted at Grassfield High School. [Visit the STEM Academy webpage](#) for more information.

International Baccalaureate Program - Oscar Smith HS

The International Baccalaureate Diploma Program (IB) is a rigorous and comprehensive program of curriculum and service that provides excellent preparation for college for *highly motivated* secondary students. The IB Program is hosted at Oscar Smith High School. [Visit the IB Program webpage](#) for more information.

Science and Medicine Academy- Deep Creek HS

The Science and Medicine Academy is a four-year high school program that features a curriculum designed for students who may want to pursue a career in one of the vast fields of science or medicine and/or who demonstrate a particular interest in science or medicine. The Science and Medicine Academy is hosted at Deep Creek High School. [Visit the Science & Medicine Academy webpage](#) for more information.

College and Career Pathways

House Bill 1184 was passed by the 2012 General Assembly. HB1184 allows high school students to work towards a TCC degree or certificate while still in high school. There are currently two options. Students may earn a Uniform Certificate of General Studies (UCGS) or a Social Sciences Associate's transfer degree through TCC while earning a high school diploma. The UCGS and the Social Sciences Associate's transfer degree require coursework using Dual Enrollment (DE) and specific Advanced Placement (AP) classes. Students pursuing the Social Sciences Associate's degree will need to have earned high school math credit in middle school. A brief description of each program and its requirements follows. The classes and grade levels listed below are the recommended sequences, but an individual 4-year plan may be created for each student. Please note both AP exams and TCC credits have a cost value associated with them.

Uniform Certificate of General Studies (UCGS)

The Uniform Certificate of General Studies (UCGS) is a one-year college program in which all courses are transferable and satisfy lower-division general education requirements at any Virginia public institution of higher education.

[UCGS 4-year plan](#)

*Total tuition cost is approximately \$810. (Does not include textbook and AP exam fees).

Social Sciences Transfer Degree

Upon successful completion of the program, students will earn college credits and an Associate's Degree.

[Social Science Associates 4-year plan](#)

*Total tuition cost is approximately \$1,305. (Does not include textbook and AP exam fees).

Early College Scholars

The Early College Scholars program allows eligible public high school students to earn a minimum of 15 transferable college credits while fulfilling the requirements for an Advanced Studies Diploma. The result? A more productive senior year in high school and significant savings on college tuition costs. By completing a college degree in just seven semesters instead of the traditional eight, students can save an average of \$5,000 in expenses.

To qualify for this program, you'll need to meet these criteria:

- Maintain a "B" average or better in your high school courses; and
- Be pursuing an Advanced Studies Diploma; and
- Successfully complete college-level coursework, such as AP, International Baccalaureate, Cambridge, or dual enrollment, to earn at least 15 transferable college credits.

Students and parents must sign a [Governor's Early College Scholars Agreement](#). Once you meet the program's criteria, you will be recognized as an Early College Scholar. This certificate acknowledges your commitment to excellence and your dedication to shaping a promising future.

Chesapeake Virtual Academy (CVA)

Students interested in taking online courses should visit the [CVA webpage](#) to view a list of course offerings and access the course request form. With the exception of special education courses, all CVA High courses are asynchronous which means students are not required to log in at a specific time or place. However, CVA teachers are available throughout the school day for optional, synchronous (live) instruction. In addition, teachers are available for scheduled small group, 1:1 online learning support sessions, and enrichment opportunities. While students will have the ability to work at a pace that is personalized to their needs, students are expected to adhere to a weekly schedule with assignments due at various times during the week .

Since CVA courses are asynchronous in format, students taking courses in CVA must be self-motivated, able to manage time wisely, regularly meet deadlines, and ask for assistance as needed. In addition, students should possess basic computer skills and be comfortable using the Internet for independent learning activities, email, and the learning management system.

Courses offered by Chesapeake Virtual Academy are identified with a prefix of "CVA" in this catalog. Course offerings may vary from semester to semester based on student enrollment and cannot be guaranteed. CVA students may take courses with Virtual Virginia if needed to complete their schedule. Students should sign up for the NON-CVA course numbers and complete the CVA application found on the CVA website. Once the application is approved, the student's course requests will be changed to the CVA classes.

CVA Guidelines for Students

- Students must complete a daily attendance check and are expected to adhere to all policies, including the Chesapeake Public Schools attendance policy, as outlined in the [Student Handbook](#).
- Full-time students enrolling in Chesapeake Virtual Academy make a full-year commitment to the program.
- Students must report to campus to complete standardized assessments and in-person graduation requirements mandated by Chesapeake Public Schools , College Board, and the Virginia Department of Education.
- Course offerings are dependent on sufficient enrollment and may differ from those provided to students at their zoned school.
- Chesapeake Public Schools reserves the right to remove a student from Chesapeake Virtual Academy and return the student to in-person learning at the student's zoned school.

Non-CPS Virtual Course Procedure

Students seeking high school credit for courses not offered by Chesapeake Public Schools must receive prior written approval from the principal before enrolling in a course desiring credit. In requesting alternative methods for credit, the following guidelines have been established:

1. The student's school counselor must review the student's academic plan and discuss all viable methods for receiving credit for courses offered by Chesapeake Public Schools if credit for these courses is desired.
2. A parent/guardian must submit in writing, at least 30 calendar days prior to enrollment each semester, a request to the principal to enroll in another secondary school or program of study outside of Chesapeake Public Schools for which an alternative method for receiving credit is desired.
 - The letter must include (1) the reason(s) for enrolling in this school or program of study, (2) a course description including time allotment, and (3) provide copies of the course or program of study objectives and table of contents of textbook or other resources to be used for instruction.
3. The course must follow the graduation guidelines.
4. The principal will respond in writing to the parent/guardian as to whether or not approval will be given for the student to enroll in the school or program of study.
5. The cost of the non-CPS virtual courses will **not** be covered by Chesapeake Public Schools.
6. Upon completion of an approved non-CPS virtual course, the student must submit an official transcript from the online provider to their school counselor. High school credit will be recorded as pass/fail, not as a letter grade.

Directory of Course Offerings and Descriptions

Arranged Alphabetically by Subject Area

This guide has been prepared to assist students and their parent(s) or guardian(s) with long-term program planning. Students and parents are encouraged to familiarize themselves with this publication and to use it as a resource guide. School counselors, in cooperation with parents, guardians, and teachers, will assist each student in planning a program of study and in selecting courses for the next year. Students will need to review academic and career plans annually with their parent(s), guardian(s), and school counselor, making adjustments where necessary to ensure that it relates with future education and/or career plans.

In addition to required courses, this guide contains a complete list of electives offered in the Chesapeake City Public Schools. Not all electives are available at **each high school. Each school publishes a separate list of elective offerings available at that school based on student interest and any specialized programming.** For all courses listed in the school's offerings, however, this guide contains the course descriptions and the listing of prerequisites.

The selection of courses contained in this document is an opportunity for each student to think carefully about his or her interests, achievements, and educational and career goals. It is also an opportunity for the student to think carefully about how the workplace and the job market are changing.

Periodically, courses will be modified, added, or deleted. **Not all courses are offered at all schools. Sufficient student enrollment is necessary for a course to be taught.**

ART COURSE OFFERINGS

Art I (60011, 60011CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Art I will introduce students to many aspects of art. It offers opportunities for artistic expression and development and increases the powers of observation, analysis, and perception. A wide variety of basic art methods, techniques, and skills are explored, such as drawing, painting, sculpture, computer graphics, and crafts, with emphasis on design and creativity.

Adapted Art I (60001)

Grade Level: 9-12

Level of Difficulty: Developmental **Credit:** 1 Credit **Weight:** None

Prerequisite: Applied Studies Diploma Students only

Standard of Learning End-of-Course Test: No

Course Description: Art I will introduce students to many aspects of art. It offers opportunities for artistic expression and development. A wide variety of basic art methods, techniques, and skills may be explored, such as drawing, painting, sculpture, computer graphics, and crafts, with emphasis on design and creativity. The methods introduced in the class are based on the developmental needs of the student.

Art II (60012, 60012CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art I

Standard of Learning End-of-Course Test: No

Course Description: Art II is a continuation of knowledge developed in Art I. Students are allowed more freedom to make advanced decisions and explore all aspects of art in more depth. They must show more initiative, originality, and use advanced critical thinking skills.

Art III (60013, 60013 CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art II

Standard of Learning End-of-Course Test: No

Course Description: This course develops a level of skills higher than those acquired in Art II. Serious and dedicated students are allowed opportunities for independent growth.

Art IV (60024, 60024CVA)

Grade Level: 10-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** .025

Prerequisite: Art III

Standard of Learning End-of-Course Test: No

Course Description: Art IV students possess a significant degree of artistic talent, self-motivation, and self-discipline. These students have proven through their portfolios that previous knowledge and experiences in art have qualified them for this level. The work of Art IV students is evaluated through visual, oral, and written assessments. Art IV students are required to participate in at least one art show during this course, either at the school level or in the community.

Ceramics I (60111, 60111CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art I Recommended

Standard of Learning End-of-Course Test: No

Course Description: This course develops basic skills in the making of ceramics. The basic hand-building methods of pinch, coil, and slab are explored, as well as the use of the potter's wheel. Students will gain a basic knowledge and understanding of art through examining the elements and principles of design as they pertain to ceramics. Completion of Art I prior to this course may be helpful.

Ceramics II (60112, 60112 CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Ceramics I

Standard of Learning End-of-Course Test: No

Course Description: This course continues to develop skills learned in Ceramics I. Advanced techniques and processes are introduced. Emphasis is on complex design and advanced critical thinking skills

Ceramics III (60113, 60113 CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Ceramics II

Standard of Learning End-of-Course Test: No

Course Description: In this highly specialized course, students continue working with advanced ceramic processes and have opportunities for independent growth.

Contemporary Crafts I (60211)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art I Recommended

Standard of Learning End-of-Course Test: No

Course Description: This course explores the design and construction of functional or decorative objects. Various media are explored such as fiber, glass, clay, wood, and paper. The completion of Art I prior to this course may be helpful.

Contemporary Crafts II (60212)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Contemporary Crafts I

Standard of Learning End-of-Course Test: No

Course Description: This course is a continuation of Contemporary Crafts I in which the students use advanced art and critical thinking skills in the making of objects.

Drawing (60611, 60611CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art I Required – Art II Highly recommended

Standard of Learning End-of-Course Test: No

Course Description: This course is designed to allow students to participate in creative and experimental approaches to drawing. They will explore various drawing techniques with media such as pencils, charcoal, pastels, pens, and conté crayons. Emphasis will be placed on design principles.

AP Drawing (60641, 60641CVA)

Grade Level: 11-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Art IV

Standard of Learning End-of-Course Test: No

Course Description: Advanced Placement Drawing is a college-level course designed to develop skills in drawing that will enable the student to successfully complete the Drawing Advanced Placement exam. Students must be highly motivated to complete the number of required artworks. It is ideal that students take an advanced art course such as Art III, IV, Drawing, or Studio during the semester prior to taking the AP Drawing course.

Studio Art (60811, 60811CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art I – IV Highly recommended

Standard of Learning End-of-Course Test: No

Course Description: This course is designed for students who are highly talented and wish to specialize in a particular media and prepare a portfolio. It is an opportunity for students to explore the nature of media and to develop individual techniques and styles. Students are allowed to work independently. Students will be prepared to move on to a higher level of art, such as AP Studio Art or courses at the college or technical school level.

Basic Jewelry Design and Construction (60311)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art I Recommended

Standard of Learning End-of-Course Test: No

Course Description: This course covers the historical as well as contemporary approaches to jewelry design and construction. Emphasis is placed on a multicultural approach to design. The course includes a variety of construction and casting methods and materials, and surface treatments such as cloisonné, embossing, and engraving. The completion of Art I prior to this course may be helpful.

Painting (60711, 60711CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art I Required – Art II Highly recommended

Standard of Learning End-of-Course Test: No

Course Description: This course is designed to have students participate in a creative and practical approach to painting. Students are given the opportunity to explore various styles of painting. Students learn basic painting techniques relative to watercolor, tempera, acrylic, and gouache media. Emphasis is placed on the use of design principles. Completion of Drawing prior to this course may be helpful.

Airbrush Design (60411)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art I – Highly recommended

Standard of Learning End-of-Course Test: No

Course Description: This course covers the creative and practical approach to the use and care of the airbrush.

Airbrush Design II (60412)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Airbrush Design

Standard of Learning End-of-Course Test: No

Course Description: The student will continue to build upon the skills developed in Airbrush Design by exploring the various ways that the airbrush can be used to paint fine artwork.

Art Photo (60911)

Grade Level:

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Art 1

Standard of Learning End-of-Course Test: No

The Art Photo course exposes students to the materials, processes, and artistic techniques of taking artistic photographs and making different forms of visual arts using their original photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, photo editing, and different aspects of digital art. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. These courses may also cover major photographers, art movements, and styles.

AP Art History (63141, 63141CVA)

Grade Level: 11-12

Level of Difficulty: Advanced Placement **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: World History 1 and World History 2/AP European History
Recommended

Standard of Learning End-of-Course Test: No

Course Description: This is a college-level survey course that traces art from prehistory to the present time in a historical and cultural context. Emphasis is on painting, architecture, and sculpture. This course is designed to enable the student to successfully complete the Art History Advanced Placement exam.

AP 2-D Art and Design (63341)

Grade Level: 11-12

Level of Difficulty: Advanced Placement **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This is a college-level course in which students learn to use 2-D design principles to organize an image on a picture plane in order to communicate content. They demonstrate mastery through any two-dimensional medium or process, such as graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, fashion illustration, painting, and printmaking. They develop technical skills and familiarize themselves with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course. To successfully complete the 2-D Advanced Placement exam, students must be highly motivated to finish the number of required works. It is ideal that students take an advanced art course such as Art III, IV, or Studio in the semester immediately prior to taking AP Studio 2-D design.

AP 3-D Art and Design (63041)

Level of Difficulty: Advanced Placement **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This is a college-level course in which students demonstrate mastery through any three-dimensional approach, such as figurative or non-figurative sculpture, architectural models, metal work, ceramics, glass work, installation, assemblage, and 3D fabric/fiber arts. Students develop technical skills and familiarize themselves with the functions of visual elements as they create an individual portfolio of work for evaluation at the end of the course. To successfully complete the 3D AP exam, students must be highly motivated to finish the number of required works. It is ideal for students to take an advanced art course such as Art III, IV, Studio, or Ceramics II/III in the semester immediately prior.

DE Art Appreciation (63051CVA)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 CPS Credit **Weight:** 0.05 per credit

Prerequisites: None

Standard of Learning End-of-Course Test: No

Course Description: Introduces art from prehistoric times to the present day. Describes architectural styles, sculpture, photography, printmaking, and painting techniques. This course highlights major artists and key contributions from global and Western culture. It covers content chronologically and or thematically.

ENGLISH COURSE OFFERINGS

English 9 (10011, 10011CVA)

Grade Level: 9

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: English 8 or Advanced English 8

Standard of Learning End-of-Course Test: No

Course Description: Using the writing process model, students compose various types of essays and cite sources, with an emphasis on expository and persuasive essays, and use mentor texts to demonstrate comprehension through integrated reading and writing. Students apply research techniques to analyze information gathered from diverse sources by identifying misconceptions and possible bias, citing quoted and paraphrased information using either MLA or APA style. There is an emphasis on nonfiction reading and comparing fiction and informational texts. Students apply knowledge of literary terms across a variety of genres and examine the function of context within informational texts. Students study vocabulary through the structural analysis of roots and affixes and figurative language to understand complex words. Students also review language usage and apply multimodal communication techniques with an emphasis on working in collaborative groups assisting with setting rules toward consensus.

Honors English 9 (10021, 10021CVA)

Grade Level: 9

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: English 8, or Advanced English 8

Standard of Learning End-of-Course Test: No

Course Description: Students read and compare fiction and informational texts and analyze the function of text within a context. Students read and critique literary works from a variety of cultures and explain, compare, and analyze the author's craft. Students develop a variety of expository and persuasive writings, emphasizing their ability to gather diverse information and evaluate that information by identifying misconceptions and possible bias, composing compelling counterarguments, and citing quoted and paraphrased information

using either MLA or APA style. Using integrated reading and writing processes, students use mentor texts as writing models. Vocabulary study includes analysis of roots and affixes and figurative language. Students make multimodal presentations and independent research projects, demonstrating the ability to analyze and synthesize information from multiple sources. Literature and reading study include additional requirements for classroom and outside of classroom reading.

English 10 (11011, 11011 CVA)

Grade Level: 10

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: English 9 or Honors English 9

Standard of Learning End-of-Course Test: No

Course Description: Students read and compare fiction and informational texts, analyzing the universal themes of fictional texts from different cultures. Literature study includes poetry, short stories, novels, plays, business documents, and consumer information. Students will solve problems, answer questions, and generate new knowledge through an analysis and synthesis of informational texts. Students develop vocabulary with an emphasis on connotations, idioms, classical allusions, and figurative language. Students use mentor texts to integrate reading and writing and write compositions focused on argument to show the relationship among claims, reasons, and evidence from diverse sources, using either MLA or APA style to credit sources. Students create multimodal presentations independently and in small groups.

Honors English 10 (11021, 11021 CVA)

Grade Level: 10

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Prerequisite: English 9 or Honors English 9

Standard of Learning End-of-Course Test: No

Course Description: Students compare a variety of fiction and informational text and analyze the universal themes from different cultures. Students analyze a variety of mentor texts and integrate reading and writing to develop well-crafted arguments, demonstrating use of the writing process to develop a variety of writing. Students continue to write with an emphasis on argument to show the relationship among claims, reasons, and evidence from reliable sources, and identify misconceptions and possible bias using either MLA or APA style to credit sources through well-crafted research. Students participate in small groups and reflect on their roles.

English 11 (12011, 12011 CVA)

Grade Level: 11

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: English 10 or Honors English 10

Standard of Learning End-of-Course Test: Yes—Reading and Writing

Course Description: Students continue to apply writing skills with an emphasis on

analysis and argument. In addition, students integrate reading and writing and use mentor texts as models. Vocabulary is reflective of a study of the connotations, idioms, classical allusions, and figurative language. Students have authentic opportunities for writing in postsecondary experiences. Students read and compare fiction and informational texts that are reflective of American history and culture, describing the contributions of other cultures. Students produce research that is synthesized from primary and secondary sources and maintain ethical guidelines for gathering and using information. Communication skills are applied independently and in small groups, and multimodal presentations are created for specific purposes.

Honors English 11 (12021, 12021CVA)

Grade Level: 11

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Prerequisite: English 10 or Honors English 10

Standard of Learning End-of-Course Test: Yes—Reading and Writing

Course Description: Students engage in intensive reading and analysis of American informational text and American literature and describe the contributions of other cultures and identify prevalent themes and characterizations reflective of American history and culture. Vocabulary development is focused on connotations, idioms, classical allusions, and figurative language. Students write focused, organized, and coherent essays, with a focus on analysis and argument, for a variety of audiences. Writing for the postsecondary experience, both college and the workplace, is applied through varied opportunities. Students integrate reading and writing using mentor texts as models to create essays, using multiple sources. Students create multimodal presentations and analyze how media messages are constructed for specific purposes. Students create multimodal presentations, and work independently and collaboratively, building communication skills.

Advanced Placement English: Language and Composition (12141,12141CVA)

Grade Level: Grade 11

Level of Difficulty: Advanced Placement **Credit:** 2 Credits **Weight:** 0.05 per credit

Prerequisite: English 10 or Honors English 10

Standard of Learning End-of-Course Test: Yes—Reading and Writing

Course Description: This is a college-level course designed in accordance with the requirements of the College Board. The Advanced Placement English Language and Composition course provides students who are interested in studying and writing various kinds of analytical and persuasive/argumentative essays on non-literary topics with a college-level English emphasis in language, rhetoric, and expository writing. Students also are required to complete summer reading according to each school's College Board approved syllabus. Students in AP English Language and Composition spend their time reading and writing, as well as engaging in discourse about their reading and writing with attention to rhetorical and compositional elements. Through exposure to various genres, voices, and ideas, students' reading experiences are broadened. Their levels of

appreciation and enjoyment, as well as their critical thinking skills, are enhanced. In addition, the students analyze classic works, conduct research, and make an oral presentation. The course culminates in the Advanced Placement examination given in May of each year. Students who enroll in this course should have a comprehensive knowledge of Standard English grammar.

English 12 (13011, 13011CVA)

Grade Level: 12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: English 11, Honors English 11, or Advanced Placement English 11/Language and Composition

Standard of Learning End-of-Course Test: No

Course Description: Students read, interpret, and compare fiction and informational texts of British literature and literature of other cultures. Students develop vocabulary with a focus on connotations, idioms, classical allusions, and figurative language. Students use mentor texts to compose essays with an emphasis on technical writing to create focused, organized, coherent writing in a standard acceptable to the workplace and postsecondary education. Students analyze how media influences beliefs, interpretations, and behaviors. Students work independently and in groups to create multimodal presentations and produce research from primary and secondary sources that maintain ethical and legal guidelines for gathering information.

Honors English 12 (13021, 13021CVA)

Grade Level: 12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: English 11, Honors English 11, or Advanced Placement English 11/Language and Composition

Standard of Learning End-of-Course Test: No

Course Description: Students interpret the meaning of selected masterpieces of world and British literature and informational texts through critical analysis and additional parallel reading. During the study of the composing process, students focus on rhetoric and logic for the purpose of developing individual style. Students focus on integrated reading and writing, using mentor texts to analyze and evaluate informational text with an emphasis on technical writing in a standard acceptable to the workplace and postsecondary education. Students analyze the influence of media on beliefs, interpretations, and behaviors. Students produce a research product synthesizing primary and secondary sources and maintain ethical and legal guidelines for gathering information and using work, and create multimodal presentations, both independently and in small groups. (Students must have successfully completed the required English courses, which include the English Standards of Learning for Grades 9, 10, and 11, before enrolling in this course).

Advanced Placement English: Literature and Composition (13141, 13141CVA)

Grade Level: Grade 12

Level of Difficulty: Advanced Placement **Credit:** 2 Credits **Weight:** 0.05 per credit

Prerequisite: English 11, Honors English 11, or Advanced Placement English 11/Language and Composition

Standard of Learning End-of-Course Test: No

Course Description: This is a college-level course designed in accordance with the requirements of the College Board. Advanced Placement English Literature and Composition prepares students by developing their interpretive reading skills and their critical/analytical writing skills on a college level. While emphasizing writing techniques and literary analysis, this course exposes students to a wealth of classical and modern literature. Through intensive study of literature and frequent written exercises, students learn strategies to express ideas in an organized, coherent, and persuasive manner. The course culminates in the Advanced Placement examination given in May of each year.

DE College Composition 1 & 2 (13351/13451, 13351CVA/13451CVA)

Grade Level: Grade 12

Level of Difficulty: Dual Enrollment **Credit:** 2 Credits **Weight:** 0.05 per credit

Prerequisite: English 11, Hnrs. English 11, or AP English 11

Standard of Learning End-of-Course Test: No

Course Description: This rigorous course is offered for dual enrollment between Chesapeake Public Schools and Tidewater Community College. Students will study and produce college-level compositions. The first-semester course (ENG 111) focuses on developing college-level writing abilities through a variety of types of composition and provides 3 credit hours. The second-semester course (ENG 112) focuses on developing argumentative writing through research and analytical writing and provides another 3 credit hours. Upon successful completion of both semesters, the student earns both the state of Virginia requisite credit for Grade 12 and 6 credits of college study. Students must complete and pass both semesters to meet Grade 12 graduation requirements. Students should be highly motivated and should possess a strong background in English grammar and usage.

ENGLISH ELECTIVE COURSE OFFERINGS

The annual elective courses described below are **not** offered for English credit. They are available to students as elective credits.

AP African American Studies(42541, 42541CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: English 9

Standard of Learning End-of-Course Test: No

Course Description: AP African American Studies is an interdisciplinary course that provides secondary students the opportunity to explore the rich and diverse Black communities in the United States through the African diaspora. Throughout the course, students will engage with primary documents in order to write to support a line of reasoning, read to recognize a line of reasoning, learn and practice proper argumentation skills, and hone literary, historical, visual, and data analysis skills.

Public Speaking (17011, 17011CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: English 9

Standard of Learning End-of-Course Test: No

Course Description: Students present original speeches, study the communication process, critique speeches delivered by others, participate in group discussions, and learn to conduct and participate in meetings according to parliamentary rules. Students learn to gather, evaluate, organize, and articulate information in an interesting and meaningful manner. At the completion of the course, students will be able to speak effectively and confidently in formal, informal, and business communication situations.

Acting Techniques (16711)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: English 9, Drama I - V

Standard of Learning End-of-Course Test: No

Course Description: After careful study of basic acting skills, students create and perform a variety of roles in student-directed scenes.

Theatre I (16111)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: N/A

Standard of Learning End-of-Course Test: No

Course Description: Students perform and critique scenes from various types of plays, design sets, study trends in drama, and utilize the principles of makeup and costuming.

Adapted Theatre I (16101)

Grade Level: 9-12

Level of Difficulty: Developmental **Credit:** 1 Credit **Weight:** None

Prerequisite: Applied Studies Diploma Students only

Standard of Learning End-of-Course Test: No

Course Description: In this modified Drama I course, students perform scenes from various types of plays, design sets, and utilize the principles of makeup and costuming based on the developmental needs of each student.

Theatre II (16212)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Dramatics I

Standard of Learning End-of-Course Test: No

Course Description: Students build on basic drama skills developed in Dramatics I by producing and evaluating dramatic productions. The class also develops skills in costuming, applying makeup, operating stage equipment, and producing scenery.

Theatre III (16313)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Dramatics I and Dramatics II

Standard of Learning End-of-Course Test: No

Course Description: Students build on basic drama skills developed in Dramatics I and Dramatics II. In addition, class members learn to direct and write plays.

Theatre IV (Stage Craft) (16414)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Dramatics I, II, and III

Standard of Learning End-of-Course Test: No

Course Description: Students build on basic drama skills developed in Dramatics I, Dramatics II, and Dramatics III. This course is for students with a serious interest in drama who may want to pursue theater as a college major and career choice. Stagecraft (set design and the building of sets), as well as a variety of types of technical theater (e.g., lighting, and sound techniques), will be emphasized.

Theatre V (Stage Direction) (16515)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite(s): Dramatics I, II, III, and IV

Standard of Learning End-of-Course Test: No

Course Description: The advanced students build on basic drama skills developed in Dramatics I, II, III, and IV. This course is for students with a serious interest in drama who may want to pursue theater as a college major and career choice. Directing opportunities (e.g., such as assistant director, student director, or production manager) will be given in this course.

Advanced Argument (17212, 17212CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: English 9

Standard of Learning End-of-Course Test: No

Course Description: Affirmative and negative teams present arguments in a rational and logical manner to a neutral third party who determines wins and losses on the basis of persuasiveness and logic of evidence presented by the two teams. Students will develop skills in public speaking, research, critical thinking, and organization of ideas by participating in debates and by producing written arguments.

Journalism I (15111)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: NA

Standard of Learning End-of-Course Test: No

Course Description: Students study the contents of news media and learn basic news writing skills. They write news stories, feature stories, and sports stories. They also investigate some of the techniques involved with layout and design. Additionally, they are exposed to journalistic ethics and other forms of mass media. Students may participate in the production of a school publication.

Journalism II (15212)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Journalism I

Standard of Learning End-of-Course Test: No

Course Description: Students build on the journalistic writing skills they developed in Journalism I by writing in-depth articles and opinion pieces. In addition, students study advanced design, advertising, photography, and scholastic press law. Each member of the class may play a vital role in producing a school publication.

Journalism III (15313)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite(s): Journalism I and Journalism II

Standard of Learning End-of-Course Test: No

Course Description: Students are chiefly responsible for management and production of a school publication. In addition, they refine writing, design, photography, and business skills developed in Journalism II.

Journalism IV (15414)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: An approved written application and English 10

Standard of Learning End-of-Course Test: No

Course Description: Students will understand and be able to use the following concepts in the creation of a yearbook: theme development; organization and content of covers and end sheets, layout and design; basic photography skills using 35 mm and digital cameras; and general copyright laws of publication. In addition, students will know, understand, and utilize methods of layout design, cropping, and creating copy for sections of the yearbook.

Creative Writing (15511, 15511CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: English 10 (Course may be taken concurrently with English 10.)

Standard of Learning End-of-Course Test: No

Course Description: Students will experiment with the elements and techniques of writing short stories, plays, and poems. Students will learn the value of the revision process through writers' workshops. Additionally, students will learn the publication process for creating a school literary-art magazine: soliciting original works from the student body, editing manuscripts, and contributing to the layout and design process.

English Foundations 9 (100001)

Grade Level: 9

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Students build proficiency in reading, writing, and research skills to prepare them to meet success in high school English courses. This elective course offers students who need more time to develop their English skills an opportunity to master basic literacy skills so they will be able to transition into the next level of high school English.

Photo Journalism I, II, III (15611/15612/15613)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: NA for Photo Journalism I

Standard of Learning End-of-Course Test: No

Course Description: This course will provide students with a basic understanding of the technology behind video production and its uses. Utilizing a variety of media, students will conduct interviews, and develop and present daily announcements, school news programs, team sports highlights, documentaries,

highlights of school-wide events, and promotional advertising commercials. Students will be expected to use written, oral, and reading skills in the collection, organization, production, and presentation of course projects. Students will work with appropriate technology and follow safety and school standards as they learn aspects of mass media production.

Reading 9-12 (01101)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course enables students to further their reading skills through comprehension and vocabulary study. The course will also address study skills, writing, and research skills. Students will use a variety of multimedia programs in the computer lab to complement their reading development.

English Language (EL) Course Offerings

ELL I (00811/00812, 00811CVA/00812CVA)

Grade Level: 9-12 **Level of Difficulty:** Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: In ELL Course 1, high school students will grow their English listening, speaking, reading, and writing skills. These language skills will support success in core content classes and completing graduation requirements. In this course, students will develop vocabulary within different thematic units, build background knowledge to increase comprehension, lengthen their language, evaluate their own progress, make connections, ask and answer good questions, analyze, and compare. This course prepares ELL students with the language to take ELL Course 2. This course can be counted as an elective class or a world language course. Students will receive high school credit towards graduation upon the successful completion of course requirements.

ELL II (00821/00822, 00821CVA/00822CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: ELL I

Standard of Learning End-of-Course Test: No

Course Description: In ELL Course II, high school students will build on the skills developed in ELL Course I. High school students will grow their English listening, speaking, reading, and writing skills. These language skills will support success in core content classes and completing graduation requirements. In this course, students will develop vocabulary within different thematic units, build background knowledge to increase comprehension, lengthen their language, evaluate their own

progress, make connections, ask and answer good questions, analyze, and compare. This course is an elective class, and students will receive high school credit towards graduation upon the successful completion of course requirements. Prerequisite, WIDA levels 3 & 4.

WORLD LANGUAGE COURSE OFFERINGS

French I (50111, 50111CVA)

Spanish I (53111,53111CVA)

German I (51111, 51111CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: These courses will teach students to begin to communicate in the world language. Students will practice listening, speaking, reading, and writing skills using basic vocabulary and grammar. Fundamental aspects of the culture associated with the language are presented.

French II (50212, 50212CVA)

Spanish II (53212, 53212CVA)

German II (51212, 51212CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Weight:** None

Prerequisite: Successful completion of Level I of the language being studied

Standard of Learning End-of-Course Test: No

Course Description: Students who have successfully completed the beginning language course continue to build upon their acquired skills in listening, speaking, reading, and writing while continuing to integrate appropriate aspects of culture. The amount of reading and writing is gradually increased as the students acquire additional familiarity with vocabulary and grammar.

French III (50323, 50323CVA)

Spanish III (53323, 53323CVA)

German III (51323, 51323CVA)

Grade Level: 9-12

Level of Difficulty: Honors **Credit:** 1 **Weight:** 0.025

Prerequisite: Successful completion of Level II of the language being studied

Standard of Learning End-of-Course Test: No

Course Description: Attention is given in Level III courses to increased proficiency in listening, speaking, reading, and writing while continuing to integrate appropriate aspects of culture. Expanded vocabulary and complex grammatical structures are emphasized.

French IV (50424, 50424CVA)

Spanish IV (53424, 53424CVA)

German IV (51424, 51424CVA)

Grade Level: 9-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Successful completion of Level III of the language being studied

Standard of Learning End-of-Course Test: No

Course Description: These courses are conducted primarily in the language as students focus on more sophisticated vocabulary and grammar concepts. More challenging listening, speaking, reading, writing, and cultural activities are incorporated.

Advanced Conversation and Grammar

French (50725, 50725CVA)

Spanish (53725, 53725CVA)

Grade Level: 10-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Successful completion of Level IV of the language being studied

Standard of Learning End-of-Course Test: No

Course Description: These courses provide an intensive look at culture and civilization through the study of history and literature. Grammar is formally reviewed and tested in context and through reading authentic selections. Students are expected to read and write at an advanced level. Verbal skills will be assessed through classroom debate and discussion. These courses are designed to help prepare students to take national standardized tests and college-level courses.

French V (50525, 50525CVA)

Spanish V (53525, 53525CVA)

German V (51525, 51525CVA)

Grade Level: 10-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Successful completion of Level IV of the language being studied

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: Students continue to refine and perfect the linguistic skills of listening, speaking, reading, and writing. At the same time, students explore broadened cultural studies and authentic literature. Predominant use of the language is encouraged. These courses are designed to help prepare students to take national standardized tests and college-level courses.

AP French Language and Culture (50645, 50645CVA)

AP Spanish Language and Culture (53645, 53645CVA)

AP German Language and Culture (51645, 51645CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Successful completion of Level V of the language being studied

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: This is a college-level course that prepares students to take the Advanced Placement Language examination. Students are expected to perform at an advanced level in all aspects of listening, speaking, reading, and writing. In addition, they must listen to and read original works as well as produce substantial and frequent oral and written compositions.

AP Spanish Literature and Culture (53045, 53045CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Successful completion of AP Spanish

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, plays and essays) from Peninsular Spanish, Latin American, and U.S. Hispanic literature. Students develop proficiencies across the three modes of communication (interpretive, interpersonal, and presentational) in the range of Intermediate High to Advanced Mid of the American Council on the Teaching of Foreign Languages (ACTFL) Proficiency Guidelines. Through careful examination of the required readings and other texts, students work to hone their critical reading and analytical writing skills. Literature is explored within the contexts of its time and place, and students gain insights into the many voices, historical periods, and cultures represented in the required readings and other texts. The course also includes a strong focus on cultural, artistic, and linguistic connections and comparisons, which is supported by the exploration of various media (art, music, film, articles, and literary criticism).

Latin I (52111, 52111CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Latin I includes an introduction to Roman culture, life, and language, a study of Latin grammar and sentence structure, a study of Greco-Roman mythology, a study of word derivation, and a study of the relationship of Latin to modern-day America and its place in our language.

Latin II (52212, 52212CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Successful completion of Latin I

Standard of Learning End-of-Course Test: No

Course Description: Latin II is a continuation of Latin I with further study of Latin grammar and sentence structure, continued practice in the translation of Latin to English and English to Latin, further study of mythology, and an introduction to Roman history.

Latin III (52323, 52323CVA)

Grade Level: 9-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Successful completion of Latin II

Standard of Learning End-of-Course Test: No

Course Description: Latin III continues to develop grammatical constructions through the translation of Latin to English and English to Latin. The studies of history and daily/frontier life continue as well.

Latin IV (52424, 52424CVA)

Grade Level: 9-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Successful completion of Latin III

Standard of Learning End-of-Course Test: No

Course Description: Latin IV is a translation course, concentrating on Latin prose and poetry.

An introduction to poetic scansion, figures of speech, vocabulary, and poetic sentence structures are developed through Latin translation. This course is primarily designed to put into practice the many points of Latin grammar from the previous levels.

Latin V (52525, 52525CVA)

Grade Level: 10-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Successful completion of Latin IV

Standard of Learning End-of-Course Test: No

Course Description: This course prepares students to take the Advanced Placement course. This is a translation course that enables students to explore primary sources of such authors as Virgil, Ovid, Horace, Catullus, et al. Development of poetic scansion, figures of speech and poetic sentence structure are completed.

AP Latin (52645, 52645CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Successful completion of Latin V

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: This is a college-level translation and literary analysis course with intensive writing that explores the Roman literature of Caesar's de bello Gallico and Virgil's Aeneid. At the culmination of the course, students may take the Advanced Placement Exam.

American Sign Language I (57151) Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** none

Prerequisite: none

Standard of Learning End-of-Course Test: No

Course Description: This is a Dual Enrollment course with Tidewater Community College. American Sign Language I is a yearlong course consisting of ASL 101 and ASL 102 on campus at TCC. The courses will teach students to communicate in American Sign Language. Students will be instructed in the fundamentals of basic vocabulary, syntax, fingerspelling, and grammatical non-manual signals. Focuses will be on communicative competence, and cultural knowledge and understanding of the deaf community. At this time, students will need to schedule classes after school hours and have their own transportation.

American Sign Language II (57251) Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** none

Prerequisite: American Sign Language I

Standard of Learning End-of-Course Test: No

Course Description: This is a Dual enrollment course with Tidewater Community College. American Sign Language II is a yearlong course consisting of ASL 201 and ASL 202 on campus at TCC. The courses will teach students to communicate in American Sign Language. Students will develop vocabulary, conversational competence, and grammatical knowledge. Students will discuss culture and literature through American Sign Language. At this time, students will need to schedule classes after school hours and have their own transportation.

American Sign Language III (57351) Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** none

Prerequisite: American Sign Language II

Standard of Learning End-of-Course Test: No

Course Description: This is a Dual enrollment course with Tidewater Community College. American Sign Language III is a yearlong course consisting of ASL 261 and ASL 262 on campus at TCC. The courses will teach students to communicate in American Sign Language. Students will develop communication skills in American Sign Language. The courses will develop advanced American Sign

Language comprehension and production skills and advanced linguistic aspects of ASL. Students will also be instructed in ASL literary forms. At this time, students will need to schedule classes after school hours and have their own transportation.

Adapted World Language & Culture (58001)

Grade Level: 9-12

Level of Difficulty: Developmental **Credit:** 1 Credit **Weight:** None

Standard of Learning End-of-Course Test: None

Course Description: This course is designed for students to develop real-life skills for world citizenship through the exploration of world languages and cultures. This course promotes skills that can be applied across the curriculum and is taught based on the developmental needs of the student.

MATHEMATICS COURSE OFFERINGS

Algebra I Part A (21111, 21111CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Elective Credit **Weight:** None

Prerequisite: Math 8 (Pre-Algebra)

Standard of Learning End-of-Course Test: No

Course Description: This is the first course of a two-semester program in Algebra I. The content includes topics that are learned in the first half of Algebra I. This course is designed for students who have difficulty with abstract thinking and/or basic mathematical skills. The slower pace and the use of manipulatives help the students make connections and build relationships between algebra, geometry, probability, and statistics concepts. The course will require students to use algebra as a tool for integrating and solving a variety of practical problems.

Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities as well as to analyze functions. Graphing utilities will be used as a tool to assist in problem-solving. Throughout this course, students will be encouraged to talk about mathematics, use the language and symbols of mathematics in representations and communication, discuss problems and problem-solving, and develop confidence in mathematics.

Algebra I Part B (21211, 21211CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Algebra I Part A

Standard of Learning End-of-Course Test: Yes

Course Description: This is the second course of a two-semester program in Algebra I. The content completes the topics covered in Algebra I and provides a thorough review of all Algebra I topics prior to the Standard of Learning

End-of-Course Test. This course is designed for students who have difficulty with abstract thinking and/or basic mathematical skills. The slower pace and the use of manipulatives help students make connections and build relationships between algebra, geometry, probability, and statistics concepts. The course will require students to use algebra as a tool for integrating and solving a variety of practical problems.

Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities, as well as to analyze functions. Graphing utilities will be used as a tool to assist in problem-solving. Throughout the course, students will be encouraged to talk about mathematics, use the language and symbols of mathematics in representations and communication, discuss problems and problem-solving, and develop confidence in mathematics.

Algebra I (21011, 21011CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Math 8 (Pre-Algebra)

Standard of Learning End-of-Course Test: Yes

Course Description: This course will help students make connections and build relationships between algebra and arithmetic, geometry, probability, and statistics. The course will require students to use algebra as a tool for integrating and solving a variety of practical problems.

Tables and graphs will be used to interpret algebraic expressions, equations, and inequalities, as well as to analyze functions. Graphing utilities will be used as tools to assist in problem-solving. Throughout the course, students will be encouraged to talk about mathematics, use the language and symbols of mathematics in representations and communication, discuss problems and problem-solving, and develop confidence in mathematics.

Geometry Part A (22111, 22111CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Elective Credit **Weight:** None

Prerequisite: Algebra I or Algebra I Part B

Standard of Learning End-of-Course Test: No

Course Description: This is the first course of a two-semester program in Geometry. The content includes topics found in the first half of Geometry. It is intended for students who have demonstrated difficulty with abstract concepts or have average or below-average algebra problem-solving skills. The slower pace and the use of manipulatives help the students make connections and build relationships between algebra and geometry. A strong emphasis is placed on hands-on investigational techniques.

Geometry Part B (22211, 22211CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Geometry Part A

Standard of Learning End-of-Course Test: Yes

Course Description: This is the second course of a two-semester program in Geometry. The content completes the topics covered in Geometry and provides a thorough review of all geometry topics prior to the Standard of Learning End-of-Course Test. The slower pace and the use of manipulatives help the students make connections and build relationships between algebra and geometry. A strong emphasis is placed on hands-on investigational techniques.

Geometry (22011, 22011CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Algebra I or Algebra I Part B

Standard of Learning End-of-Course Test: Yes

Course Description: Geometry includes the study of properties of geometric figures, trigonometric relationships, and reasoning to justify conclusions. Emphasis is on two and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. Students must demonstrate strong algebraic skills to be successful in this course. Hands-on investigational techniques are used to foster the student's understanding of many of the topics in geometry.

Honors Geometry (22021, 22021CVA)

Grade Level: 8 and above

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Prerequisite: Algebra I

Standard of Learning End-of-Course Test: Yes

Course Description: Honors Geometry includes the study of properties of geometric figures, trigonometric relationships, and reasoning to justify conclusions. Emphasis is on two- and three-dimensional reasoning skills, coordinate, and transformational geometry, and the use of geometric models to solve problems. Students must exhibit strong algebraic skills to be successful in this fast-paced course where geometry principles are rigorously applied in order to demonstrate logical, step-by-step problem-solving. Hands-on investigational techniques are used to foster student understanding of geometry topics. Additional trigonometric topics, an emphasis on symbolic knowledge, and geometric probability are included in this honors course.

Data Science (21711, 21711CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Geometry Part B, Geometry, or Honors Geometry

Standard of Learning End of Course Test: No

Course Description: This course provides the opportunity for students to learn through the exploration of data. Students will formulate questions through data investigations and choose data sets from local contexts and learner interests. They will follow a data cycle process and be exposed to many types of data. Throughout course study, students will become proficient at modeling their world with data structures other than only flat data (RxC) and selecting tools to use for data visualization and analysis. Connections will be formed that will build a data literacy skill set that learners can bring to use in post-secondary education.

Computer Math Using Graphing Utilities (20211, 20211CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Algebra I or Algebra I Part B

Standard of Learning End-of-Course Test: No

Course Description: This course provides students with materials and instruction that address the Computer Mathematics Standards of Learning using the graphing calculator and spreadsheets as the primary computing devices. The programming capabilities with graphing utilities are used for mathematical problem-solving. Must complete a CTE sequence to receive a math credit

Algebra, Functions, and Data Analysis (23011, 23011CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Geometry or Geometry Part B

Standard of Learning End-of-Course Test: No

Course Description: Within the context of mathematical modeling and data analysis, students will study functions and their behaviors, systems of inequalities, probability, experimental design and implementation, and analysis of data. Data will be generated by practical applications arising from science, business, and finance. Students will solve problems that require the formulation of linear, quadratic, exponential, or logarithmic equations or a system of equations. By investigating mathematical models and interpreting or analyzing data from practical situations, students will strengthen their conceptual understanding of mathematics and further develop connections between algebra and statistics. Students should use the language and symbols of mathematics in representations and communication throughout the course. The infusion of technology (graphing utility and/or computer software) in this course will assist in modeling and investigating functions and data analysis.

Algebra II (23111, 23111CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: AFDA or Geometry/Geometry Part B

Standard of Learning End-of-Course Test: Yes

Course Description: A thorough treatment of advanced algebraic concepts is provided through the study of functions, “families of functions,” equations, inequalities, systems of equations and inequalities, polynomials, rational and radical expressions, complex numbers, conic sections, matrices, and sequences and series. A solid foundation in these topics is crucial for students who plan to take future mathematics courses. Graphing utilities will be used as a tool to verify and investigate mathematical concepts and ideas.

Advanced Functions and Modeling (26011, 26011CVA)

Grade Level: 12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: AFDA or Algebra II

Standard of Learning End-of-Course Test: No

Course Description: This course contains high-interest contextualized content designed to further prepare students for college and the workplace entry by 1) enhancing skills in number and quantity, functions and algebra, geometry, and statistics and probability; and 2) simultaneously reinforcing readiness skills and dispositions in adaptability and flexibility, creativity and innovation, leadership, teamwork, collaboration, and work ethic. The course will augment skills in applied mathematical concepts through mathematical investigations targeting outcomes defined in Virginia’s College and Career Ready Mathematics Performance Expectations (MPE). Students will research, collect, and analyze data; develop and support ideas and conjectures; investigate, evaluate, and incorporate appropriate resources; and determine appropriate problem-solving approaches and decision-making algorithms in a variety of practical contexts and applied settings.

Probability and Statistics (24111, 24111CVA)

Grade Level: Any grade level with appropriate prerequisite requirement **Level of**

Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Algebra II

Standard of Learning End-of-Course Test: No

Course Description: The purpose of the course is to present basic concepts and techniques for collecting and analyzing data, drawing conclusions, and making predictions.

Students will apply and interpret the logic of a hypothesis testing procedure. Tests will include large sample tests for proportion, mean, difference between two proportions, difference between two means (independent and paired), and Chi-square test for goodness of fit, homogeneity of proportions, and independence. This course can be used to prepare students for the rigors of

Advanced Placement Statistics.

Advanced Placement Statistics (24241, 24241CVA)

Grade Level: Any grade level with appropriate prerequisite requirement **Level of Difficulty:** Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Algebra II

Standard of Learning End-of-Course Test: No, Advanced Placement exam rec.

Course Description: The topics for this course are aligned with the College Board Advanced Placement Course Description. It states that “the purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: Exploring Data...Sampling and Experimentation...Anticipating Patterns...Statistical Inference.” Visit the College Board website for a detailed course description (www.collegeboard.com).

Trigonometry (24011, 24011CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Algebra II

Standard of Learning End-of-Course Test: No

Course Description: A thorough treatment of trigonometry is provided through the study of trigonometric definitions, applications, graphing, and solving trigonometric equations and inequalities. Emphasis is placed on using connections between right triangle ratios, trigonometric functions, and circular functions. Graphing utilities are used as a tool to verify and investigate mathematical concepts and ideas.

Mathematical Analysis (25021, 25021CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Trigonometry

Standard of Learning End-of-Course Test: No

Course Description: This comprehensive course is intended to develop student understanding and application of algebraic and transcendental functions, parametric and polar equations, sequences and series, and vectors. The content of this course will help prepare the student for Calculus. Calculators and graphing utilities are used as tools to verify and investigate mathematical concepts and ideas.

AP Pre-Calculus (25141, 25141CVA)

Grade Level: 9-12

Level of Difficulty: Advanced Placement **Credit:** 1 Unit **Weight:** 0.05

Prerequisite: Trigonometry

Standard of Learning End-of-Course Test: No

Course Description: In AP Precalculus, students explore everyday situations and phenomena using mathematical tools and lenses. This course prepares students

for college-level mathematics and science courses. The framework delineates content and skills common in mathematics, physics, biology, health science, social science, and data science. Students will study each function type through their graphical, numerical, verbal, and analytical representations and their applications in a variety of contexts. Students will select, construct, and validate function models using transformations of functions and regressions. Through this course, students will strengthen their procedural and symbolic fluency skills needed for higher-level mathematics. Students will learn how to observe, explore, and build mathematical meaning from dynamic systems.

Calculus (25121, 25121CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Mathematical Analysis or AP Pre-Calculus

Standard of Learning End-of-Course Test: No

Course Description: This course is intended for students who have a thorough knowledge of analytic geometry, and functions (including trigonometric functions, logarithmic functions, and exponential functions). The course provides students with a study of limits, continuity of functions, the derivative and its applications, and the definite integral and its applications. All topics will be investigated analytically, numerically, and graphically. Calculators and graphing utilities will be used as a tool to verify and investigate mathematical concepts and ideas. This course can be used to prepare students for the rigors of AP Calculus AB (25241).

Advanced Placement Calculus AB (25241, 25241CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Calculus strongly recommended; successful completion of Math Analysis or AP Pre-Calculus w/ parent letter

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: This course is equivalent to a first-semester college calculus course. The topics are aligned with the College Board AP Course Description, which states, "Calculus AB is primarily concerned with developing the student's understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important" (www.collegeboard.com). Graphing utilities are mandatory but will be used sparingly.

Advanced Placement Calculus BC (25341, 25341CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Advanced Placement Calculus AB

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: This is a challenging and demanding course that is equivalent

to a second-semester college calculus course. The topics are aligned with the College Board Advanced Placement Course Description, which states that Calculus BC contains “extensions of Calculus AB rather than an enhancement; common topics require a similar depth of understanding” (www.collegeboard.com). New topics are sequences and series, parametric and polar functions, Euler’s method, improper integrals, and various integration techniques.

Dual Enrollment Math 111 - Basic Technical Mathematics (25051, 25051CVA)

Grade Level: Grades 10-12

Level of Difficulty: Dual Enrollment **Credit:** 1 Unit **Weight:** .05

Prerequisite: Algebra II or AFDA

Standard of Learning End-of-Course Test: No

Course Description: This rigorous course is offered for dual enrollment between Chesapeake Public Schools and Tidewater Community College. Provides a foundation in mathematics with an emphasis on arithmetic, unit conversion, basic algebra, geometry, and trigonometry. This course is intended for CTE programs.

Dual Enrollment Math 161 - Pre-Calculus 1 (25151, 25151CVA)

Grade Level: Grades 10-12

Level of Difficulty: Dual Enrollment **Credit:** 1 Unit **Weight:** .05

Prerequisite: Algebra II

Standard of Learning End-of-Course Test: No

Course Description: This rigorous course is offered for dual enrollment between Chesapeake Public Schools and Tidewater Community College. This course presents topics in power, polynomial, rational, exponential, logarithmic functions, and systems of equations in order to prepare students for a course in statistics or applied calculus sequence. This is accomplished by providing students with the necessary competencies in algebra and functions. Precalculus I can also be applied in conjunction with Precalculus II in preparation for a course in calculus with analytic geometry.

Computer Science (27011, 27011CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Algebra II or currently enrolled in Algebra II

Standard of Learning End-of-Course Test: No

Course Description: The Computer Science standards outline course content with an emphasis on the principles underlying computer science. This course provides a foundation for Advanced Placement Computer Science with topics that include: computer systems, algorithmic analysis, objects and primitive data, data structures, selection and control statements, Boolean logic, writing and implementing classes in an OOPs environment, arrays, lists, inheritance, and polymorphism. Students in this course will expand their programming skills and begin to think about and analyze their own problem-solving process. Students continue to develop the ideas and practices of computational thinking and

consider how computing impacts the world. Programmable computing tools will be used to facilitate design, analysis, and implementation of computer programs. Students exploring and creating computer programs, facilitating reasoning and problem-solving, and verifying solutions should use these tools. The course may conclude with Web Applets and GUI input/output implemented in a complete student-designed application.

Advanced Placement Computer Science Principles (27241, 27241CVA)

Grade Level: Grades 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Algebra I

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical.

Advanced Placement Computer Science A (27141, 27141CVA)

Grade Level: Any grade level with appropriate prerequisite requirement

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Prerequisite: Algebra II

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: The College Board describes Advanced Placement Computer Science as a course that “emphasizes object-oriented programming methodology with a concentration on problem-solving and algorithm development and is meant to be the equivalent of a first-semester college-level course in Computer Science” (www.collegeboard.com).

MUSIC COURSE OFFERINGS

Band 9 (66010)

Grade Level: 9

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Successful completion of Band 8 or Audition

Standard of Learning End-of-Course Test: No

Course Description: Students continue to develop skills learned in the middle school band classes. More advanced techniques and repertoire are emphasized, and increased performance opportunities are offered.

Symphonic Band (66110)**Grade Level:** 9-12**Level of Difficulty:** Academic **Credit:** 1 **Credit Weight:** None**Prerequisite:** Audition**Standard of Learning End-of-Course Test:** No**Course Description:** Students use the skills learned in previous band classes in the execution of music at various levels of difficulty. This course is performance-oriented.**Symphonic Band – Honors Credit (66120)****Grade Level:** 11-12**Level of Difficulty:** Honors **Credit:** 1 **Credit Weight:** 0.025**Prerequisite:** Audition, interview and passing grade on written eligibility test**Standard of Learning End-of-Course Test:** No**Course Description:** Students use the skills learned in previous band classes in the execution of music at various levels of difficulty. This course is performance-oriented. Because of the weighted credit received for this course, students are expected to fulfill additional requirements outside the regular class rehearsal, including extra performances, research, composition, and other written work.**Concert Band (66210)****Grade Level:** 9-12**Level of Difficulty:** Academic **Credit:** 1 **Credit Weight:** None**Prerequisite:** Audition**Standard of Learning End-of-Course Test:** No**Course Description:** Students continue to develop fundamentals of music reading, tone production, and pitch awareness. Many performance opportunities are provided.**Percussion Ensemble (66310)****Grade Level:** 9-12**Level of Difficulty:** Academic **Credit:** 1 **Credit Weight:** None**Prerequisite:** Audition**Standard of Learning End-of-Course Test:** No**Course Description:** Students who have reached an acceptable level of performance proficiency on percussion instruments participate in the study and performance of selected repertoire and techniques.**Wind Ensemble (66510)****Grade Level:** 9-12**Level of Difficulty:** Academic **Credit:** 1 **Credit Weight:** None**Prerequisite:** Audition**Standard of Learning End-of-Course Test:** No

Course Description: As in Symphonic Band, students apply skills used in previous band classes in the execution of music at various levels of difficulty. This course is performance-oriented and offers students an opportunity to develop advanced performance techniques for wind instruments.

Wind Ensemble – Honors Credit (66520)

Grade Level: 11-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Audition, interview and passing grade on written eligibility test

Standard of Learning End-of-Course Test: No

Course Description: As in Symphonic Band, students apply skills used in previous band classes in the execution of music at various levels of difficulty. This course is performance-oriented and offers students an opportunity to develop advanced performance techniques for wind instruments. Because of the weighted credit received for this course, students are expected to fulfill additional requirements outside the regular class rehearsal, including extra performances, research, composition, and other written work.

Jazz Ensemble (66410)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Audition and membership in the appropriate curricular ensemble (i.e., Symphonic Band, Concert Band, or Wind Ensemble)

Standard of Learning End-of-Course Test: No

Course Description: Students who meet the appropriate performance requirements will study and perform selected literature in a variety of jazz styles.

Treble Chorus (64410)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Students demonstrating higher vocal pitch characteristics will participate in a performance ensemble while developing vocal technique and music literacy through the study of diverse musical repertoire.

Basso Chorus (64510)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Students demonstrating lower vocal pitch characteristics will participate in a performance ensemble while developing vocal technique and music literacy through the study of diverse musical repertoire.

Select Mixed Chorus (64110)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Audition

Standard of Learning End-of-Course Test: No

Course Description: Students participate in a performance-oriented ensemble in which a variety of musical styles are studied and performed, while musicianship and vocal techniques are reviewed and developed.

Select Mixed Chorus – Honors Credit (64120)

Grade Level: 11-12

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Prerequisite: Audition, interview and passing grade on written eligibility test

Standard of Learning End-of-Course Test: No

Course Description: Students participate in a performance-oriented ensemble in which a variety of musical styles is studied and performed, while musicianship and vocal techniques are reviewed and developed. Because of the weighted credit received for this course, students are expected to fulfill additional requirements outside the regular class rehearsal, including extra performances, research, composition, and other written work.

Select Treble Chorus (64310)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Audition

Standard of Learning End-of-Course Test: No

Course Description: Students demonstrating higher vocal pitch characteristics will participate in an advanced performance ensemble while developing vocal technique and music literacy through the study of diverse musical repertoire.

Select Choral Ensemble (64210)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Audition

Standard of Learning End-of-Course Test: No

Course Description: Students participate in a smaller, more select ensemble that studies and performs a choral repertoire of a high level of difficulty with increased performance opportunities and requirements.

Select Choral Ensemble – Honors Credit (64220)

Grade Level: 11-12

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Prerequisite: Audition, interview and passing grade on written eligibility test

Standard of Learning End-of-Course Test: No

Course Description: Students participate in a smaller, more select ensemble that studies and performs choral repertoire of a high level of difficulty with increased performance opportunities and requirements. Because of the weighted credit received for this course, students are expected to fulfill additional requirements outside the regular class rehearsal, including extra performances, research, composition, and other written work.

Mixed Chorus (64010)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Students participate in various basic choral activities while learning and reviewing performance skills and developing music literacy.

Orchestra (65010)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Audition

Standard of Learning End-of-Course Test: No

Course Description: Students use the skills learned in previous string orchestra classes in the execution of music at various levels of difficulty. This course is performance-oriented and involves both small and large ensemble experience

Chamber Orchestra (65110)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Audition

Standard of Learning End-of-Course Test: No

Course Description: Students participate in a smaller ensemble designed for select students who are capable of performing advanced string music literature.

Chamber Orchestra – Honors Credit (65120)

Grade Level: 11-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Audition, interview and passing grade on written eligibility test

Standard of Learning End-of-Course Test: No

Course Description: Students participate in a smaller ensemble designed for select students who are capable of performing advanced string music literature. Because of the weighted credit received for this course, students are expected to fulfill additional requirements outside the regular class rehearsal, including extra performances, research, composition, and other written work.

Concert Orchestra (65210)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Audition

Standard of Learning End-of-Course Test: No

Course Description: Students use skills learned in previous string orchestra classes in the execution of music at a higher level of difficulty. This course is performance-oriented.

Concert Orchestra – Honors Credit (65220)

Grade Level: 11-12

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Prerequisite: Audition, interview and passing grade on written eligibility test

Standard of Learning End-of-Course Test: No

Course Description: Students use skills learned in previous string orchestra classes in the execution of music at a higher level of difficulty. This course is performance-oriented. Because of the weighted credit received for this course, students are expected to fulfill additional requirements outside the regular class rehearsal, including extra performances, research, composition, and other written work.

Music Survey (67111)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Students study and experience the importance of music as an art form, as a mode of expression, and as a record of social history. Various styles of music (e.g., pop/rock, jazz, classical, and multicultural) are included in the course of study.

Adapted Music Survey (67100)

Grade Level: 9-12

Level of Difficulty: Developmental **Credit:** 1 **Credit Weight:** None

Prerequisite: Applied Studies Diploma Students only

Standard of Learning End-of-Course Test: No

Course Description: Students study and experience the importance of music as an art form, as a mode of expression, and as a record of social history. Students may experience music through playing various instruments and listening to recorded presentations based on their developmental needs.

Beginning Guitar (67011, 67011CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Students learn basic performance skills on the acoustic guitar and the fundamentals of music reading. Guitars are available for student use in school.

Guitar II (67012, 67012CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Successful completion of Beginning Guitar or audition

Course Description: Students will learn and perform advancing guitar techniques within a variety of musical styles and genres. Students will gain an advanced understanding of standard notation and guitar tablature as demonstrated through individual and ensemble performances.

Advanced Guitar Techniques (67021)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisites: Beginning Guitar and Guitar II or Audition

Standard of Learning End-of-Course Test: No

Course Description: Advanced guitar techniques will provide interested musicians with an opportunity to continue guitar studies and will also include greater exposure to performing musical literature. Students will learn advanced guitar techniques with an emphasis on classical guitar styles. Students will learn to perform expressively and independently a variety of literature from the classical guitar repertoire.

Music Theory (67211, 67211CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None, however, previous experience in a performance music class is helpful

Standard of Learning End-of-Course Test: No

Course Description: Students study basic melodic, rhythmic, harmonic notation, and nomenclature as well as part-writing, form, and score analysis. Students will also develop listening and aural skills.

Advanced Placement Music Theory (67241, 67241CVA)

Grade Level: 11-12

Level of Difficulty: Advanced Placement **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: Music Theory and/or approval of instructor

Standard of Learning End-of-Course Test: No

Course Description: Students participate in an intensive study of the theoretical structure of music with an emphasis on the acquisition of aural skills and competencies. This course is designed to prepare students for the Advanced Placement examination in music theory.

PE AND HEALTH COURSE OFFERINGS

Physical Education/Health I (59011, 59011CVA)

Grade Level: 9

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Students progress from modified movement forms to more complex physical activities, demonstrating basic skills, strategies, and tactics. They apply key movement principles, assess their performance, and develop a personal fitness plan for improvement. They make independent decisions, respect others, resolve conflicts, and uphold fair play and ethics. Students plan for fitness, achieve health-enhancing levels of personal fitness, and set lifelong health goals, integrating concepts like risky behavior awareness, disease prevention, wellness, and community health resources. They gain competence in health and fitness and actively contribute to healthy lifestyles for themselves, their families, and their communities, with training in CPR, first aid, and AED.

Health, PE & Driver Education II (59111, 59111CVA)

Grade Level: 10

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Physical Education/Health I

Standard of Learning End-of-Course Test: No

Course Description: Students are proficient in fundamental movement skills and self-selected physical activities for lifelong participation. They apply key movement and fitness principles, demonstrate leadership, respect others, and avoid unsafe situations. Students understand how physical activity interests and abilities change over time and are competent in lifelong activities. They plan, assess, and adjust a personal fitness plan and are prepared to lead an active lifestyle. Students demonstrate comprehensive health and wellness knowledge, reflect good health behaviors, and promote wellness in the community. Driver Education is also included in the Health curriculum.

Personal Fitness I Grade 9 (59511, 59511CVA)

Grade Level: 9-10

Level of Difficulty: Academic **Credit:** 1 Elective **Credit Weight:** None

Prerequisite: Physical Education/Health I and II

Standard of Learning End-of-Course Test: No

Course Description: This course focuses on fitness, strength training, physical conditioning, and lifetime health concepts, activities and knowledge to promote health and wellness. This course is structured to develop individualized knowledge of weight training and physical conditioning for the beginning student and the advanced student. The course requires mastery of training principles and a thorough understanding of fitness center safety rules prior to participation in weight room laboratory experiences.

Personal Fitness II Grade 10 (59611, 59611CVA)

Grade Level: 9-10

Level of Difficulty: Academic **Credit:** 1 Elective **Credit Weight:** None

Prerequisite: Physical Education/Health I and II

Standard of Learning End-of-Course Test: No

Course Description: This course that focuses on fitness, strength training, physical conditioning, and lifetime health concepts, activities and knowledge to promote health and wellness. This course is structured to develop individualized knowledge of weight training and physical conditioning for the beginning student and the advanced student. The course requires mastery of training principles and a thorough understanding of fitness center safety rules prior to participation in weight room laboratory experiences.

Advanced (Elective) Physical Education 11 (59211, 59211CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Physical Education/Health I and II

Standard of Learning End-of-Course Test: No

Course Description: Advanced Physical Education offers further development of skills in some activities chosen by students and teachers. Emphasis is placed on fitness appraisal, nutrition, flexibility, cardiovascular endurance, muscle strength and endurance, body composition, and weight management. These courses also offer opportunities for practical experiences in coaching, scoring, officiating, and sportsmanship

Advanced (Elective) Physical Education Grade 12 (59311, 59311CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Physical Education/Health I and II

Standard of Learning End-of-Course Test: No

Course Description: Advanced Physical Education offers further development of

skills in some activities chosen by students and teachers. Emphasis is placed on fitness appraisal, nutrition, flexibility, cardiovascular endurance, muscle strength and endurance, body composition, and weight management. These courses also offer opportunities for practical experiences in coaching, scoring, officiating, and sportsmanship

Adapted Physical Education

These are modified programs of developmental activities, games, sports, and rhythms designed to provide each student with opportunities to develop organic vigor, muscular strength, and endurance within the limits of the individual's abilities. The skills taught in all adaptive classes will depend on the individual's abilities and on medical advice.

Adapted Physical Education/Health 9 (59001)

Grade Level: 9

Level of Difficulty: Developmental **Credit:** 1 Elective **Credit Weight:** None

Prerequisite: Applied Studies Diploma Students only

Standard of Learning End-of-Course Test: No

Course Description: This course is a general review of eighth-grade physical education with an emphasis on rules and basic techniques necessary to compete effectively in sports. Topics discussed in health are disease prevention and control, consumer and environmental health, first aid, personal and family survival, and Family Life Education. Hands-on CPR, basic first aid, and AED training will be taught in this course.

Adapted Physical Education /Health 10 (59101)

Grade Level: 10

Level of Difficulty: Developmental **Credit:** 1 Elective **Credit Weight:** None

Prerequisite: Physical Education 9, Applied Studies Diploma Students only

Standard of Learning End-of-Course Test: No

Course Description: The development of individual skills is emphasized in golf, badminton, and tennis. Participation in the fall, winter, and spring sports includes game situations and tournaments. In health, the classroom requirements of driver education will be taught.

SCIENCE COURSE OFFERINGS

Environmental Science (30311, 30311CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standards of Learning End-of-Course Test: No

Course Description: Environmental science is the study of natural processes in the world and how the processes are impacted by human activities. Topics include

scientific inquiry, the physical world, the living environment, resource conservation, humans' impact on the planet, and legal and civic responsibilities. Students will collect and analyze data through descriptive and comparative studies, as well as investigation (e.g., meaningful watershed educational experiences.)

The goal of this course is to provide the knowledge and skills necessary for students to evaluate diverse points of view and make informed decisions to protect and restore the environment. Note: Environmental science fulfills either a biology or an earth science discipline credit and qualifies as a prerequisite for an Earth Science II course.

Earth Science (30011, 30011CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standards of Learning End-of-Course Test: Yes

Course Description: This laboratory course focuses on the complex nature of Earth, including Earth's composition, structure, processes, and history; its atmosphere, freshwater, and oceans; and its environment in space as a set of complex, interacting and overlapping systems. Students explore the nature of science and learn to interpret maps, charts, tables, and profiles; use technology to collect, analyze, and report data; and utilize science skills in systematic investigation. Problem-solving and decision-making are integral, especially as they relate to the costs and benefits of utilizing Earth's resources. Mathematics and computational thinking are important as students advance in their scientific thinking.

Honors Earth Science (30021, 30021CVA)

Grade Level: 9-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: None

Standards of Learning End-of-Course Test: Yes

Course Description: This rigorous laboratory course focuses on the complex nature of Earth, including Earth's composition, structure, processes, and history; its atmosphere, freshwater, and oceans; and its environment in space as a set of complex, interacting and overlapping systems. Students explore the nature of science and learn to interpret maps, charts, tables, and profiles; use technology to collect, analyze, and report data; and utilize science skills in systematic investigation. Problem-solving and decision-making are integral, especially as they relate to the costs and benefits of utilizing Earth's resources. Mathematics and computational thinking are important as students advance in their scientific thinking. This is a very rigorous course with a strong research component that uses the experimental design model of investigation. Honors Earth Science students will be challenged to learn, research, and present topics in Earth Science in greater depth, utilizing both classroom experimentation and literature reviews from written and electronic resources.

Astronomy (30221, 30221CVA)**Grade Level:** 10-12**Level of Difficulty:** Honors **Credit:** 1 Credit **Weight:** 0.025**Prerequisite(s):** None**Standard of Learning End-of-Course Test:** No

Course Description: This laboratory course introduces students to the concepts of modern astronomy, the origin and history of the Universe, and the formation of the Earth and the solar system. Astronomical phenomena are explored and explained using the laws of physics, including mathematical models and calculations. Topics include planets, stars, the Milky Way and other galaxies, and black holes. Students engage in descriptive and comparative studies as well as investigations.

Adv Survey of Earth Science Topics – Meteorology (30012, 30012CVA)**Grade Level:** 10-12**Level of Difficulty:** Academic **Credit:** 1 Credit **Weight:** None**Prerequisite(s):** None**Standard of Learning End-of-Course Test:** No

Course Description: This laboratory course provides a detailed look at Earth Systems including interactions between the lithosphere, hydrosphere, atmosphere, biosphere and the cryosphere. Special emphasis is given to the process of heat transfer between the oceans and the atmosphere. Special emphasis is also given to environmental issues such as the enhanced greenhouse effect (global warming), ozone depletion, and air pollution sources, both natural and man-induced. Climate change throughout Earth's history is discussed by examining the effects of plate tectonics, the Milankovitch theory, sunspot activity, and others. The course examines the effects the topography of Earth's surface has on the weather and climate. A large part of the course investigates the dynamics of the atmosphere. Topics include atmospheric composition and structure, heating and temperature, moisture and humidity, stability and cloud formation, air pressure, and winds, cyclogenesis, fronts, tornadoes, and hurricanes.

Oceanography (30111, 30117CVA)**Grade Level:** 10-12**Level of Difficulty:** Academic **Credit:** 1 Credit **Weight:** None**Prerequisite:** None**Standard of Learning End-of-Course Test:** No

Course Description: Oceanography is the science of the ocean. This course is based on the Virginia Standards of Learning of Biology, Chemistry, Earth Science, and Physics and includes topics as diverse as the history of oceanography, the geologic forces that created and continue to impact the ocean floor, water chemistry, wave action, marine ecology, and human impacts on the ocean. Students will explore the ocean world through scientific investigations, data analysis, and projects.

Advanced Placement Environmental Science (34041, 34041CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Science Prerequisite(s): Biology and Chemistry

Mathematics Prerequisite(s): Algebra I

Standard of Learning End-of-Course Test: No

Course Description: This one-semester course provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course helps students identify and analyze natural and human-induced environmental problems. It enables them to learn how to assess the risks associated with these problems and evaluate alternative solutions for resolving and preventing them. Students cultivate their understanding of environmental science through classroom study and activities as well as hands-on laboratory work as they explore ecosystems, biodiversity, populations, earth systems and resources, land and water use, energy, pollution, and global change.

DE Foundations of Environmental Science ENV 121 (34051, 34051CVA)

Grade Level: 11-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Science Prerequisite(s): Biology

Standard of Learning End-of-Course Test: No

Course Description: Focuses on basic physical, chemical, and biological principles with an emphasis on the interactions between humans and the environment. Assignments require college-level reading fluency, coherent written and oral communication, and basic mathematical skills. Intended for students not majoring in science.

DE Applications in Environmental Science ENV 122 (34052, 34052CVA)

Grade Level: 11-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Science Prerequisite(s): Biology

Standard of Learning End-of-Course Test: No

Course Description: Dual Enrollment Applications in Environmental Science explores fundamental components and interactions that make up the natural systems of the earth and introduces the basic science concepts in the disciplines of biological, chemical, and earth sciences that are necessary to understand and address environmental issues. Topics covered include Human population and environmental stress; Energy Consumption; Soil Formation; Land Use; Biodiversity; Indoor/Outdoor pollution; Climate Change; Ozone Depletion; Waste Disposal; and Sustainability. NOTE: At TCC, this course is designed for students NOT majoring in science.

Dual Enrollment Geology (30051)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: None

Standard of Learning End of Course Test: No

Course Description: Physical geology introduces the composition and structure of the earth and its modifying agents and processes. This course will investigate the formation of minerals and rocks, weathering, erosion, crustal deformation, and geologic hazards. The course reinforces the students' appreciation for geology by stressing a practical and application-level approach to the subject material.

Biology (31011, 31011CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Science Prerequisite: None

Standards of Learning End-of-Course Test: Yes

Course Description: This laboratory course provides students with a detailed understanding of living systems including biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time. Skills necessary to examine scientific explanations, conduct experiments, analyze and communicate information, and gather and use information in scientific literature continue to be important. The importance of scientific research that validates or challenges ideas is emphasized at this level. Tools and technology, including calculators, computers, probes, sensors, and microscopes, are used when feasible. Students will use chemicals and equipment safely. Mathematics, computational thinking, and experiences in the engineering design process are important as students advance in their scientific thinking.

Honors Biology (31021, 31021CVA)

Grade Level: 9-12

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Science Prerequisite: None

Standards of Learning End-of-Course Test: Yes

Course Description: This rigorous laboratory course provides students with a detailed understanding of living systems including biochemical life processes, cellular organization, mechanisms of inheritance, dynamic relationships among organisms, and the change in organisms through time. Skills necessary to examine scientific explanations, conduct experiments, analyze and communicate information, and gather and use information in scientific literature continue to be important. The importance of scientific research that validates or challenges ideas is emphasized at this level. Tools and technology, including calculators, computers, probes, sensors, and microscopes, are used when feasible. Students will use chemicals and equipment safely. Mathematics, computational thinking,

and experiences in the engineering design process are important as students advance in their scientific thinking. Honors biology students will be challenged to learn, research, and present topics in biology in greater depth, utilizing both classroom experimentation and literature reviews from written and electronic resources.

Ecology (35011, 35011CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite(s): None

Standard of Learning End-of-Course Test: No

Course Description: Biology II Ecology provides a study of the interrelationships and interactions of the biotic and abiotic parameters of the marine environment. Marine life, marine communities, and marine ecosystems are studied in detail as well as the impact of human activities on the marine environment. A detailed study of the Chesapeake Bay is included to enable students to gather information about our local marine community.

Human Anatomy and Physiology (36011, 36011CVA)

Grade Level: 10-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** .025

Prerequisite(s): Biology; Chemistry strongly recommended

Standard of Learning End-of-Course Test: No

Course Description: This course is valuable to students who have a unique interest in the study of the human body systems. The course presents all structural levels composing the human body. Each of the essential life functions is discussed and illustrated using a biological approach. This course may also serve as a foundational basis for further study in various health and/or medical fields.

Dual Enrollment Human Anatomy & Physiology I (36051)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 Credit **Weight:** .05

Prerequisite: Successful completion of DE Biology or "C" or better in AP Bio and earned a 4 or 5 on AP Bio Exam

Standard of Learning End-of-Course Test: No

Course Description: DE Human Anatomy & Physiology I presents the study of anatomy & physiology including anatomical terminology, homeostasis, histology, integumentary system, skeletal system, muscular system, and nervous system.

Dual Enrollment Human Anatomy & Physiology II (36052)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 Credit **Weight:** .05

Prerequisite: "C" or better in DE Human Anatomy & Physiology I

Standard of Learning End-of-Course Test: No

Course Description: Dual Enrollment Human Anatomy & Physiology II continues the study of anatomy and physiology including the endocrine system; blood and

cardiovascular system; lymphatic system and immunity; respiratory system; urinary system; fluid, electrolyte, and acid-base balance; digestive system and nutrient metabolism; reproductive system; and prenatal development.

Forensic Science (37721, 37721CVA)

Grade Level: 11-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** .025

Science Prerequisite(s): Biology & Chemistry

Standards of Learning End-of-Course Test: No

Forensic Science is a laboratory course, which allows the students to take on the various roles of a crime scene investigator, scientist, and medical examiner in order to collect and evaluate evidence in a problem-solving environment. Students will develop scientific bench techniques necessary for the handling and evaluation of evidence. Students will develop the field skills necessary to collect and maintain a chain of evidence, explore the history of DNA studies and the current standard acceptance of DNA in courts, and explore career opportunities involved in the medical, law enforcement, scientific, and legal aspects of forensic investigation.

Advanced Placement Biology (31041, 31041CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 2 Credits (1 Science and 1 Elective) **Weight:** 0.05 per credit

Prerequisite(s): Biology, Success in Chemistry is the best predictor of success in AP Biology

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: Advanced Placement Biology is designed to place emphasis upon the major topics covered in introductory college-level biology courses. Molecular, cellular, organism and population biology are stressed. Students also develop an understanding of the characteristics, unity, and diversity of living things while collecting, analyzing, and interpreting biological data. This course is also designed to prepare students to achieve a satisfactory score on the Advanced Placement examination in biology to receive college credit. In meeting the rigorous course standards, students will be encouraged to share their ideas, use the language of biology, discuss problem-solving techniques, and communicate effectively. Students will be challenged to learn, research, utilize both classroom experimentation and literature reviews from written and electronic resources, and present topics in biology in greater depth.

Dual Enrollment Biology I (31051)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 Credit **Weight:** .05

Science Prerequisite(s): Honors Biology and Honors Chemistry

Standards of Learning End-of-Course Test: No

Course Description: DE Biology I: Focuses on biological processes with a chemical foundation, including macromolecules, cellular structure, metabolism, and genetics in an evolutionary context. Explores the core concepts of evolution;

structure and function; information flow, storage and exchange; pathways and transformations of energy and matter; and systems biology. Emphasizes the process of science, interdisciplinary approach, and relevance of biology to society. Topics covered in DE Biology I: Introduction to Biology; Biochemical Foundation; Cell Structure & Function; Energetics; Cell Reproduction; Mendelian Genetics; Molecular Biology; and Evolution.

Dual Enrollment Biology II (31052)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 Credit **Weight:** .05

Science Prerequisite(s): DE Biology I

Standards of Learning End-of-Course Test: No

Course Description: DE Biology II: Focuses on biological processes with a chemical foundation, including macromolecules, cellular structure, metabolism, and genetics in an evolutionary context. Explores the core concepts of evolution; structure and function; information flow, storage and exchange; pathways and transformations of energy and matter; and systems biology. Emphasizes the process of science, interdisciplinary approach, and relevance of biology to society. Topics covered in DE Biology II: Diversity of Species; Evolution of Multicellularity; Structure and Function in Plants; Structure and Function in Animals; Basics of Ecology; Evolutionary Theory; and Speciation.

Chemistry (32011, 32011CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Science Prerequisite(s): Biology strongly recommended

Mathematics Prerequisite(s): Algebra I

Standards of Learning End-of-Course Test: Yes

Course Description: This laboratory course provides students with a detailed understanding of the interaction of matter and energy. This interaction is investigated using experimentation, mathematical reasoning, and problem-solving. Areas of study include atomic theory, chemical bonding, chemical reactions, molar relationships, Kinetic Molecular Theory, and thermodynamics. Concepts are illustrated with current practical applications that should include examples from environmental, nuclear, organic, and biochemistry content areas. Technology, including graphing calculators, computers, simulations, and probeware, are used when feasible. Students will use chemicals and equipment safely. Mathematics, computational thinking, and experience in the engineering design process are essential as students advance in their scientific thinking.

Honors Chemistry (32021, 32021CVA)

Grade Level: 9-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Science Prerequisite(s): Biology strongly recommended

Mathematics Prerequisite: Algebra I

Standards of Learning End-of-Course Test: Yes

Course Description: This rigorous laboratory course provides students with a detailed understanding of the interaction of matter and energy. This interaction is investigated using experimentation, mathematical reasoning, and problem-solving. Areas of study include atomic theory, chemical bonding, chemical reactions, molar relationships, Kinetic Molecular Theory, and thermodynamics. Concepts are illustrated with current practical applications that should include examples from environmental, nuclear, organic, and biochemistry content areas. Technology, including graphing calculators, computers, simulations, and probeware, are used when feasible. Students will use chemicals and equipment safely. Mathematics, computational thinking, and experience in the engineering design process are essential as students advance in their scientific thinking. Honors chemistry students will be challenged to learn, research, and present topics in chemistry in greater depth, utilizing both classroom experimentation and literature reviews from written and electronic resources.

Chemistry II (32022, 32022CVA)

Grade Level: 10-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Chemistry and Algebra 1

Standard of Learning End-of-Course Test: No

Course Description: Advanced Studies provides students with an in-depth exploration of concepts originally encountered in Chemistry I. Advanced chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry.

Advanced Placement Chemistry (32041, 32041CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 2 Credits (1 Science and 1 Elective) **Weight:** 0.05 per credit

Science Prerequisite(s): Chemistry **Mathematics Prerequisite(s):** Algebra II

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: This course is designed to place emphasis on the major topics covered in introductory college-level chemistry courses. This college-level course will provide a depth of understanding of the fundamentals and competencies needed to apply chemical calculations and the mathematical formulation of principles. This course is designed to prepare students for the Advanced Placement examination in chemistry to receive college credit. In meeting the rigorous course standards, students will be encouraged to share their ideas, use the language of chemistry, discuss problem-solving techniques, and

communicate effectively. Advanced Placement chemistry students will be challenged to learn, research, utilize both classroom experimentation and literature reviews from written and electronic resources, and present chemistry topics in greater depth.

Dual Enrollment Chemistry I (32051)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 Credit **Weight:** .05

Science Prerequisite(s): 3.0 GPA, "C" or better in Honors Chem

Mathematics Prerequisite(s): "C" or better in Alg II or higher math course

Standards of Learning End-of-Course Test: No

Course Description: Dual Enrollment Chemistry I explores the fundamental laws, theories, and mathematical concepts of chemistry. Topics covered include Basic Concepts of Chemistry; Tools of Quantitative Chemistry; Atoms, Molecules and Ions; Chemical Reactions; Stoichiometry; Gases and Their Properties; Energy and Chemical Reactions; the Structure of Atoms and Periodic Trends; Bonding and Molecular Structure; and Orbital Hybridization.

Dual Enrollment Chemistry II (32052)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 Credit **Weight:** .05

Science Prerequisite(s): "C" or higher in DE Chemistry I

Standards of Learning End-of-Course Test: No

Course Description: Dual Enrollment Chemistry II explores the fundamental laws, theories, and mathematical concepts of chemistry. Topics covered include Organic Chemistry; Intermolecular Forces and Liquids; Solutions and Their Behavior; Chemical Kinetics; Equilibria; Acids and Bases; Thermodynamics; Electrochemistry; and Transition Elements and/or Nuclear Chemistry as time permits.

Honors Physics (33021, 33021CVA)

Grade Level: 10-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Science Prerequisite(s): Biology and Chemistry strongly recommended

Mathematics Prerequisite(s): Algebra II with a C or higher recommended

Standard of Learning End-of-Course Test: No

Course Description: This rigorous laboratory course emphasizes the use of mathematics, including algebra and trigonometry, to develop conceptual understandings of physical systems. Students explore in-depth the nature and characteristics of energy and its dynamic interaction with matter, including force and motion, energy transformations, wave phenomena, the electromagnetic spectrum, electricity, fields, and non-Newtonian physics. Technology, including graphing calculators, computers, and probeware, are used when feasible. Students will use equipment safely. Mathematics, computational thinking, and experience in the engineering design process are essential as students advance in their scientific thinking.

Advanced Placement Physics 1 (33041, 33041CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Science Prerequisite(s): Biology and Chemistry strongly recommended

Mathematics Prerequisite(s): Successful completion of Geometry and Algebra II

Standard of Learning End-of-Course Test: No (AP exam recommended)

Course Description: This course is designed to place emphasis on principal topics covered in a first-semester college course in algebra-based physics. AP Physics 1 is Algebra-Based. The course covers Newtonian mechanics (including rotational dynamics and angular momentum), work, energy, and power, mechanical waves, and sound. It will also introduce electric circuits. This course is designed to prepare students for the Advanced Placement examination in AP Physics 1.

Advanced Placement Physics 2 (33142, 33142CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Science Prerequisite(s): Physics or AP Physics 1 required; Biology and Chemistry strongly recommended

Mathematics Prerequisite(s): Successful completion of Algebra II and concurrently taking Trigonometry or an equivalent course

Standard of Learning End-of-Course Test: No

Course Description: This course is designed to place emphasis on principal topics covered in a second-semester college course in algebra-based physics. AP Physics 2 is Algebra-Based. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. This course is designed to prepare students for the Advanced Placement examination in AP Physics 2.

Advanced Placement Physics C: Mechanics (33341, 33341CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05

Science Prerequisite(s): Successful completion of any Physics course; Biology and Chemistry strongly recommended

Mathematics Prerequisite(s): Successful completion of any Calculus course

Standard of Learning End-of-Course Test: No (AP exam recommended)

Industry Credential: No

Course Description: AP Physics C: Mechanics is a one-semester, calculus-based, college-level physics course, especially appropriate for students planning to specialize or major in one of the physical sciences or engineering. Students cultivate their understanding of physics through classroom study and activities as well as hands-on laboratory work as they explore kinematics, Newton's laws of motion, work, energy and power, systems of particles and linear momentum, rotation, oscillations, and gravitation.

Dual Enrollment Physics I (33051)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1; 4 credit hours for TCC **Weight:** 0.05

Prerequisite: Math Analysis or DE/AP Precalculus

Standard of Learning End-of-Course Test: No

Course Description: Covers basic concepts of physics, including Newtonian mechanics, properties of matter, heat transfer, waves, fundamental behavior of gasses, optics, ionizing radiation, and fundamentals of electricity and magnetism. This course will expand on the VDOE Physics course, which includes Newtonian force and motion, energy transformations, wave phenomena and the electromagnetic spectrum, electricity, fields, and non-Newtonian physics.

Dual Enrollment Physics II (33052)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 CPS Credit **Weight:** 0.05 per credit

Prerequisite: DE Physics I (Physics 201)

Standard of Learning End-of-Course Test: No

Course Description: DE Physics II content includes mechanical waves, sound, electrostatics, Ohm's law and DC circuits, magnetic forces and magnetic fields, electromagnetic induction, ray optics, wave optics, and selected topics of modern physics. DE Physics II is part II of II and is a UCGS Transfer course.

Physics for Technology I (78411)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Elective Credit **Weight:** None

Science Prerequisite(s): Two Laboratory Science courses (for physics credit)

Mathematics Prerequisite: Algebra I

Standard of Learning End-of-Course Test: No

Industry Credential: No

Course Description: Students in this single-period laboratory science course apply physics and mathematics concepts through a unified systems approach to develop a broad knowledge base of the principles underlying modern technical systems. Students study seven technical principles: force, work, rate, resistance, energy, power, and force transformers, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment. This "principles and systems" approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance. Students must successfully complete the two-year sequence (Physics for Technology I and Physics for Technology II) in order to receive one unit of credit in Physics.

Physics for Technology II (78412)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite(s): Physics for Technology I

Science Prerequisite(s): Two Laboratory Science courses (for physics credit)

Mathematics Prerequisite: Algebra I

Industry Credential: No

Standard of Learning End-of-Course Test: No

Course Description: Students continue to apply physics and mathematics concepts through a unified systems approach to expand their knowledge base of the principles underlying modern technical systems. This course focuses on seven technical principles: momentum, waves, energy converters, transducers, radiation, optical systems, and time constants, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment. This “principles and systems” approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance. Students must successfully complete the two-year sequence (Physics for Technology I and Physics for Technology II) in order to receive one unit of credit in Physics. (An additional elective credit will also be awarded for completing the two-year sequence.)

HISTORY AND SOCIAL SCIENCE COURSE OFFERINGS

World History 1 to 1500 C.E. (40011, 40011CVA)

Grade Level: 9

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: Yes

Course Description: This course provides students with an overview of world geography and geographical concepts and enables students to explore the historical development of people, places, and patterns of life from ancient times and early civilizations until 1500 C.E. in terms of the impact on Western civilization. The study of history rests on knowledge of dates, names, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking: to raise questions and marshal evidence in support of their answers. Students engaged in historical thinking draw upon chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision-making. These skills are developed through the study of significant historical substance from the era or society being studied.

Honors World History 1 to 1500 C.E. (40021, 40021CVA)

Grade Level: 9

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: None

Standard of Learning End-of-Course Test: Yes

Course Descriptions: This course provides students with an overview of world geography and geographical concepts and an in-depth study of the historical development of people, places, physical geography as it has influenced and hindered the development of cultures from ancient times and early civilizations until renaissance in the 1500's; in terms of the impact on Western civilization. Specific attention concentrates on ideas, political institutions, the military, economics, religion, art, music, and architecture as components of man's cultural development. The study of history rests on knowledge of dates, names, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking: to raise questions and marshal evidence in support of their answers. Students engaged in historical thinking draw upon chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision-making. These skills are developed by studying significant historical content from the era or society being studied. This course can be taken instead of World History 1 to 1500 C.E.

World Geography (48011, 48011CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: Yes

Course Description: Focuses on the relationships among people, places, and environments that result in geographic patterns on the earth. The students will use geographic methods to compare and analyze landforms, climates, and natural resources, as well as the cultural, political, economic, and religious characteristics of the world regions. Students will use a variety of interdisciplinary sources, both primary and secondary, such as maps, pictures, and documents, to learn about the geography of different world regions.

World History 2 / 1500 C.E. to the Present (41011, 41011CVA)

Grade Level: 10

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: World History 1 to 1500 C.E.

Standard of Learning End-of-Course Test: Yes

Course Description: This modern world history course provides students with an overview of the history of human society that covers history and geography from 1500 C.E. renaissance to the present, with emphasis on Western Europe. Geographic influences on history continue to be explored, but increasing attention is given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that, in turn, produced political,

economic, social, religious, military, scientific, and cultural developments. Noteworthy people and events of the nineteenth and twentieth centuries will be emphasized for their strong connections to contemporary issues.

Honors World History 2 / 1500 C.E. to the Present (41021, 41021CVA)

Grade Level: 10

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: World History 1 to 1500 C. E. /Honors World History 1 to 1500 C.E.

Standard of Learning End-of-Course Test: Yes

Course Description: This modern world history course provides students with an overview and in-depth study of the history of human society that covers history and geography from 1500 C.E. renaissance to the present, with emphasis on Western Europe. Geographic influences on history continue to be explored, but increasing attention is given to political boundaries that developed with the evolution of nations. Significant attention will be given to the ways in which scientific and technological revolutions created new economic conditions that produced political, economic, social, religious, military, scientific, and cultural developments of strong national states, the age of revolutions, and the problems that exist today in modern nations.

Dual Enrollment Western Civilization 1 & 2 (41251/41351, 41251CVA/41351CVA)

Grade Level: 10

Level of Difficulty: Dual Enrollment **Credit:** 2 Credits (1 Social Science and 1 elective) **Weight:** .05 per credit

Prerequisite: World History 1 to 1500 C.E.

Standard of Learning End-of-Course Test: Yes (SOL for World History 2)

Course Description: This rigorous course is offered for dual enrollment between Chesapeake Public Schools and Tidewater Community College. Students will study and survey college-level Western Civilization from its beginning to the present. The first-semester course focuses on Western Civilization from the development of democracy through the rise of the sovereign state and provides three credit hours. The second-semester course surveys from the rise of the European State system to the Present and provides another three credit hours. Upon successfully completing both semesters, the student earns the state of Virginia requisite credit for World History II and six credits of college study. Students must complete and pass both semesters to meet graduation requirements.

Advanced Placement: European History (41241, 41241CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 2 Credits (1 Social Science and 1 Elective) **Weight:** 0.05 per credit

Prerequisite: Honors World History 1 to 1500 C.E.

Standard of Learning End-of-Course Test: Yes- World History 2; (AP exam recommended)

Course Description: This course is a freshman college-level study of European civilizations from the high Renaissance period to the recent past and to expose students to the factual narrative; student ability to analyze and express historical evidence and themes in writing. This period of emphasis recognizes the major topics covered by recent Advanced Placement European History examinations. The course is designed to cover two semesters of in-depth study that will focus on interpreting social, intellectual, and political themes that have changed the course of direction for the world. This course can be taken instead of World History 2 / 1500C.E. to the Present.

Advanced Placement: World History Modern (41141, 41141CVA)

Grade Level: 10-12

Level of Difficulty: Advanced Placement **Credit:** 1 Credit **Weight:** 0.05 per credit

Prerequisite: Honors Placement Requirements Recommended

Standard of Learning End of Course Test: Depending on grade level of student

Course Description: Following the College Board's suggested curriculum designed to parallel college-level World History courses, AP World History: Modern courses examine world history from 1200 CE to the present with the aim of helping students make connections of historical evolution across times and places. These courses highlight the interaction between humans and the environment; the development and interaction of cultures; state-building, expansion, and conflict; creation, expansion, and interaction of economic systems; development and transformation of social structures; and technology and innovation.

Virginia and United States History (42011, 42011CVA)

Grade Level: 11

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: Yes

Course Description: The overview course covers the standards for Virginia and United States History and includes the historical development of American ideas and institutions from the Age of Discovery and colonialism to WW2 and present. While focusing on political and economic history, the course provides students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Virginia history. Students should use historical and geographical analysis skills to explore in depth the events, people, and ideas that fostered our national identity.

Honors Virginia and United States History (42021, 42021CVA)

Grade Level: 11

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Prerequisite: None

Standard of Learning End-of-Course Test: Yes

Course Description: This course is an in-depth study of the period in United States history beginning with the Age of Discovery and colonialism to WW2 and present. Selected knowledge areas are based on the standards for VA and U.S. History and address the various ideas, thoughts, and philosophies that were the backbone of the political, economic, and social contributions of various groups of people and ideas that fostered U.S. national identity. Students will develop and use historical and geographical analysis skills to explore in-depth knowledge of American culture through a chronological survey of major issues, movements, people, and events in US and Virginia history. This course may be taken instead of VA and U.S. History.

Advanced Placement: United States History (42141, 42141CVA)

Grade Level: 11

Level of Difficulty: Advanced Placement **Credit:** 2 Credits (1 Social Science and 1 Elective) **Weight:** 0.05 per credit

Prerequisite: Honors Placement Requirements Recommended

Standard of Learning End-of-Course Test: Yes (AP exam recommended)

Course Description: This course is a freshman college-level study of American history from colonization to the present with special emphasis during the period 1790 to 1965. This period of emphasis recognizes the major topics covered by recent Advanced Placement American History examinations. The course is designed to cover two semesters, with the period of Reconstruction (1877) as the dividing point. This course can be taken instead of Virginia and United States History.

Dual Enrollment United States History 1 & 2 (42351/42451, 42351CVA/42451CVA)

Grade Level: 11

Level of Difficulty: Dual Enrollment **Credit:** 2 Credits (1 Elective and 1 Social Science) **Weight:** 0.05 per credit

Prerequisite: Honors Placement Requirements Recommended; Students must have placed into English 111 at TCC

Standard of Learning End-of-Course Test: Yes

Course Description: This rigorous course is offered for dual enrollment between Chesapeake Public Schools and Tidewater Community College. Students will study and survey college-level United States History from its beginning to the present. The first-semester course (HIS 121) focuses on United States History from Colonization through Reconstruction and provides three credit hours. The second-semester course (HIS 122) surveys from Reconstruction to the Present and provides another three credit hours. Upon successfully completing both semesters, the student earns the state of Virginia requisite credit for VA/US History and six credits of college study. Students must complete and pass both semesters to meet graduation requirements. Students should be highly motivated

and must have been placed into English 111 at TCC as a co-requisite.

Virginia and United States Government (43011, 43011CVA)

Grade Level: 12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: The course for Virginia and United States Government defines the knowledge that enables citizens to participate effectively in civic life. Students examine political institutions, fundamental constitutional principles, concepts of citizenship rights and responsibilities, the role of political parties and interest groups, and the importance of civic participation in the democratic process. The course may examine the structure and function of state and local government.

Honors Virginia and United States Government (43021, 43021CVA)

Grade Level: 12

Level of Difficulty: Honors **Credit:** 1 **Credit Weight:** 0.025

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course is an in-depth study that provides a comprehensive analysis of the American political and economic system with a comparison to that of other political and economic systems; and comprehensive analysis of the national court system with emphasis on court structure and landmark court cases. A major focus is given to the examination of civil rights and civil liberties. Local government is emphasized through the relationship with the state and federal government and current issues. This course may be taken instead of Virginia and the United States Government.

Advanced Placement: Government and Politics (43141, 43141CVA)

Grade Level: 12

Level of Difficulty: Advanced Placement **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: Honors Placement Requirements Recommended

Standard of Learning End-of-Course Test: No

Course Description: This course is a freshman college-level study of an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret American politics (local, state, and national levels) and the analysis of specific case studies familiarizing the student with various institutions, groups, beliefs, and ideas that make up the American political reality. The course covers constitutional underpinnings of the U.S. government, political beliefs and behaviors, political parties, and interest groups AP Government and Politics examinations. This course can be taken instead of Virginia and United States Government.

AP Economics

Grade Level: 11-12

Level of Difficulty: Advanced Placement **Credit:** 2 **Credit Weight:** 0.05

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: AP Microeconomics courses provide students with a thorough understanding of the principles of economics that apply to the functions of individual decision-makers (both consumers and producers). They place primary emphasis on the nature and functions of product markets, while also including a study of factor markets and the role of government in the economy. AP Macroeconomics courses provide students with a thorough understanding of the principles of economics that apply to an economic system as a whole. They place particular emphasis on the study of national income and price determination and developing students' familiarity with economic performance measures, economic growth, and international economics.

HISTORY AND SOCIAL SCIENCE ELECTIVE COURSE OFFERINGS

Introductory High School Humanities (46111)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course is an elective course that is a study of man's ideas and feelings about life; approached through the avenues of art, drama, literature, music, architecture, technology, philosophy, and religion of the cultures studied. This course will include identifying responses to cultural traditions, including viewing, listening, speaking, reading and writing, performing, and creating. It is offered for the purpose of broadening and deepening students' thinking. This course will use various films, slides, recordings, and books to assist with the study of creative thinking.

Introductory High School Sociology (46011, 46011CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course is an elective course that is a study of human behavior in society and looking at the ways people interact with one another. The course explores people's efforts to better understand relationships with others. Emphasis is also placed on the individual's role in society and culture (including marriage and family), institutions and norms, socialization, and social change.

Introductory High School Psychology (45011, 45011CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course is an elective course that is the study of psychology, its characteristics, and its development as a behavioral science. This course includes (but is not limited to) an overview of the fields of psychology. Major topics include learning, memory and thought, mental and physical being, human growth and development, personality and behavior, and abnormal psychology.

Multicultural USA: We Are The World (46211)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course is an elective course that focuses on the facets of our multicultural heritage (i.e., American immigration, multicultural groups in the United States, their customs and traditions). Areas of contribution to the quality of life in the United States will be studied through examining thirty-one of the American ethnic groups. The focus of the course will emphasize student input and participation in various activities.

Current United States and International Issues (46411, 46411CVA)

Grade Level: 11 - 12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course is an elective course. It studies contemporary U.S. Issues, including political, economic, and social issues facing the United States, with or without emphasis on the state and local issues. This course may focus on current issues or may examine selected issues that span throughout the 20th century to the present.

African American History (42511, 42511CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Academic Credit:** 1 Credit **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: None

Course Description: This course will survey African American history from precolonial Africa through the present. Students will be introduced to key concepts in African American history from early beginnings in indigenous Africa, the transatlantic slave trade, the arrival of Africans to America in 1619, the Revolutionary War, the Civil War, Emancipation, Reconstruction, the Civil Rights era and into the present. In addition, the course will highlight the social, cultural, and

political contributions of African Americans to American society. The course is supported by the local division curriculum and Virtual Virginia modules. The study of history rests on knowledge of dates, names, places, events, and ideas. Historical understanding, however, requires students to engage in historical thinking: to raise questions and marshal evidence in support of their answers. Students engaged in historical thinking draw upon chronological thinking, historical comprehension, historical analysis and interpretation, historical research, and decision-making. These skills are developed through the study of significant historical content from the era or society being studied.

Advanced Placement: Human Geography (48041, 48041CVA)

Grade Level: 9-12

Level of Difficulty: Advanced Placement **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: Honors Placement Requirements Recommended

Standard of Learning End-of-Course Test: Yes

Course Description: This course is a freshman college-level study of geography. The purpose of the course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice.

Advanced Placement: Psychology (45041, 45041CVA)

Grade Level: 11-12

Level of Difficulty: Advanced Placement **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: Honors Placement Requirements Recommended

Standard of Learning End-of-Course Test: No

Course Description: This course is a freshman college-level study of psychology. The purpose of the course is to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

Advanced Placement: Comparative Government and Politics (43241, 43247CVA)

Grade Level: 12

Level of Difficulty: Advanced Placement **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: Honors Placement Requirements Recommended

Standard of Learning End-of-Course Test: No

Course Description: This is an introductory-level college course in political science. Using current events to illuminate the processes of politics, they look beyond formal political institutions to determine ways citizens organize and define themselves and their interests. Through the study of both specific countries and general concepts, students will gain an understanding of the vast diversity of political structures, practices, and how societies fit into the global realm. Students

develop analytical writing skills, emphasizing form, logical development, substantiation of arguments, and detection of logical fallacies. This course is an elective and does not fulfill the US/Government requirement for graduation.

AP Seminar (48140, 48140CVA)

Grade Level: 10-12 **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, foundational broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

AP Research (48240, 48240CVA)

Grade Level: 12 **Credit:** 1 **Credit Weight:** 0.05

Prerequisite: AP Seminar

Standard of Learning End-of-Course Test: No

Course Description: AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research question. Students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. The course culminates in an academic paper of approximately 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

World Religions (44011, 44011CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Fundamental foundations and historical developments (from primitive society to the present) of religion are surveyed. From a social science perspective, the course emphasized doctrines of major Eastern and Western religions. History, sociology, psychology, anthropology, and philosophy are components of the investigative framework. Various regions of the world are examined in terms of religious development with emphasis on the interaction between religion and culture.

Women's Studies (46511, 46511CVA)**Grade Level:** 10-12**Level of Difficulty:** Academic **Credit:** 1 Credit **Weight:** None**Prerequisite:** N/A**Standard of Learning End-of-Course Test:** No

Course Description: This course will use a multifaceted approach. Both historical context and chronology will be fostered while also examining the advancement of women in society through an additional thematic lens. A chronological approach is used at the launch of the semester, followed by an opportunity to empower students to explore women's contributions in a variety of areas. Students will explore the changing role of women in global society, but also identify and research marked contributions to society in a variety of fields. Areas of contribution could include business, technology, leadership, military, medicine, science, and the arts. The course offers a scholarly dive into the culture of women, which has frequently remained an untold story. Students will have an open forum in which to explore academically the experiences and contributions of diverse groups of women to the global society. Such a course provides an opportunity for students to grow and empower themselves through learning about the real-life experiences of women.

Leadership Development and Applications (01611)**Grade Level:** 10-12 **Credit:** 1 Credit **Weight:** None**Prerequisite:** None**Standard of Learning End-of-Course Test:**

Course Description: Students will gain an understanding of the history of leadership and current leadership theories. In addition, students will understand how leadership models are put into practice personally, locally, and globally. Students will develop critical thinking skills in regard to the needs of the leadership program. Students will learn how to effectively articulate their set of practical skills and tools on a resume, in a portfolio, and during interviews, gaining authentic work-based experiences.

Dual Enrollment African American History I (42551CVA)**Grade Level:** 10-12**Level of Difficulty:** Dual Enrollment **Credit:** 2 CPS Credits **Weight:** 0.05 per credit**Prerequisite:** None**Standard of Learning End-of-Course Test:** No

Course Description: This course will survey African American history from precolonial Africa through Reconstruction and will also be introduced to key concepts in African American history, including the early beginnings in indigenous Africa, the Transatlantic Slave Trade, the development of colonial America, the Revolutionary War, Civil War, Reconstruction, The course instruction will focus on historical and critical thinking skills, research, critical reading analysis, and decision making equivalent to that of an introductory collegiate course on African American history.

Dual Enrollment African American History II (42551CVA)

Grade Level: 10-12

Level of Difficulty: Dual Enrollment **Credit:** 2 CPS Credits **Weight:** 0.05 per credit

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course will survey African American history from Reconstruction to the present and will also be introduced to key concepts in African American history, including, the Industrial Era, the World Wars, the Civil Rights era, and through the present. The course instruction will focus on historical and critical thinking skills, research, critical reading analysis, and decision making equivalent to that of an introductory collegiate course on African American history.

Dual Enrollment Psychology (45051CVA)

Grade Level: 11-12

Level of Difficulty: Dual Enrollment **Credit:** 1 CPS Credit **Weight:** 0.05 per credit

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: This course surveys the basic concepts of psychology with a concentration on the scientific study of behavior and mental processes, research methods, biological bases of behavior, sensation and perception, developmental psychology, learning, memory, thinking, intelligence, personality, social psychology, and psychological disorders and treatment. With the completion of this course, students will gain a greater understanding of themselves and the world around them through possible explanations behind human thought and behavior.

SPECIAL EDUCATION

Academic Support- SLD (90001/90002)

Affective Education- LEAD (90201/90202)

Resource Seminar- ID (90301/90302)

Developmental Workshop (90401/90402)

Grade Level: 9- 12

Credit: 1 Credit **Weight:** None **Prerequisite:** None

Standard of Learning End-of-Course Test: No

Course Description: Support courses are designed to enable students with specific learning deficits to succeed in high school and beyond. The course provides an opportunity to develop an understanding of individual strengths and weaknesses, to apply various study techniques, and to improve organizational skills. In addition, as determined by the IEP, the course may offer specific academic instruction in English, mathematics, science, and social studies.

CAREER AND TECHNICAL EDUCATION OFFERINGS

Aerospace Science

The Air Force Junior Reserve Officers Training Corps (AFJROTC) curriculum includes instruction that emphasizes self-discipline, citizenship, patriotism, leadership, and instruction in aerospace science.

Each AFJROTC unit has an organizational structure that is administered and operated by student cadets. Cadets participate in academic, athletic, and military competitions at the local, state, and national levels. Students successfully completing 2-4 years of the program may enter the military at an advanced enlisted pay grade. Opportunities for being accepted in the various service academies and earning ROTC scholarships are enhanced by participation in the AFJROTC program.

AFJROTC Aerospace Science I (70011)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 credit per year **Weight:** No

Prerequisite: No

Industry Credential End-of-Course Test: No

Course Description: Students are introduced to the Air Force JROTC program with instruction focusing on aerospace science, including aviation history, principles of aircraft flight and navigation, development of aerospace power, aerospace vehicles, rocketry, space and technology programs, and the aerospace industry. Students explore Air Force traditions, customs and courtesies, character, and the foundations of U.S citizenship. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Instruction in personal wellness and health and fitness encourages cadets to lead healthy, active lifestyles into adulthood.

AFJROTC Aerospace Science II (70012)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 credit per year **Weight:** No

Prerequisite: AFJROTC Aerospace Science I

Industry Credential End-of-Course Test: Yes

Course Description: Students explore the Air Force JROTC program with instruction focusing on aerospace science including flight conditions affecting flight, flight's effects on the human body, analyses of flight navigation, and purposes of aerial navigation aids. The course focuses on Air Force traditions, customs and courtesies, effective communication skills, and the influences of varying global cultures, religions, and ethnicities in the development of nations. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

AFJROTC Aerospace Science III (70013)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 credit per year **Weight:** No

Prerequisite: AFJROTC Aerospace Science I

Industry Credential End-of-Course Test: No

Course Description: Students explore the Air Force JROTC program, with instruction focusing on aerospace science, including astronomy, space exploration, the history and development of aerospace vehicles and rocketry. Aerospace science acquaints students with the elements of aerospace and the aerospace environment and introduces them to the history and development of air power. Leadership education develops leadership skills, acquaints students with the practical applications of life skills, and includes a drill and ceremonies component. Instruction on effective communication and management techniques, human relations skills, and postsecondary education and career opportunities is also included. Personal wellness studies encourage cadets to lead healthy, active lifestyles into adulthood.

AFJROTC Aerospace Science IV (70014)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 credit per year **Weight:** No

Prerequisite: AFJROTC Aerospace Science I, II, and III

Industry Credential End-of-Course Test: No

Course Description: This course allows instructor selected cadets the opportunity to apply learned leadership skills while managing the cadet corps. Cadets will hold a leadership position in the cadet chain of command and help in the planning and execution of all activities. The Leadership Education phase teaches the principles of management. Subjects include management basics, management in the marketplace, management theories, the foundations of planning and decision-making, management change, stress, and innovation, and finally, individual and group behavior, work teams, and leadership.

BUSINESS AND INFORMATION TECH COURSE OFFERINGS

Principles of Business and Marketing (70311, 70311CVA)

Grade Level: 9-10

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential End-of-Course Test: No

Course Description: Students discover the roles of business and marketing in the free enterprise system and global economy. Basic financial concepts of banking, insurance, credit, inheritance, taxation, and investments are investigated to provide a strong background as students prepare to make sound decisions as consumers, wage earners, and citizens. The real-world impact of technology, effective communication, and interpersonal skills are evident throughout the course. This course also supports career development skills and explores career options.

Digital Applications (71611, 71611CVA)

Grade Level: 9 -12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential End-of-Course Test: No

Course Description: This course is designed for secondary school students to develop real-life, outcome-driven approach skills for digital citizenship, basic computer operations, keyboarding, application software (word processing, spreadsheets, multimedia applications, databases), and career exploration. This course promotes skills that can be applied across the curriculum and offers preparation relevant to 21st-century skills and postsecondary education.

Introduction to Information Technology (71411)

Grade Level: 9-10

Level of Difficulty: Academic **Credit:** 1 Unit **Weight:** None

Prerequisite: Keyboarding (71111) Recommended

Industry Credential: Yes

Course Description: Introduces the essential skills needed for students to pursue specialized programs leading to technical and professional careers and certifications in the Information Technology (IT) industry. Students have an opportunity to investigate career opportunities in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. The focus of the IT Fundamentals course is on introducing skills related to IT basics, Internet fundamentals, network systems, computer maintenance, upgrading, troubleshooting, computer applications, programming, graphics, web page design, and interactive media. Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability.

Adapted Digital Applications and Keyboarding (71611A)

Grade Level: 9 -12

Level of Difficulty: Developmental **Credit:** 1 Credit **Weight:** None

Prerequisite: Applied Studies Diploma Students only

Industry Credential End-of-Course Test: No

Course Description: This course is designed for students to develop real-life, skills for digital citizenship, basic computer operations, keyboarding, application software (word processing, multimedia applications), and career exploration. This course promotes skills that can be applied across the curriculum and is taught based on the developmental needs of the student.

Business Management (70511, 70511CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential End-of-Course Test: No

Course Description: Students study basic management concepts and leadership

styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations. Quality concepts, project management, problem solving, and ethical decision making are an integral part of the course. Student leadership skills may be enhanced by participation in school-based or virtual enterprises, job shadowing, internships, and/or the Future Business Leaders of America (FBLA).

Design, Multimedia, and Web Technologies (70611, 70611CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 **Weight:** None

Prerequisite: None

Industry Credential End-of-Course Test: Yes

Course Description: Students develop proficiency in creating desktop publications, multimedia presentations/projects, and Web sites using industry-standard application software. Students incorporate principles of layout and design in completing publications and projects. Students design portfolios that may include business cards, newsletters, mini-pages, Web pages, multimedia presentations/projects, calendars, and graphics.

Computer Information Systems (70711, 70711CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 **Weight:** None

Prerequisite: Recommended - Digital Applications and Keyboarding (71611) or demonstration of touch keyboarding skills is a recommended prerequisite.

Industry Credential End-of-Course Test: Yes

Course Description: Students apply problem-solving skills to real-life situations through word processing, spreadsheets, databases, multimedia presentations, and integrated software activities. Students work individually and in groups to explore computer concepts, operating systems, networks, telecommunications, and emerging technologies.

Advanced Computer Information Systems (70712, 70712CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 **Weight:** None

Prerequisite: Computer Information Systems

Industry Credential End-of-Course Test: Yes

Course Description: Students apply problem-solving skills to real-life situations through advanced integrated software applications, including printed, electronic, and Web publications. Students work individually and in groups to explore advanced computer maintenance activities, Website development, programming, networking, emerging technology, and employability skills.

Introduction to Cybersecurity (73511, 73511CVA)

Grade Level: Recommended 11 or 12

Level of Difficulty: Academic **Credit:** 1 Unit **Weight:** None

Prerequisite: Introduction to Information Technology (recommended)

Industry Credential: Yes

Course Description: Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity. Students will have the opportunity to prepare for success on related industry certifications aligned to the course content. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills.

Accounting (70811, 70811CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Keyboarding and Digital Applications (71611) or demonstration of touch keyboarding skills is a recommended prerequisite.

Industry Credential End-of-Course Test: No

Course Description: Students study the basic principles, concepts, and practices of the accounting cycle for a service business and a merchandising business. Topics covered include analyzing transactions, journalizing and posting entries, preparing payroll records and financial statements, and managing cash systems. Ethics and professional conduct are emphasized. Students learn fundamental accounting procedures using both manual and electronic systems.

Advanced Accounting (70812, 70812CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Accounting

Industry Credential End-of-Course Test: Yes

Course Description: Students gain knowledge of advanced accounting principles, procedures, and techniques used to solve business problems and to make financial decisions. Students use accounting and spreadsheet software to analyze, synthesize, evaluate, and interpret business financial data. Students work in a technology-integrated environment using authentic workplace industry scenarios that reflect current industry trends and standards.

Economics and Personal Finance (70911, 70911CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit (Graduation Requirement for all students) **Weight:** None

Prerequisite: None

Industry Credential End-of-Course Test: Yes

Course Description: Students learn how to navigate the financial decisions to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. The development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. This course prepares students to function effectively as consumers, savers, investors, entrepreneurs, and active citizens. Students learn how economies and markets operate and how the United States economy is interconnected with the global economy. Students must complete the online component of this course to satisfy the graduation virtual requirement for the advanced studies or standard diploma.

Business Law (71011, 71011CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential End-of-Course Test: No

Course Description: Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens. Students gain practical knowledge and life skills by exploring economic and social concepts related to laws governing business and individuals. Focus areas include contracts, consumer protection, criminal law, tort law, international law, family/domestic law, employment law, and careers in the legal profession.

FAMILY AND CONSUMER SCIENCES COURSE OFFERINGS

Life Planning (75311, 75311CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: Life Planning equips students with the skills to face the challenges in today's society. Students will develop a life-management plan that includes Developing Career, Community, and Life Connections; Applying Problem-Solving Processes to Life Situations; Creating and Maintaining Healthy Relationships; Developing Strategies for Lifelong Career Planning; Developing a Financial Plan; Examining Components of Individual and Family Wellness; and Demonstrating Leadership within the Community. Critical thinking and practical problem-solving are emphasized through relevant life applications.

Nutrition and Wellness (75211, 75211CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus and preparing food, and exploring careers in the field of nutrition and wellness. Critical thinking and practical problem-solving are emphasized.

Adapted Nutrition and Wellness (75201)

Grade Level: 9-12

Level of Difficulty: Developmental **Credit:** 1 Credit **Weight:** None

Prerequisite: Applied Studies Diploma Students only

Industry Credential: No

Course Description: Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus and preparing food, and exploring careers in the field of nutrition and wellness. Students will complete the course based on their developmental needs.

Child Development and Parenting (75411, 75411CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: Students enrolled in Child Development and Parenting focus on analyzing parenting roles and responsibilities, ensuring a healthy start for mother and child, evaluating support systems that provide services for parents, and evaluating parenting practices that maximize human growth and development. Critical thinking, practical problem solving using case studies, and entrepreneurship opportunities within the area of parenting responsibilities and child development are emphasized.

Intro to Early Childhood Education (74811)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential End-of-Course Test: No

Course Description: students explore different types of early childhood education programs and delivery models, develop safe and healthy learning environments for children, and identify the ages and stages of child development and developmentally appropriate practices that support child development from birth through age 12, including a work-based learning experience

Introduction to Interior Design (75011, 75011CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: The Introduction to Interior Design students explore the influences on the design of interior spaces, investigate careers in the interior design industry, and focus on the technical and soft skills necessary for employment in the field of interior design. Students develop an interior design project that meets specific criteria and includes the elements and principles of design.

Introduction to Fashion Careers (75111)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: students learn what it takes to be successful in fashion by exploring careers within the industry. Instruction focuses on hands-on experiences. Students apply the design process from concept to final product and demonstrate basic fashion design techniques.

Fashion Careers I (75611)

Grade Level: 10-11

Level of Difficulty: Academic **Credit:** 2 Credits **Weight:** None

Prerequisite: None **Industry Credential:** No

Course Description: The course is a full-year program that prepares students for creating original products while applying design techniques and skills. Work-based learning within the fashion industry is encouraged to provide opportunities for students to develop employability skills. Other areas of emphasis include employability and strategies for balancing the roles of worker, family member, and citizen.

Fashion Careers II (75612)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 2 Credits **Weight:** None

Prerequisite: Fashion Careers I

Industry Credential: Yes

Course Description: The course is a full-year program that allows students to focus on the advanced technical skills necessary for careers in the fashion industry by continuing to develop skills in illustrating, draping, pattern making, garment construction, and marketing. Students explore opportunities for work-based learning and entrepreneurship within the fashion industry.

Introduction to Culinary Arts (75511)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: Students investigate food safety and sanitation, culinary preparation foundations, basic culinary skills, diverse cuisines, service styles, basic nutrition, and the economics of food. Students also explore postsecondary education options and career opportunities within the food service industry. The curriculum places a strong emphasis on science and mathematics knowledge and skills.

Culinary Arts I (75711)

Grade Level: 10-11

Level of Difficulty: Academic **Credit:** 2 Credits **Weight:** None

Prerequisite: None **Industry Credential:** No

Course Description: The Culinary Arts I curriculum is a full year course that provides students with the foundations for a comprehensive knowledge of the food service industry and with opportunities to build technical skills. Students examine and practice basic rules and procedures related to kitchen and food safety, kitchen sanitation procedures, and emergency measures. Students explore the purchasing and receiving of goods and study fundamental nutritional principles and guidelines. As they explore food preparation techniques, students practice applying these techniques to the preparation and serving of basic food products. The curriculum places a strong emphasis on science and mathematics knowledge and skills. This course has uniform requirements for safety.

Culinary Arts II (75712)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 2 Credits **Weight:** None

Prerequisite: Culinary Arts I

Industry Credential: Yes

Course Description: The Culinary Arts II curriculum is a full year course that provides students with continuing opportunities to acquire a comprehensive knowledge of the food service industry as well as to expand their technical skills. Students practice kitchen safety and sanitation, apply nutritional principles to food preparation and storage, perform a wide range of more advanced food-preparation techniques, including baking, refine their dining room serving skills, develop menus, perform on-site and off-site catered functions, and strengthen their business and math skills. The curriculum places a strong emphasis on science and math knowledge and skills. This course has uniform requirements for safety.

CVA Food Science & Dietetics (74711CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Corequisite: Chemistry (suggested)

Prerequisite: Nutrition and Wellness (suggested)

Standard of Learning End-of-Course Test: No

Course Description: Students will develop a deeper appreciation for the food system and the impact of science on the food and nutrition industries. Students will explore food sources, the science and technology of food production and processing, and the implications for individual and global health and wellness. Career opportunities are broad and include health care; dietetics, and food research, development, and manufacturing.

Culinary Seminar

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Culinary II

Standard of Learning End-of-Course Test: No

Course Description:

The culinary seminar is an advanced course designed for students who have successfully finished Culinary Arts II. This course offers students the chance to engage in work-based learning within a collaborative restaurant-style setting, focusing on the planning and development of meals. Students will manage a comprehensive restaurant at the Chesapeake Public Schools Administration Building, as well as a catering service for district events. This initiative allows students to engage in work-based learning within a collaborative restaurant-style setting. As a part of this cooperative learning experience, students will be paid an hourly rate for 280 hours. This course has uniform requirements for safety.

MARKETING EDUCATION COURSE OFFERINGS

Digital Marketing (76211, 76211CVA)

Grade Level: 9 - 12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None **Industry Credential end-of-Course Test:** Yes

Course Description: Students receive an introduction to marketing functions and the business plan and study Internet marketing's role in the global economy. Students gain knowledge of the tools and techniques used in Internet marketing and learn how to design a Website. They explore ethical, legal, and security aspects and prepare for a career in Internet marketing. Academic skills related to the content are a part of this course. Computer/technology applications supporting this course are studied.

Marketing Exploration (75811, 75811CVA)

Grade Level: 9-10

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None **Industry Credential End-of-Course Test:** No

Course Description: Students gain an understanding of the importance of marketing in today's society. They develop skills related to interpersonal communication, self-presentation, economics, marketing, sales, employability, career discovery, and ethical decision-making. Computer/technology applications and DECA activities support this course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events.

Marketing (75911, 75911CVA)

Grade Level: 11 - 12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None **Industry Credential End-of-Course Test:** Yes

Course Description: Students examine activities in marketing and business important for success in marketing employment and postsecondary education. Students will learn how products are developed, branded, and sold to businesses and consumers. Students will analyze industry trends and gain hands-on experience in the marketing of goods, services, and ideas. Topics will include professionalism in the workplace, product planning and positioning, promotion, pricing, selling, economic issues, and the impact of technology on the marketplace. Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events.

Strategic Marketing (75912, 75912CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Marketing or Fashion Marketing Recommended

Industry Credential End-of-Course Test: Yes

Course Description: This course teaches students to leverage marketing activities to best differentiate themselves and their businesses. They will participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, distribution, selling, operations research, and promotion. Students will prepare for marketing careers and postsecondary education, continuing to enhance self-presentation, communication, and leadership skills. Contextual instruction and participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction and performed in partnership with local businesses and organizations.

Fashion Marketing (76011, 76011CVA)

Grade Level: 10 – 12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: None **Industry Credential End-of-Course Test:** Yes

Course Description: In this specialized course, students gain basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses. Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applicable to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/service technology, as well as academic skills (mathematics, science, English, and history/social science) related to the content, are part of this course. Computer/technology applications supporting this course are studied.

Advanced Fashion Marketing (76012, 76012CVA)

Grade Level: 11 - 12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: Fashion Marketing Recommended

Industry Credential End-of-Course Test: Yes

Course Description: Students with a career interest in apparel and accessories marketing gain in-depth knowledge of the apparel and accessories industry and skills important for employment in apparel businesses. They develop advanced skills unique to fashion marketing and advanced general marketing skills applied to the apparel and accessories industry. Professional selling, sales promotion, buying, merchandising, marketing research, product/service technology, and supervision, as well as academic skills (mathematics, science, English, and history/social science) related to the content, are part of this course. Computer/technology applications supporting this course are studied.

Travel and Tourism Marketing I (76111, 76111CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 **Credit Weight:** None

Prerequisite: N/A

Industry Credential End-of-Course Test: Yes

Course Description: Students gain knowledge of the travel/tourism industry to include cruises, airlines, lodging, and car rental. They develop skills in the areas of communication, human relations, customer service, industry technology, and marketing. In addition, students obtain an understanding of the global nature of the industry, travel planning, and the career options available. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

Travel, Tourism, and Destination Marketing II (76112, 76112CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Travel and Tourism Marketing I

Industry Credential End-of-Course Test: Yes

Course Description: Students gain in-depth knowledge of the travel/tourism industry and related management and supervisory responsibilities. They develop advanced competencies in the areas of communication, human relations, finance, health/safety/environmental issues, promotion, industry technology, and marketing research. In addition, students gain an understanding of global travel and career trends and opportunities. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course.

Sports and Entertainment Marketing I (76411, 76411CVA)

Grade Level: 10,11,12

Level of Difficulty: Academic **Credit:** 1 Unit **Weight:** None

Prerequisite: None **Industry Credential:** Yes

Course Description: This course helps students develop a thorough understanding of fundamental marketing concepts and theories as they relate to the sports and entertainment industries. Students will investigate the components of customer service, branding, product development, pricing and distribution, business structures, sales processes, digital media, sponsorships, and endorsements, as well as promotion needed for sports and entertainment events. The course explores career options and develops workplace readiness skills. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to student's career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

Sports and Entertainment Management II (76481, 76481CVA)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisites: Sports and Entertainment Marketing I recommended

Standard of Learning End-of-Course Test: No

Course Description: Students will build on prior knowledge of sports and entertainment marketing. This course focuses on the principles of management and planning supported by research and financial, economic, ethical, and legal concepts. Students will be able to plan and execute an event, establish a sports, entertainment, or recreation marketing product/business, and develop a career plan. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to student's career goals and/or interests, integrated with instruction and performed in partnership with local businesses and organizations.

TECHNOLOGY EDUCATION

Physics for Technology I (78411)

Grade Level: 10 - 12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: See Note Above

Standard of Learning End-of-Course Test: No

Industry Credential: No

Course Description: Students in this single-period laboratory science course apply physics and mathematics concepts through a unified systems approach to develop a broad knowledge base of the principles underlying modern technical systems. Students study seven technical principles: force, work, rate, resistance, energy, power, and force transformers, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment. This “principles and systems” approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance.

Physics for Technology II (78412)

Grade Level: 11 or 12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Physics for Technology I (See Note Above)/Recommended for the Mechatronics Pathway

Standard of Learning End-of-Course Test: No

Industry Credential: No

Course Description: Students continue to apply physics and mathematics concepts through a unified systems approach to expand their knowledge base of the principles underlying modern technical systems. This course focuses on seven technical principles: momentum, waves, energy converters, transducers, radiation, optical systems, and time constants, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment. This “principles and systems” approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance.

Electronics Systems I (78111)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: This course engages students in electricity and electronic experiments that focus on the application of scientific theories and mathematics principles. Students solve problems using simple electrical devices and circuits and build electronic projects using DC and AC devices and circuits.

Electronics Systems II (78112)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Electronics Systems I

Industry Credential: Yes

Course Description: Students work with electronics devices, instruments, and circuits, building projects to apply theories and laws with electronic components such as resistors, capacitors, and transistors. They also study integrated circuits used in computers, amplifiers, televisions, and other equipment.

Technical Drawing and Design (78211, 78211CVA)

Grade Level: 9-11

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: Yes

Course Description: This is a foundation course for students to experience the basic language of industry and technology. Students design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is especially recommended for future engineering and architectural students. Students are introduced to computer-aided drafting and design.

Engineering Drawing/Design (78311, 78311CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Technical Drawing and Design

Industry Credential: Yes

Course Description: Advanced drawing design course that enables students to use a graphic language for product design, technical illustration, assembly, patent, and aeronautical drawings. It increases students' understanding of drawing techniques learned in the prerequisite course. Students use computers (AutoDesk software), calculators, and descriptive geometry while adhering to established standards to solve design problems. Manufacturing Cluster

Manufacturing Systems I (77911)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: This course provides an orientation to careers in various fields of manufacturing. Emphasis will be placed on the major systems in automated manufacturing, including design, electrical, mechanical, manufacturing processes, material handling, and quality control. Students participate in teams to produce manufacturing projects that demonstrate critical elements of manufacturing.

Materials and Processes Technology (77811)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: Students focus on industrial/technical materials and processes as they fabricate usable products and conduct experiments. Learning experiences include career analysis as well as the use of tools and equipment related to the analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials.

Technology of Robotic Design (77711)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None/Recommended for Mechatronics Career Pathway

Industry Credential: No

Course Description: Students engage in the study of computers and microprocessors and their applications to manufacturing, transportation, and communication systems. Topics include computer equipment and operating systems, robotics, programming, control systems, and the social/cultural impact of these technologies. Problem-solving activities challenge students to design, program, and interface devices with computer systems. Learning activities include robotics, computer-aided design, computer-aided manufacturing and design, and control of electromechanical devices.

Construction Technology (78011)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: Students in this course design, build, and test scale model structures. They also work with projects that help them understand the jobs of architects, carpenters, electricians, plumbers, surveyors, contractors, masons, design engineers, and a variety of other construction careers.

Adapted Construction Technology (78001)

Grade Level: 9-12

Level of Difficulty: Developmental **Credit:** 1 Credit **Weight:** None

Prerequisite: Applied Studies Diploma Students only

Industry Credential: No

Course Description: Students in this course design, build, and test scale model structures. They also work with projects that help them understand the jobs of architects, carpenters, electricians, plumbers, surveyors, contractors, masons, design engineers, and a variety of other construction careers. The projects for this course are based on the developmental needs of the student.

Architectural Drawing/Design (78511, 78511CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Technical Drawing and Design

Industry Credential: No

Course Description: Advanced drawing design course that provides students the opportunity to learn about the principles of architecture and to increase understanding of working drawings and construction techniques learned in the prerequisite course. Experiences include residential and commercial building designs, rendering, model making, structural details, and community planning. Students use computer-aided drawing (AutoDesk software), design equipment, and established standards or codes. They prepare models for presentation and related drafting practices and techniques. Building on the knowledge and skills acquired, this information is especially beneficial to future architects, interior designers, or homebuilders.

Communication Systems (78711, 78711CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: This course provides experiences related to various modes of communicating information, using data, technical design, optics, graphic production, audio and video, and integrated systems. Students solve problems involving input, process, output, and feedback processes. Also, students learn about potential career choices related to communication and impact of communication on society

Adapted Communication Systems (78701)

Grade Level: 9-12

Level of Difficulty: Developmental **Credit:** 1 Credit **Weight:** None

Prerequisite: Applied Studies Diploma Students only

Industry Credential: No

Course Description: This course provides experiences related to various modes of communicating information, using data, technical design, optics, graphic production, audio and video, and integrated systems. Students solve problems involving input, process, output, and feedback processes. Also, students learn about potential career choices related to communication and the impact of communication on society. The projects chosen for this course are based on the developmental needs of the students.

Graphic Communications (78911)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: Yes

Course Description: The course focuses on printed images such as newspapers, books, printed t-shirts, photographs, advertisements, and stationery. Students use a variety of graphic arts equipment and processes to make visual projects with different materials. Students design, plan, and reproduce products similar to those produced by the graphic arts industry. Students use cameras, printing presses, computer imagery, and advertising layout and design to foster their creative abilities.

Imaging Technology (77611, 77611CVA)

Grade Level: 9-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: Yes

Course Description: The course is designed to cover the basics of photography with a strong emphasis in the principles of the evolving field of digital imaging. The course will provide a knowledge base that includes the development of the photographic medium and the essential tools of the photographer. Student progression will cover the extension of photographic principles into the digital realm, blending both theory and practice. Using image-editing software, students will enhance, correct, and manipulate photographic images.

Video and Media Technology (77511, 77511CVA)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential: No

Course Description: This course offers students an opportunity to study all aspects of video and media production, from planning and writing for production to operating studio and editing equipment. Students practice various methods of gathering news and information from individuals, research, and online resources. In addition, students are introduced to analog and digital principles of film production.

Digital Visualization (78821, 78821CVA)

Grade Level: 10-12

Level of Difficulty: Honors **Credit:** 1 Credit **Weight:** 0.025

Prerequisite: Technical Drawing and Design Recommended

Industry Credential: No

Course Description: Students will gain experiences related to computer animation by solving problems involving 3D object manipulation, storyboarding, texture mapping, lighting concepts, and environmental geometry with a heavy emphasis

on AutoDesk software. They will produce animations that include interdisciplinary projects related to science, engineering, and the entertainment industry. A major emphasis will be the production of a portfolio that showcases examples of student work.

CAREER CONNECTIONS COURSE OFFERINGS

Virginia Teachers for Tomorrow I (73811, 73811CVA)

Grade Level: 11-12

Level of Difficulty: Academic, **Dual Enrollment Option with Tidewater Community College (0.05 weight) Credit:** 1 Credit **Weight:** No

Prerequisite: None

Industry Credential End-of-Course Test: No

Course Description: Virginia Teachers for Tomorrow (VTFT) fosters student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in education. Students build a foundation for teaching, learn the history, structure, and governance of teaching, apply professional teaching techniques in the VTFT classroom, and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization, Future Educators Association.

Virginia Teachers for Tomorrow II (73812, 73812CVA)

Grade Level: 11-12

Level of Difficulty: Academic, **Dual Enrollment Option with Tidewater Community College (0.05 weight) Credit:** 1 Credit **Weight:** No

Prerequisite: Virginia Teachers for Tomorrow I

Industry Credential End-of-Course Test: Yes

Course Description: Students continue to explore careers in the Education and Training Cluster and pathways. This course provides the opportunity for students to prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience.

Education for Employment I (73911)

Grade Level: 9-11

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Students must meet program criteria

Industry Credential End-of-Course Test: No

Course Description: This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career research, job acquisition, workplace communication, self-awareness, self-advocacy, customer service, and life skills.

Adapted Education for Employment I (74011)

Grade Level: 9-11

Level of Difficulty: Developmental **Credit:** 1 Credit **Weight:** None

Prerequisite: Applied Studies Diploma Students only

Industry Credential End-of-Course Test: No

Course Description: This course teaches students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught ethical behaviors and career research, job acquisition, workplace communication, self-awareness, self-advocacy, customer service, and life skills. The course is based on the developmental needs of the students.

Education for Employment II (73912)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: Students must meet program criteria

Industry Credential End-of-Course Test: Yes

Course Description: This course continues to teach students to make informed career and continuing education choices as they transition from school, gain technical skills and adapt to the workplace. Students are taught to apply ethical behaviors and career research, job acquisition, workplace communication, self-awareness, self-advocacy, customer service, and life skills.

Work-Based Learning Seminar Level I- (73891), Level II- (73892)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 1 Credit **Weight:** None

Prerequisite: None

Industry Credential End-of-Course Test: No

Course Description: The student will be introduced to a work-related learning experience where they develop hands-on work experience in a certain occupational field and gain the relevant knowledge and skills required to enter a particular career field. The WBL Seminar Course will help develop professional work habits, provide an understanding of corporate cultures, and offer a platform to compare differences in work styles. Students will be required to complete a minimum of six hours of on-the-job training per week in a high-quality work-based learning experience. Students must complete an internal assessment in the form of a presentation, resume, career assessment, and essay that addresses the students' skills, attitudes, and awareness of the career field of the work-based learning experience. Approved course application and Training Agreement required.

CHESAPEAKE CAREER CENTER COURSE OFFERINGS

Early Childhood Education and Services I/II (74951C120/74951S100)

Grade Level: 11

Level of Difficulty: College Level, **Dual Enrolled with TCC**

Credit: 4 Credits, 16 Tidewater Community College Credits **Weight:** 0.05 per credit

Prerequisite: None **Industry Credential:** Yes

Course Description: Early Childhood Education I prepares students with the skills needed to provide home, family, or institution based childcare services. Students focus on the planning, organizing, and conducting of meaningful play and learning activities, child monitoring and supervision, recordkeeping, and referral procedures. Students who successfully complete Early Childhood Education I, return to take Early Childhood Education II. Dual Enrollment is required. Early Childhood Education II students further their knowledge by focusing on occupational skills needed in early childhood-related careers, including but not limited to education, medical/health care, social services, counseling, psychology, and entrepreneurship. Work-based learning experiences in on-site labs, early childhood development centers, elementary schools, and other institutions, under the supervision of the instructor, are required for the successful completion of this program. Dual Enrollment is required. Child Development Associate (CDA) Assessment.

Emergency Medical Technician I, II (72611, 72612)

Grade Level: 11-12

Level of Difficulty: College Level, **Dual Enrolled with TCC**

Credits: 4 Credits, 12 TCC Credits **Weight:** 0.05 per credit

Prerequisite: Students must be at least 16 years old

Industry Credential: Yes

Course Description: Emergency Medical Technician I, II is a one year, three-credit program which prepares students to focus on the role and responsibilities of emergency rescue workers, basic medical terminology, and health care skills that include first aid; cardiopulmonary resuscitation; aseptic technique; and related anatomy, physiology, and disease knowledge. Students become skilled in identifying and dealing with emergencies such as bleeding, fractures, airway obstruction, cardiac arrest, and emergency childbirth. Instruction emphasizes proper care and use of common emergency equipment and safe methods for lifting, moving, and transporting injured persons. The curriculum includes a practical applications component, provided through emergency room and ambulance "ride along" experiences. Program completers may take the Emergency Medical Technician Basic Licensure Examination administered by the National Registry of Medical Technicians. Students enroll in both fall and spring courses. (EMT VA State Licensure)

Nurse Aide I, II (72711, 72712)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: None **Industry Credential:** Yes

Course Description: Nurse Aide I, II is a one-year, three-credit program which prepares students for an entry-level position as a healthcare professional in a hospital or nursing home. In addition, this class provides a basic medical/nursing experience for students in a medical facility under their instructor's supervision. Course topics include anatomy and physiology, medical terminology, first aid and CPR, and basic nursing skills. Upon successful completion of the course, students are eligible to take the national exam to become a licensed certified nurse aide. Students enroll in both fall and spring courses. (National Nurse Aide Assessment)

Pharmacy Technician I, II (73711, 73712)

Grade Level: 12

Level of Difficulty: Academic, **Dual Enrolled Required with TCC**

College Credit: 4 Credits, 18 Tidewater Community College credits (option)

Weight: 0.05 per credit if Dual Enrollment

Prerequisite: None **Industry Credential:** Yes

Course Description: Pharmacy Technician I, II is a one year, three-credit program designed to provide students with the basic skills and knowledge to begin work as a pharmacy technician. Course topics include receiving and processing of medication orders, data collection and record keeping, maintaining medication and inventory, and other basic pharmacy technician skills. Upon successful completion of the course, students are eligible to take the national examination administered by the Pharmacy Technician Certification Board. Students enroll in both fall and spring courses. (Certified Pharmacy Technician, ExCPT Examination, NHA)

Dental Assisting I (73611)

Grade Level: 11

Level Of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: None **Industry Credential:** Yes

Course Description: Students are introduced to careers in dentistry, including dentist (general and specialists), hygienist, dental assistant, dental laboratory technician, and dental receptionist. Students practice and learn about many of the skills utilized in these professions while attaining all the skills necessary to become entry-level dental assistants.

Dental Assisting II (73612)

Grade Level: 12

Level Of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: Dental Assisting I **Industry Credential:** Yes

Course Description: Units of study include medical emergencies, coronal polishing, oral pathology, dental roentgenology, nutrition, schedule IV drugs and pharmacology, and advanced laboratory techniques. In addition to attending

classes for part of the week, students have the opportunity to participate in internships at local private dental offices and public health dental facilities, where they participate in all phases of dental care delivery. Students who pass are qualified to work in entry-level dental assistant I and dental receptionist positions. After two years in the field full-time, graduates of the program are eligible to take the national examination to become a Certified Dental Assistant.

Medical Laboratory Technician I (72511)

Grade Level: Grades 11-12

Level of Difficulty: Academic **Credit:** 2 Credits **Weight:** None

Prerequisite: None

Standard of Learning End-of-Course Test: No

Course Description: Medical Laboratory Technology I gives students an overview of the clinical lab, hematology, urinalysis, and clinical chemistry. Students gain foundational knowledge and skills appropriate for a variety of medical-related career paths in the field of medical laboratory technology. They are introduced to diagnostic and therapeutic laboratory procedures that support medical practice and research, and investigate safety, quality assurance, and ethical concerns associated with the field of medical laboratory technology. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations

Medical Laboratory Technician II (80112)

Grade Level: Grades 11-12

Level of Difficulty: Academic **Credit:** 2 Credits **Weight:** None

Prerequisite: Medical Laboratory Technician I

Standard of Learning End-of-Course Test: No

Course Description: In Medical Laboratory Technology II, students perform tests normally seen in the clinical setting as they build on the foundational knowledge and skills obtained in Medical Laboratory Technology I. The students will use the basic principles necessary to perform competently in the areas of clinical microbiology, immunohematology, immunology/serology, coagulation, hemostasis, and molecular diagnostics. Competency includes performing the technique correctly, understanding the theory of the procedures, and interpreting the results. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to students' career goals and/or interests, integrated with instruction and performed in partnership with local businesses and organizations.

Emergency Medical Telecommunications: 911 Dispatch (74111,74211)

Grade Level: 12

Level of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: Keyboarding (can be taken at TCC during summer session)

Industry Credential: Yes

Course Description: Emergency Medical Telecommunications: 911 Dispatch students 124 will develop the entry-level skills needed in a telecommunications environment for rescue, fire, and police. Students will gain an understanding of situations encountered in an emergency telecommunications environment. Students will develop an understanding of the telecommunicator's role and responsibilities. Students will learn of resources available to the telecommunicator, and cover liability and legal issues involving emergency telecommunicators and their agencies. Emergency Telecommunicator Examination Certification.

Auto Body I, II Collision and Refinishing (73351, 73352)

Grade Level: 11,12

Level of Difficulty: College Level, **Dual Enrolled Required with TCC**

Credit: 4 Credits, 13 TCC **Weight:** 0.05 per credit

Prerequisite: None **Industry Credential:** Yes

Course Description: Auto Body Repair I, II Collision and Refinishing is a one-year, three-credit course which provides training in the following areas: use of shop tools, basic construction, sheet metal alignment basic welding procedures, parts replacement, equipment operation, and application and finishing of filler materials. This program is certified by the National Institute for Automotive Service Excellence (ASE). Upon successful completion of this course, students are prepared to test for industry certification/state licensure.

Auto Body III Collision and Refinishing (73353)

Grade Level: 12th only

Level of Difficulty: College Level, **Dual Enrollment Required with TCC**

Credit: 4 Credits, 10 TCC (required)

Weight: 0.05 per credit

Prerequisite: Auto Body I and II **Industry Credential:** Yes

Course Description: Auto Body Repair III Collision and Refinishing is a one-year, three-credit course which allows students to further apply the tasks/competencies learned in I and II. Students who successfully complete the program sequence will be prepared to take and pass the I- CAR Pro Level 2 Refinishing Certification. Dual Enrollment is required.

Automotive Technology I, Powertrain Specialist (71911)

Grade Level: 11

Level of Difficulty: Academic, **Dual Enrolled (Optional) with TCC**

Credit: 4 Credits, 8 TCC (option) **Weight:** 0.05 per credit if Dual Enrolled

Prerequisite: None **Industry Credential:** Yes

Course Description: Automotive Technology I, Powertrain Specialist is a one-year, three-credit course which provides instruction in the theory, repair and light maintenance skills relating to automotive engine rebuilding, automotive electrical and electronic systems, automatic and manual drivetrain, and engine performance. This program is certified by the National Institute for Automotive Service Excellence (ASE). Upon successful completion of the course, students are prepared to test for industry certifications. (ASE Student Certification)

Automotive Technology II, Undercar Specialist (71912)

Grade Level: 12

Level of Difficulty: Academic, **Dual Enrolled (Optional) with TCC**

Credit: 4 Credits, 10/11 TCC Credits (option) **Weight:** 0.05 per credit if Dual Enrolled

Prerequisite: Automotive Technology I, Powertrain Specialist

Industry Credential: Yes

Course Description: Automotive Technology II, Undercar Specialist is a one-year, three-credit course which provides instruction in the theory, repair and light maintenance skills relating to automotive electrical systems, suspensions, steering, heating and air conditioning systems and brakes. This program is certified by the National Institute for Automotive Service Excellence (ASE). Upon successful completion of the course, students are prepared to test for industry certifications. (ASE Student Certification)

Cybersecurity Fundamentals/Technology (73511, 73512)

Grade Level: 11

Level of Difficulty: Academic, **Dual Enrollment Option with TCC**

Credit: 4 Credits, 8 TCC Credits **Weight:** 0.05 per credit

Prerequisite: None **Industry Credential:** Yes

Course Description: Cybersecurity affects every individual, organization, and nation. This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity. Students enter the world of computer technology and gain practical experience in assembling a computer system. Students will install, configure, and secure various operating systems. Students will troubleshoot computers and peripherals and use system tools and diagnostic software. They develop skills in computer networking and resource sharing.

Advanced Cybersecurity (72022)

Grade Level: 12

Level of Difficulty: Accelerated, **Dual Enrolled Option with TCC**

Credit: 4 Credits, 4 TCC Credit option **Weight:** 0.05 per credit if Dual Enrolled

Prerequisite: Cybersecurity Fundamentals / Cybersecurity Systems Technology

Industry Credential: Yes

Course Description: This advanced course provides students with training in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks. Students will gain a basic understanding of emerging technologies, including unified communications, mobile, cloud, and virtualization technologies. The course prepares students for postsecondary education and training and a successful career in information technology. Upon successful completion of the course, students may qualify to take CompTIA's A+ and Network+ certification exams.

Cosmetology I (72411)

Grade Level: 11

Level of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: None **Industry Credential:** No

Course Description: Cosmetology I is a one-year, three-credit course which involves the study of hair, skin, and nails and their related care. Students study and practice in a clinical lab setting, using mannequins and live models for manipulative skill development. The program emphasizes safety and sanitation, communication, and management skills. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. Related areas of study include psychology, ethics, and the presentation of a professional image.

Cosmetology II (72412)

Grade Level: 12

Level of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: Cosmetology I **Industry Credential:** Yes

Course Description: Cosmetology II is a one-year, three-credit course in which students develop skills and technical knowledge relating to advanced hair coloring, hair pressing, facials, cosmetic make-up, wig styling, selection of commercial products, and salon management. Upon successful completion of this class, students are eligible to take the Cosmetology State Board Examination to become licensed cosmetologists. (Cosmetology State Licensure)

Nail Technician I, II (73011, 73012)

Grade Level: 10-12

Level of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: None **Industry Credential:** Yes

Course Description: Nail Technician I, II is a one-year, three-credit program which is designed to assist students in developing skills and technical knowledge relating to manicuring, pedicuring, and basic nail care. Students study career opportunities, professional ethics, nail structure, anatomy of the hands and feet,

sterilization/sanitation, product chemistry, and safety procedures. Upon successful completion of this class, students will be eligible to take the State Board Examination to become licensed nail technicians. Students enroll in both fall and spring courses. (Nail Technician VA State Licensure)

Electricity I, II (79751 & 79752)

Grade Level: 11-12

Level of Difficulty: College Level, **Dual Enrolled Required with TCC**

Credit: 4 Credits, 14 Tidewater Community College Credits (required)

Weight: 0.05 per credit

Prerequisite: None **Industry Credential:** Yes

Course Description: Electricity I and II is a one-year, three-credit course which provides instruction in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. Students will also study electrical theory and mathematical problems related to electricity, navigate the National Electrical Code Book, select and install conductors, examine lighting, communication, and power systems, and work with conduit and raceways, panel boards, switchboards, grounding systems, and generators. Students enroll in both fall and spring courses. (Electrical Construction Technology Assessment NOCTI)

Heating, Ventilation, Air Conditioning, and Refrigeration I (72310)

Grade Level: 11

Level of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: None **Industry Credential:** Yes

Course Description: Students are taught to professionally install, repair, and maintain the operating conditions of heating, ventilation, air-conditioning, and refrigeration (HVACR) systems. Students work with piping and tubing, study the principles of heat and electricity, install duct systems, and explore EPA regulations. Completion of the two-course sequence may prepare students for HVACR certifications that will be helpful for employment in a variety of HVAC occupations (EPA – Section 608 Technician Certification). Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills.

Heating, Ventilation, Air Conditioning, and Refrigeration II (72320)

Grade Level: 12

Level of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: HVACR I (72310) **Industry Credential:** Yes

Course Description: Students are taught to professionally install, repair, and maintain the operating conditions of heating, ventilation, air-conditioning, and refrigeration (HVACR) systems. Students work with piping and tubing, study the principles of heat and electricity, and install duct systems. Students also explore emerging technologies, Environmental Protection Agency (EPA) regulations, energy conservation techniques, and systems with exempt and non-exempt refrigerants. Completion of this sequence may prepare students for HVACR certifications and employment in a variety of HVACR occupations. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal,

and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to student's career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

Building Trades I (80111)

Grade Level: Grades 10-12

Level of Difficulty: Academic **Credit:** 2 credits **Weight:** None

Prerequisite: No

Standard of Learning End-of-Course Test: No

Course Description: Building Trades I introduces students to skills in the four core areas of residential construction: masonry, carpentry, electricity, and plumbing. Students emphasize safety by earning the Construction Industry Occupational Safety and Health Administration (OSHA) 10 card as they build or repair residential structures, using a variety of materials and tools. Students will also learn current residential building codes associated with the trades. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to student's career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

Building Trades II (80112)

Grade Level: Grades 10-12

Level of Difficulty: Academic **Credit:** 2 Credits **Weight:** None

Prerequisite: Building Trades I

Standard of Learning End-of-Course Test: No

Course Description: Building Trades II teaches students advanced skills in masonry, carpentry, electricity, and plumbing. The class prepares students to synthesize these valuable skills to build or repair residential structures, using a variety of materials and tools. Students will also learn current residential building codes associated with the trades. Contextual instruction and student participation in co-curricular career and technical student organization (CTSO) activities will develop leadership, interpersonal, and career skills. High-quality work-based learning (HQWBL) will provide experiential learning opportunities related to student's career goals and/or interests, integrated with instruction, and performed in partnership with local businesses and organizations.

Public Safety/Firefighting I, II (73111, 73112)

Grade Level: 11-12

Level of Difficulty: Academic **Credit:** 4 Credits **Weight:** None

Prerequisite: Students must be at least 16 years old

Industry Credential: Yes

Course Description: Public Safety/Firefighting I, II is a one-year, three-credit program in which students learn how to fight fires and control the outbreak of fire. Instruction includes fire department organization; use of various kinds of equipment such as extinguishers, pumps, hoses, ropes, ladders, gas masks,

hydrants, and standpipe and sprinkler systems; methods of entry and rescue; salvage practices and equipment; and fire and arson inspection and investigation techniques. Students enroll in both fall and spring courses. (Workplace Readiness)

Welding I (72211)

Grade Level: 11

Level of Difficulty: Academic, **Dual Enrolled Option with TCC**

Credit: 4 Credits, 10 TCC credits **Weight:** 0.05 per credit if Dual Enrolled

Prerequisite: None **Industry Credential:** No

Course Description: Welding I is a three-credit course in which students develop knowledge and skills in occupational awareness, drawings, welding symbols, shielded metal arc welding, gas metal arc welding, flux cored arc welding, gas tungsten arc welding, oxy-fuel welding and cutting, plasma arc cutting, carbon arc cutting practices, and visual inspection principles and practices.

Welding II (72212)

Grade Level: 12

Level of Difficulty: Academic, **Dual Enrolled Option with TCC**

Credit: 4 Credits, 12 TCC credits **Weight:** 0.05 per credit if Dual Enrolled

Prerequisite: Welding I **Industry Credential:** Yes

Course Description: Welding II is a three-credit course in which students learn and develop advanced skills in the welding industry including occupational awareness, job hunting skills, following written and verbal directions, interpreting and applying welding symbols and basic drawings. Students also demonstrate proficiency in the following welding and cutting processes: shielded metal arc welding, gas metal arc welding, flux cored arc welding, gas tungsten arc welding, manual and automatic oxy-fuel gas cutting, carbon arc cutting, plasma arc cutting, and visual examination principles and practices. Pre-apprenticeship Opportunity (Skills USA Welding Proficiency Assessment)

DE Precision Machining I

Grade Level: 12

Level of Difficulty: Dual Enrollment **Credit:** 2 Credits; TCC credits **Weight:** .05

Prerequisite: TCC admission standards, Algebra 1 and Geometry

Standard of Learning End-of-Course Test: No

Course Description: Precision Machining I is a dual enrolled course taught on the TCC campus. In this first course, students are taught safety awareness and the foundations of machining, including how to accurately apply measurements, use engineering drawings and sketches and apply metalworking theory in order to efficiently plan, manage, and perform general machine maintenance and machining jobs. Students will earn 3 credentials: OSHA 10, National Institute for Metalworking Skills, and Blueprint Reading Project Based Assessment.

DE Precision Machining II

Grade Level: 12

Level of Difficulty: Dual Enrollment **Credit:** 2 Credits; TCC Credits **Weight:** .05

Prerequisite: Dual Enrollment Precision Machining I

Standard of Learning End-of-Course Test: No

Course Description: Precision Machining II is a dual enrolled class taught on TCC campus. In this advanced course, CNC machining operations are emphasized. Students have the opportunity to increase their skills in applying precise measurements, using engineering drawings and sketches, and applying metalworking theory in order to safely and efficiently plan, manage, and perform general machine maintenance and machining jobs. This program helps to prepare students for the National Institute for Metalworking Skills (NIMS) credentials, which the industry uses to recruit, hire, place, and promote individual workers.

DE Mechatronics I (80151M140) MEC 140 Introduction to Mechatronics

Grade Level: 11

Level of Difficulty: College Level, **Dual Enrolled with TCC Credit:** 1 Credit, 3 TCC Credits **Weight:** 0.05 total

Prerequisite: None **Industry Credential:** No

Course Description: Students will learn about foundational concepts in mechatronics including analog and digital electronics, sensors, actuators, microprocessors, and microprocessor interfacing to electromechanical systems. Survey components and measurement equipment used in the design, installation, and repair of mechatronic equipment and circuits will also be explored.

DE Electronics Systems I (78151E150) ELE 150- AC and DC Circuit Fundamentals

Grade Level: 11

Level of Difficulty: College Level, **Dual Enrolled with TCC Credit:** 1.5 Credits, 3 TCC Credits **Weight:** 0.05 per credit

Prerequisite: None **Industry Credential:** No

Course Description: This course engages students in electricity and electronic experiments that focus on the application of scientific theories and mathematics principles. Students solve problems using simple electrical devices and circuits and build electronic projects using DC and AC devices and circuits.

DE Electronics Systems II (78152E281) ETR 281- Digital System

Grade Level: 11

Level of Difficulty: College Level, **Dual Enrolled with TCC Credit:** 1.5 Credits, 3 TCC Credits **Weight:** 0.05 per credit

Prerequisite: DE Electronics System I **Industry Credential:** Yes

Course Description: Students work with electronics devices, instruments, and circuits, building projects to apply theories and laws with electronic components such as resistors, capacitors, and transistors. They also study integrated circuits used in computers, amplifiers, televisions, and other equipment.

DE Electronics Systems III (78153E146) ELE 146 Electric Motor Control

Grade Level: 11

Level of Difficulty: College Level, **Dual Enrolled with TCC**

Credit: 1 Credit, 4 TCC Credits **Weight:** 0.05 total

Prerequisite: DE Electronics System II **Industry Credential:** No

Course Description: Students perform hands-on activities to apply advanced electronics concepts in state-of-the-art digital electronics and robotic programming, including concentrated work with microprocessors, magnetism, diodes, motors, transistors, amplifiers, power supplies, and automation.

DE Mechatronics II (80152MEC269) MEC 269 Fluid Power Pneumatics

Grade Level: 12

Level of Difficulty: College Level, **Dual Enrolled with TCC**

Credit: 1 Credit, 3 TCC Credits **Weight:** 0.05 total **Prerequisite:** Mechatronics I

Industry Credential: No

Course Description: Students will learn pneumatic components, systems, and trouble analysis. Introduces basic design for modification and repair. Covers open loop control, fluidics, robotics, and computer controls.

DE Mechatronics III (80152I230) INS 230 Instrumentation I

Grade Level: 12

Level of Difficulty: College Level, **Dual Enrolled with TCC**

Credit: 1 Credit, 4 TCC Credits **Weight:** 0.05 total **Prerequisite:** Mechatronics II

Industry Credential: No

Course Description: Students will learn fundamental scientific principles of process control including temperature, pressure, level, and flow measurements. Topics include transducers, thermometers, and gauges, along with calibration.

DE Industrial Robotics Programming (78154E246) ELE 246

Grade Level: 12

Level of Difficulty: College Level, **Dual Enrolled with TCC**

Credit: 1 Credit, 3 TCC Credits **Weight:** 0.05 total **Prerequisite:** None

Industry Credential: No

Course Description: Our ability to function and progress in the modern age is dependent on electronics and robotics technologies. This course provides a depth and breadth of the basic skills required in today's automated manufacturing environment. Students will explore careers, build circuits, and use principles of physics to analyze basic electronic and robotic components.

IMPORTANT WEBSITES

Chesapeake Public Schools- www.cpschools.com

Virginia Department of Education- www.doe.virginia.gov

NCAA Eligibility Requirements- www.ncaaeligibilitycenter.org

Kahn Academy- Khan Academy is free, gives personalized help with what you're studying or to learn

<https://www.khanacademy.org/>

Career Clusters in Virginia- Career Clusters help you investigate careers and design your courses of study to advance your career goals.

www.doe.virginia.gov/instruction/career_technical/career_clusters/index.shtml

Virginia Career VIEW- This site helps K–8 students explore career options, introduces the 16 Career Clusters, and provides resources and activities to enhance career development.

www.vacareerview.org

Virginia Education Wizard- The Virginia Education Wizard offers extensive career information, including assessment tools based on interests. Virginia Education Wizard will help you choose a career, get the information you need to pursue your career, and get answers to your questions about your future. Assessments are available to help students in their careers.

www.vawizard.org

ACT- Assesses high school students' general educational development and their ability to complete college-level work. Online registration, practice tests, and score reporting

www.act.org

College Board- Register online for the SAT Reasoning Test and SAT Subject Test. Review directions and practice questions. SAT score results are now available at this site.

www.collegeboard.org

CollegeView- <http://www.collegeview.com/collegesearch/index.jsp>

The Princeton Review- www.princetonreview.com

GoCollege- www.gocollege.com