2020-2021

Program of Studies

An Educational and Career Planning Guide for Secondary Students

SUFFOLK
PUBLIC SCHOOLS

"Every Child A Star . . . Together We Can Help Them Shine"

Effective: September 2020
(Revision: May 2020)

Contacts for Additional Information

King's Fork High School

351 King's Fork Road
Suffolk, VA 23434
www.sps.k12.va.us/schools/kfhs
923-5240

Lakeland High School

214 Kenyon Road
Suffolk, VA 23434
www.sps.k12.va.us/schools/lhs
925-5790

Nansemond River High School

3301 Nansemond Parkway
Suffolk, VA 23434
www.sps.k12.va.us/schools/nrhs
923-4101

The College and Career Academy at Pruden

4169 Pruden Boulevard
Suffolk, VA 23434
www.prudencenter.net
925-5650

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GENERAL INFORMATION

The purpose of the *Program of Studies* is to describe programs and courses offered in the high schools of Suffolk Public Schools. Included in this document are course sequences and descriptions within subject areas (Examples: English, Mathematics, Science, etc.) for your reference. Grade levels represent the recommended grade level at which most students should take the course described.

This *Program of Studies* is designed to assist students **entering 9th grade in 2020 and beyond** and their parents with long-range program planning and selection of courses for the upcoming school years. It is important that students consider the course descriptions and prerequisites, keeping in mind their personal abilities and interests. Students should choose courses that contribute to the accomplishments of their educational, personal, and career goals.

Parents are asked to review the *Program of Studies* information with their child(ren). Information in this guide should generate helpful discussions about career opportunities, diploma types, and educational plans. It is important that every parent be a vital part of the decision for the selection of student courses. Parents, in conjunction with school personnel, must work together to help students realize that the educational choices made today greatly affect the opportunities available in the future.

Course Selection and Registration Process

High schools in Suffolk Public Schools operate on a seven period alternate (odd/even) daily schedule. On the even day schedule, students attend their first block, second block, fourth block, and sixth period classes. On odd days, students attend their first block, third block, fifth block, and seventh period classes. (Please note that the first period class meets every day).

When selecting courses for the school year, students and parents/guardians should carefully choose the courses to be taken. The chosen courses should be based on the student's ability, past record of academic achievement, career goals, interest in the subject if it is an elective, and teacher/counselor recommendations. Fine arts and career and technical education electives offer students the opportunity to explore and study new topics as well as to gain valuable knowledge and skills.

Through thoughtful course selections and close cooperation between the student and the school counselor, a student should be able to pursue an academic and/or a career goal in a variety of elective areas of study. Parents/guardians are encouraged to contact their child's school counselor to discuss student career goals, course selections, and student academic achievement.

Promotion Policy

The following information applies to students who entered **Grade 9 in 2018-2019 and beyond**:

- Grade 9 — Successfully completed Grade 8
- Grade 10 — Successfully completed at least five (5) units including English 9, a Mathematics, and three (3) other courses AND have at least one verified credit in Science, Social Science or Mathematics
- Grade 11 — Successfully completed at least ten (10) units including English 10 and one Mathematics, one Science, and one Social Science AND have two (2) verified credits in Mathematics, Science, or Social Science for a total of two (2) verified credits
- Grade 12 — Successfully completed at least 15 units including English 11 and two Mathematics, two Sciences, and two Social Sciences and enrollment in those courses which will lead to graduation upon successful completion AND have verified one Mathematics, one Science, one Social Science and one English for a total of four verified credits
- Graduation — Successfully completed at least 22 units and at least five (5) verified credits: two (*2) English, one (1) mathematics, one (1) science, and one (1) history.*

A verified credit is earned by successful completion of an SOL course and passing the corresponding SOL assessment.

Special Education: Promotion will be based on achievement as determined by the standards-based Individualized Education Program (IEP).

Grading Scale

A ten (10) letter grading key is used to report scholastic progress in the following ranges:

			Point Value		
Letter Grade	**Score Range**	**Progress Statements**	**General**	**Honors and Pre-IB + (0.5)**	**IB, PLTW, Advanced Placement and Dual Enrollment +(1.0)**
A.	100-93	Outstanding progress, superior work	4.0	4.5	5
A-	92-90		3.7	4.2	4.7
B+	89-87		3.3	3.8	4.3
B.	86-83	Good, better than average progress	3.0	3.5	4
B-	82-80		2.7	3.2	3.7
C+	79-77		2.3	2.8	3.3
C.	76-73	Average progress	2.0	2.5	3
C-	72-70		1.7	2.2	2.7
D+	69-67		1.3	1.8	2.3
D.	66-63	Poor, but passing	1.0	1.5	2
F.	below 63	Unsatisfactory	0.0	0.0	0.0
I.		Incomplete – work must be made up			

Semester Grades: To determine the semester grade average, each nine weeks' grade will be added three times and the exam grade added one time, with the total divided by seven (7).

Final Grades: The final grade will be determined by averaging the two semester grades:

Example:

88/B First Semester
94/A Second Semester
182

182 ÷ 2 = 91/A- Final Grade

Class Ranking

High school class ranking in Suffolk Public Schools is based upon the grades earned in courses for which high school credit is awarded. Class rank is determined by assigning the highest average rank a number one (1): the second highest, the rank of number two (2): etc. In cases where more than one student has the same numerical average, all students with that average will be given the same rank. The next highest average will assume the next ranked position which will indicate the number of students having a higher rank.

Example:

Student No. 1	3.988 Rank 1
Student No. 2	3.988 Rank 1
Student No. 3	3.897 Rank 3
Student No. 4	3.897 Rank 3

The student with the next highest average would have the rank of five (5) in the class indicating that there are four (4) students who ranked higher. Students shall be ranked at the end of the first semester of their senior year. Only those high school credits earned through high school and middle school will be used in the ranking (i.e., a total of seven (7) semesters work and any high school credits earned in 7th or 8th grade).

In determining class rank, weighted points will be given for any Advanced Placement, Honors, Governor's School for the Arts, Project Lead the Way, International Baccalaureate (IB) and/or dual enrollment grades earned in another school division which correspond with weighted courses offered by Suffolk Public Schools.

A student may repeat a course and the higher grade will be used in determining class rank. In the case of a sequential course, the lower level course must be taken and the student must earn a passing grade before the student is eligible to take a higher level course.

If the student should decide to repeat a lower level course after having taken the higher level course, the original lower level course grade will be used for computing class rank, even though the student may have earned a higher grade after repeating the lower level course.

To be considered a valedictorian or salutatorian, a student must have completed a minimum of two (2) regular semesters in Suffolk Public Schools prior to computation of class rank.

Class rank will be announced during the last (fourth) grading period.

Testing

Standards of Learning (SOL) Assessments

The SOL tests were designed to measure student achievement throughout the State of Virginia. Students in selected grades are tested in the four core academic areas: Mathematics, English, Science, and History/Social Science. Students in Grades 8 and 11 will be assessed in Writing. SOL testing is scheduled in the fall, spring, and at the end of summer school each year. Other opportunities are available for re-testing or recovery.

GRADUATION REQUIREMENTS

Awarding Diplomas - Suffolk Public Schools shall award diplomas to all secondary school students, including students who transfer from nonpublic schools or from home instruction, who (i) earn the units of credit prescribed by the Board of Education; (ii) pass any prescribed tests; and (iii) meet such other requirements as prescribed by the Suffolk City School Board.

Profile of a Virginia Graduate – Both the Standard Diploma and the Advanced Diploma shall provide multiple pays toward college, career, and citizenship readiness for students to follow in the later years of high school. Each such pathway shall provide meaningful and rigorous opportunities tied to instruction to achieve workplace and citizenship skills through experiences such as internships, externships, credentialing, and blended learning which may be offered for credit toward high school graduation. Each student who receives a standard or advanced diploma shall: (i) attain the knowledge, skills, competencies, and experiences necessary to be successful in the evolving global economy whether immediately entering the world of work or pursuing a postsecondary education and (ii) acquire and be able to demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship. (Virginia Administrative Code 8VAC20-131-51)

Service Learning/Community Service Requirement

Students enrolled in 9th grade in 2020-21 and beyond will be required to complete a service learning experience embedded in a core area course. Service Learning (SL) experiences enable students to learn to apply academic, social, and personal skills to improve the community, continue individual growth, and develop a lifelong ethic of service. During a service learning experience, students identify an interest and a community need, and then develop and complete a project under the supervision of a staff member or teacher.

Students entering 9th grade PRIOR to 2020-21 will have the option of completing community service hours or a SL experience. Students opting to complete community service hours should follow the recommended number of hours listed below to attain the 50 hours needed to me graduation requirements.

Recommended Number of Community Service Hours per Year	
Grade 9	at least 16 hours
Grade 10	at least 17 hours
Grade 11	at least 17 hours

Students transferring into Suffolk Public Schools will be required to complete the following hours of community service:

Entering in grade 10	at least 35 hours (recommend at least 18 hours per year)
Entering in grade 11	at least 20 hours (recommend at least 18 hours per year)
Entering in grade 12	at least 10 hours

Students may elect to earn the 50 hours in varying combinations, earning all hours in one (1) year, two (2) years, three (3) years, or four (4) years.

Students completing the community service requirement with a B or better average in Virginia & United States History and Virginia & United States Government with good attendance and no disciplinary referral will be eligible for the Board of Education's Excellence in Civics Education Seal.

Parent(s) and a representative from the non-profit organization/person receiving the service must verify the student's participation in the activities. Hours will not be counted for activities that involve pay for services or that a family member is the recipient of the service.

School counselors will annually monitor the students' progress towards meeting the service learning or 50 hour requirement. Students will attach a one page Reflective Summary to the Community Verification form for each submission to the school counselor. Community Verification and Reflective Summary forms are available at www.spsk12.net (parent and student pages).

The Virginia Board of Education has prescribed the following diploma options:

The *Standards for Accrediting Schools in Virginia*, adopted by the Virginia Board of Education, establishes high school graduation requirements. Students typically have two diploma options**: Standard Diploma (22 credits)** and **Advanced Studies Diploma (26 credits)**. Students meeting standards based on Individualized Educational Plan (IEP) goals and objectives are eligible for an **Applied Studies Standard Diploma**. Credit accommodations for students with disabilities pursuing the Standard Diploma shall be determined by the student's individualized education plan (IEP) team or 504 committee.

Approved Courses

Courses approved for the Standard and Advanced Studies Diplomas – Effective with Ninth-Grade Class of 2010-2011 and beyond are available at: http://www.doe.virginia.gov/

Additional Requirements

Students entering 9th grade in 2018-2019 and beyond will be required by VDOE to complete a virtual course (standard and advanced diploma) and obtain an industry credential or take an Advanced Placement, IB, or honors course. The students in Health and Physical Education 9 and/or 10 courses will have a blend of face-to-face and virtual. Students will be required to complete selected virtual modules/lessons in one or both of the courses. Successful completion of modules will meet the requirement for the virtual course. Students are also required to complete an Economic and Personal Finance course which includes an industry credentialing assessment. Successful completion of the Economic and Personal Finance assessment or an assessment associated with another Career and Technical Education course will satisfy the industry credentialing requirement.

Students seeking a standard or advanced diploma are required to complete at *least two sequential electives*. Students are strongly encouraged to complete a sequence in career and technical education to match their career plans.

Students entering the ninth grade for the first time in 2018-2019 and beyond will be required by the VDOE to be trained in emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation. Students with an IEP or 504 Plan that documents they cannot successfully complete this training shall be granted a waiver per 8VAC20-131-420B.

Students shall acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate approved by the State Board of Education.

Students must successfully complete one of the following diploma plans:

STANDARD AND ADVANCED DIPLOMA OPTIONS

Discipline Area	***Standard Diploma Standard Credits***	***Advanced Diploma Standard Credits***
English	4	4
Mathematics	3	4
Laboratory Science	3	4
History and Social Sciences	3	4
Health and Physical Education	2	2
World Language	Optional (1 or more)	3 or more
Fine Arts, or Career and Technical	1 or more	1
Economics and Personal Finance	1	1
Electives	4	3
Total Credits	***22***	***26***

Notes for Standard Diploma

Discipline Area	**Courses required to complete this requirement:**
Mathematics	At least 2 different courses from Algebra I, Geometry, Algebra Functions and Data, Algebra II or other approved courses; computer science course credit earned by students may be considered a mathematics course credit
Laboratory Science	At least 2 different courses from Earth Sciences, Biology, Chemistry, or Physics, or completion of IB sequenced courses; computer science course credit

Discipline Area	Courses required to complete this requirement:
	earned by students may be considered a science course credit
History and Social Science	Virginia and U.S. History, Virginia and U.S. Government, and one course in either World History or Geography or both
World Language, Fine Arts, or Career and Technical Education	At least 1 credit in Fine Arts or Career and Technical Education
Electives	At least 2 sequential electives

Notes for Advanced Diploma

Discipline Area	Courses required to complete this requirement:
Mathematics	At least 3 different courses from Algebra I, Geometry, Algebra II or other mathematics courses above the level of Algebra II; computer science course credit earned by students may be considered a mathematics course credit
Laboratory Science	At least 3 different courses from Earth Sciences, Biology, Chemistry, or Physics, or completion of IB sequenced courses; computer science course credit earned by students may be considered a science course credit
History and Social Science	Virginia and U.S. History, Virginia and U.S. Government, and 2 courses in either World History or Geography or both
World Languages	3 years of one language or 2 years of two languages
Fine Arts, or Career and Technical Education	1 credit in Fine Arts or Career and Technical Education
Electives	At least 2 sequential electives

APPLIED STUDIES DIPLOMA

The Applied Studies Diploma is a diploma option available to students identified as having a disability who complete the requirements of their individualized education programs (IEPs) and meet certain requirements prescribed by the Board of Education pursuant to regulations, but do not meet the requirements for any named diploma.

STANDARD DIPLOMA CREDIT ACCOMMODATIONS

The Board of Education has approved Guidelines for Standard Diploma Credit Accommodations for Students with Disabilities to provide alternatives for these students in meeting the requirements for a Standard Diploma. Please direct questions about credit accommodations to the Office of Special Education Program Improvement in the Division of Special Education and Students Services. Credit accommodations provide alternatives for students with disabilities in earning 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

Guidance on the Use of Credit Accommodations

- Standard Diploma Credit Accommodations from the VDOE—This link will provide information about the policies and resources for students with credit accommodations.

GRADUATION REQUIREMENTS (Verified Credits)

Beginning with the graduating Class of 2004, students will be required to earn verified credits by passing a specific number of End-of-Course SOL tests in certain subject areas prior to high school graduation.

	Standard and Advanced Diploma (2018-2019 and beyond) Five (5) Credits	***Applied Studies Diploma***
Disciplines	*Entered 9th Grade 2018-2019 and beyond*	*Entering 9th Grade in 2013 and beyond*
English: Writing	1	*Meets Standards-Based IEP Goals*
English: Reading	1	
History/Social Science	1	
Mathematics	1	
Science	1	
Student Selected		
TOTAL:	**5**	

Summer Graduation - Students completing graduation requirements in summer school; completion of 12th grade English and Government required.

a. Students completing graduation requirements in a summer school accredited under these standards shall be eligible for a diploma. The last school attended by the student during the regular session shall award the diploma unless otherwise agreed upon by the principals of the two (2) schools.

b. In order for a student to earn a standard or advanced studies diploma from Suffolk Public Schools a student must (i) complete Twelfth grade English and Government at one of the high schools of Suffolk Public Schools and (ii) have successfully completed one full semester of study in Suffolk Public Schools.

c. Any student that does not satisfy the requirement set forth in subsection B above, must petition the last school attended to award a diploma.

Verified Credit Requirements for Transfer Students

Students entering during the 10th grade or the beginning of 11th grade	**5 verified credits**: 2 English; 1 History; 1 Science; 1 Math
Students entering during the 11th grade or the beginning of 12th grade	**2 verified credits**: 1 English; 1 of student's choosing unless Math participation is required

DIPLOMA SEALS

Students meeting specific requirements for graduation and demonstrating exemplary performance may receive diploma seals for recognition. VDOE makes available to local school divisions the following seals:

Governor's Seal – Awarded to students who complete the requirements for an Advanced Studies Diploma with an average grade of "B" or better, and successfully complete college-level coursework that will earn the student at least nine transferable college credits in Advanced Placement (AP), International Baccalaureate (IB), Cambridge, or dual enrollment courses.

Board of Education Seal – Awarded to students who complete the requirements for a Standard Diploma or Advanced Studies Diploma with an average grade of "A."

Board of Education's Career & Technical Education Seal – Awarded to students who:

- earn a Standard or Advanced Studies Diploma and complete a prescribed sequence of courses in a career and technical education concentration or specialization that they choose and maintain a "B" or better average in those courses
- OR pass an examination or an occupational competency assessment in a career and technical education concentration or specialization that confers certification or occupational competency credential from a recognized industry, trade or professional association
- OR acquire a professional license in that career and technical education field from the Commonwealth of Virginia.
- The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

Board of Education's Science, Technology, Engineering, and Mathemathics (STEM) Seal – Awarded to students who earn either a Standard or Advanced Studies Diploma and satisfy all of the mathematics and science requirements for the Advanced Studies Diploma (four units of credit including Algebra II; one verified unit of credit) with a "B" average or better; and either

- successfully complete a 50 hour or more work-based learning opportunity in a STEM area, and
- satisfy all requirements for a Career and Technical Education concentration. A concentration is a coherent sequence of two or more state-approved courses as identified in the course listing within the CTW Administrative Planning Guide, and
- pass one of the following:
  - a Board of Education CTE STEM-H credential examination, or
  - an examination approved by the Board that confers a college-level credit in a STEM field

Board of Education's Excellence in Civics Education Seal – Awarded to students who meet each of the following four criteria:

- Satisfy the requirement to earn a Modified Standard Diploma, Standard Diploma or an Advanced Studies Diploma
- Complete Virginia & United States History and Virginia & United States Government courses with a grade of "B" or higher
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate;

participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; and participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.

- Have good attendance and no disciplinary infractions as determined by local school board policies.

Virginia Seal of Biliteracy, --Awarded to students who meet each of the following criteria:

- Pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level, **and**
- Be proficient in the intermediate-mid level or higher in one or more language other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction.

Board of Education's Seal for Excellence in Science and the Environment --Awarded to students who enter the nine grade for the first time in 2018-2019 and thereafter, and meet the each of the following criteria:

- Earn either a Standard or Advanced Studies Diploma,
- Complete at least three different first-level board-approved laboratory science courses and at least one rigorous advanced-level or postsecondary-level laboratory science course, each with a grade of "B" or higher,
- Complete laboratory or field-science research and present that research in a formal, juried setting,
- Complete at least 50 hours of voluntary participation in community service or extracurricular activities that involve the application of science such as environmental monitoring, protection, management, or restoration.

Local school divisions may award other diploma seals or awards for exceptional academic, CTE, citizenship or other exemplary performance in accordance with criteria defined by the local school board. The design, production and use of those seals are the responsibility of the local school boards awarding the seal.

Special Recognition

Early College Scholar

The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credits while completing the requirements for an Advanced Studies Diploma. The result is a more productive senior year and a substantial reduction in college tuition.

Specifically, the program is composed of the following options: Advanced Placement (AP), Dual Enrollment, and International Baccalaureate.

Each of these programs allows students to experience college level course work during their high school careers. The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credits while completing the requirements for an Advanced Studies Diploma. Completion of transferrable college credits assist students in reducing the number of courses they will need to complete at the college/university of their choice.

To qualify for the Early College Scholars program, a student must:

- Have a "B" average or better;
- Be pursuing an Advanced Studies Diploma; and;
- Take and complete college-level course work (i.e., Advanced Placement, International Baccalaureate, Cambridge, or dual enrollment) that will earn at least 15 transferable college credits.

Early College Scholar applications are available in the high school guidance office and at this website:
http://www.doe.virginia.gov/instruction/graduation/early_college_scholars/index.shtml

AP Scholar Awards

The Advanced Placement Program offers several Scholar Awards to recognize high school students who have demonstrated college-level achievements through AP courses and exams. Although there is no monetary award, in addition to receiving an award certificate, this achievement is acknowledged on any grade report that is sent to colleges the following fall and is announced in the media. Students may earn the following distinctions:

Advanced Placement Scholar
Granted to students who receive grades of 3 or higher on three or more AP Exams

Advanced Placement Scholar with Honor
Granted to students who receive an average grade of at least 3.25 on all AP Exams taken, and grades of 3 or higher on four or more of these exams

Advanced Placement Scholar with Distinction
Granted to students who receive an average grade of at least 3.5 on all AP Exams taken, and grades of 3 or higher on five or more of these exams

Advanced Placement State Scholar
Granted to one female and one male student in each U.S. state and the District of Columbia with grades of 3 or higher on the greatest number of exams (at least three exams), and then the highest average grade (at least 3.5) on all AP Exams taken.

National Advanced Placement Scholar
Granted to students in the United States who receive an average grade of at least 4 on all AP Exams taken, and grades of 4 or higher on eight or more of these exams

COURSE SEQUENCES AND DESCRIPTIONS

ACADEMIC COURSES

English
Course Sequences and Descriptions

1130 **ENGLISH 9**
Grade: 9
Prerequisite(s): Successful completion of English 8
Credit: One

The English 9 course supports students in building their skills in the four areas of study outlined in the 2017 Standards of Learning: communication and multimodal literacies, reading, writing and research. Throughout the course, students are exposed to a survey of world literature from varying cultures and periods of time. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. The English 9 course integrates reading and writing throughout the year, using the recursive writing process while writing in a variety of forms with an emphasis on analysis, persuasion, and research. **Summer Reading: SUGGESTED**

1130H **HONORS ENGLISH 9**
Grade: 9
Prerequisite(s): "B" or better in English 8
Credit: One (weighted + 0.5)

The Honors English 9 course supports students in building their skills in the four areas of study outlined in the 2017 Standards of Learning: communication and multimodal literacies, reading, writing and research. Throughout the course, students are challenged to analyze and compare/contrast world literature from varying cultures and periods of time. There is a continued emphasis on reading comprehension by comparing fiction and nonfiction texts. The English 9 course integrates reading and writing throughout the year, using the recursive writing process while writing in a variety of forms with an emphasis on analysis, persuasion, and research. Students are expected to conclude the course with greater control over the conventions of writing. **Summer Reading: REQUIRED**

1140 **ENGLISH 10**
Grade: 10
Prerequisite(s): Successful completion of English 9
Credit: One

The English 10 course supports students in building their skills in the four areas of study outlined in the 2017 Standards of Learning: communication and multimodal literacies, reading, writing and research. Throughout the course, students are exposed to a survey of world literature from varying cultures and periods of time. There is a sustained emphasis on comparing and analyzing fiction and nonfiction texts to solve problems, answer questions, and generate new knowledge. The English 10 course integrates reading and writing throughout the year, using the recursive writing process while writing in a variety of forms with an emphasis on analysis, persuasion, and research. **Summer Reading: SUGGESTED**

1140H **HONORS ENGLISH 10**
Grade: 10
Prerequisite(s): "B" or better in English 9
Credit: One (weighted + 0.5)

The Honors English 10 course supports students in building their skills in the four areas of study outlined in the 2017 Standards of Learning: communication and multimodal literacies, reading, writing and research. Throughout the course, students are exposed to a survey of world literature from varying cultures and periods of time. There is a sustained emphasis on comparing and analyzing fiction and nonfiction texts to solve problems, answer questions, and generate new knowledge. The Honors English 10 course integrates reading and writing throughout the year, using the recursive writing process while writing in a variety of forms with an emphasis on analysis, persuasion, and research. Students are expected to conclude the Honors English 10 course with an even greater control over the conventions of writing. **Summer Reading: REQUIRED**

1150 **ENGLISH 11**
Grade: 11
Prerequisite(s): Successful completion of English 10
Credit: One
SOL(s): *End of Course Reading and Writing REQUIRED*

The English 11 course supports students in building their skills in the four areas of study outlined in the 2017 Standards of Learning: communication and multimodal literacies, reading, writing and research. Throughout the course, engage with a variety of texts written by American authors in order to identify prevalent themes and characterizations reflective of American history and culture. There is a sustained emphasis on critiquing and analyzing American literature to solve problems, answer questions, and generate new knowledge. The English 11 course integrates reading and writing throughout the year, using the recursive writing process while writing in a variety of forms with an emphasis on persuasion, argumentation, and research. **Summer Reading: SUGGESTED**

1150H **HONORS ENGLISH 11**
Grade: 11
Prerequisite(s): "B" or better in English 10
Credit: One (weighted + 0.5)
SOL(s): *End of Course Reading and Writing REQUIRED*

The Honors English 11 course supports students in building their skills in the four areas of study outlined in the 2017 Standards of Learning: communication and multimodal literacies, reading, writing and research. Throughout the course, an increased emphasis is placed on critical thinking skills, analytical skills, college readiness, and independent reading. There is a sustained emphasis on critiquing and analyzing American literature to solve problems, answer questions, and generate new knowledge. The Honors English 11 course integrates reading and writing throughout the year, using the recursive writing process while writing in a variety of forms with an emphasis on persuasion, argumentation, and research. As they progress through the course, students are expected to write to a standard acceptable both in the workplace and postsecondary education. **Summer Reading: REQUIRED**

1160 **ENGLISH 12**
Grade: 12
Prerequisite(s): Successful completion of English 11
Credit: One

The English 12 course supports students in building their skills in the four areas of study outlined in the 2017 Standards of Learning: communication and multimodal literacies, reading, writing and research. Throughout the course, engage with a variety of texts written by British authors in order to identify prevalent themes and characterizations reflective of British history and culture. There is a sustained emphasis on critiquing and analyzing British literature to solve problems, answer questions, and generate new knowledge. The English 12 course integrates reading and writing throughout the year, using the recursive writing process while writing in a variety of forms with an emphasis on persuasion, argumentation, and research. **Summer Reading: SUGGESTED**

1160H **HONORS ENGLISH 12**
Grade: 12
Prerequisite(s): "B" or better in English 11
Credit: One (weighted + 0.5)

The Honors English 12 course supports students in building their skills in the four areas of study outlined in the 2017 Standards of Learning: communication and multimodal literacies, reading, writing and research. Throughout the course, an increased emphasis is placed on critical thinking skills, analytical skills, college readiness, and independent reading. There is a sustained emphasis on critiquing and analyzing British literature to solve problems, answer questions, and generate new knowledge. The Honors English 12 course integrates reading and writing throughout the year, using the recursive writing process while writing in a variety of forms with an emphasis on persuasion,

argumentation, and research. As they progress through the course, students are expected to write to a standard acceptable both in the workplace and postsecondary education. **Summer Reading: REQUIRED**

1195 ADVANCED PLACEMENT LITERATURE AND COMPOSITION
Grade: 12
Prerequisite(s): "B" or better in English 11 or Honors
English 11 or AP Language and Composition
Credit: One (weighted +1)
AP Exam: Optional

Students in this class will be challenged to think critically, to synthesize literature, and to write effectively. The course will emphasize British literature, but will include literary works from many countries. In addition, information concerning cultural, historical, philosophical, and psychological backgrounds will be addressed. The genres will include epics, dramas, novels, and a major focus on poetry. **Summer Reading: REQUIRED**

1196 ADVANCED PLACEMENT LANGUAGE AND COMPOSITION
Grades: 11-12
Prerequisite(s): "B" or better in English 10 or Honors English 10 or English II or Honors English 11 or AP Language and Composition
Credit: One (weighted + 1)
SOL: Reading and Writing End-of-Course Testing SUGGESTED
AP Exam: Optional

Students will follow a program designed to parallel freshman composition at the college level. The work includes a close analysis of prose works. Students will prepare multi-paragraph compositions employing various rhetorical strategies examined in four major areas: narration, description, exposition, and argumentation. Time is allotted in-class for test taking strategies and timed writings which simulate the AP examination. **Summer Reading: REQUIRED**

DE1600 DUAL CREDIT ENGLISH COMPOSITION
Grades: 11-12
Prerequisite(s): B" or better in English 10 or
Honors English 10 or English 11 or Honors English 11 or AP Language and Composition and students must meet the Virginia Placement Test (VPT) criteria for the PDCCC, or have taken the ACT, SAT or PSAT.

Credit: One (weighted +1)
College Code: ENG 111 and ENG 112

DC English Composition is designed to challenge the student's ability to think critically and to write effectively. Students will follow a program designed to parallel freshman composition at the college level. Students will prepare multi-paragraph compositions employing various rhetorical strategies examined in four major areas: narration, description, exposition, argumentation, and at least one researched essay.

1181 LITERACY STRATEGIES FOR HIGH SCHOOL I
Grade: 9
Prerequisite(s): English 8
Credit: One

The Literacy Strategies for High School I course supports students in further developing and refining their reading and test taking skills. Students are recommended for placement in this course based on multiple criteria including results from prior Standards of Learning assessments, performance in English or Reading courses, and other standardized testing. Throughout the course, students receive instruction in the areas of word level instruction, comprehension, motivation, and assessment strategy. Students explore texts and vocabulary through the use of seven different strategies:

thinking reading, the vocabulary process, book study, the prediction strategy, the bridging strategy, strategy integration, and possible selves. Independent reading is incorporated to build fluency, expand vocabulary, provide practice, and increase the enjoyment of reading.

1182 LITERACY STRATEGIES FOR HIGH SCHOOL II

Grade: 10
Prerequisite(s): Successful completion of Literacy Strategies I
Credit: One

The Literacy Strategies for High School II course provides students with opportunities to practice and refine what they learned in Literacy Strategies for High School I. Students explore texts and vocabulary through the use of six different strategies: thinking reading, the vocabulary process, book study, the summarization strategy, strategy integration, and the PASS strategy. Independent reading is incorporated to build fluency, expand vocabulary, provide practice, and increase the enjoyment of reading. Students complete a reading project at the conclusion of the course.

1200 JOURNALISM I

Grades: 11-12
Prerequisite(s): "C" or better in previous English class
Credit: One

The Journalism I course introduces students to the terminology necessary for understanding the communication process. Students have the opportunity to explore and compare various forms of mass communication, both print and electronic. Journalism I also introduces students to the beginning study of black and white and color photography. Students learn to organize and write news, sports, features, and editorial articles. Students are introduced to various types of journalistic writing throughout the course.

1210 JOURNALISM II

Grades: 11-12
Prerequisite(s): Journalism I
Credit: One

The Journalism II course provides students with opportunities to practice and refine what they learned in Journalism I. This course may be used to design school newspaper and/or yearbook. Throughout the course, students learn about gathering and writing news and practice writing in-depth news articles, feature stories, editorials, columns, and reviews. Students gain further experience in proofreading and revision to improve writing style and editing skills in this course.

1300 FUNDAMENTALS OF PUBLIC SPEAKING

Grades: 10-12
Prerequisite(s): English 9
Credit: One

The Fundamentals of Public Speaking course allows students to become proficient in and gain knowledge of advanced oral communication techniques. 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 in a professional manner. Throughout the course, they gather, evaluate, organize, and articulate information in a purposeful and meaningful manner. In addition, students learn to defend and refute issues and develop skills in research, critical thinking, and organization of ideas. Upon successful completion of the course, students are able to speak effectively and confidently in formal, informal, and business communication situations.

1171 **CREATIVE WRITING**

Grades: 10-12
Prerequisite(s): English 9
Credit: One

The creative writing course is an introduction to the major genres of creative (imaginative) writing, including fiction, poetry, drama, and personal essay (creative nonfiction). Students examine the creative process through experimentation with a variety of creative exercises. Students gain a more in-depth understanding of the technical elements of fiction, poetry, and drama. In addition, the course features reading, analyzing, and critiquing a variety of literary examples, including students' own writings. In the course, students compose stories, poems, and dramatic scenes.

1517 **ADVANCED CREATIVE WRITING**

Grades: 11-12
Prerequisite(s): Creative Writing
Credit: One

The advanced creative writing course provides students with an in-depth study and practice in fiction writing and poetry, including but not limited to: narrative voice and speaker, plotting and pacing, meter and rhyme, use of figurative language and allusions, developing characters, point of view, them, setting, and description. Students apply and refine the skills learned in Creative Writing by creating and publishing a literary magazine/newspaper. Students also explore the areas of self-publishing through examination of formatting, publishing, and marketing. At the conclusion of the course, students complete a long-term project and prepare for self-publication.

Foreign Language
Course Sequences and Descriptions

5990 **AMERICAN SIGN LANGUAGE I**

Grades 9-12
Pre-requisite(s): none
Credit: One

Students will be introduced to a basic vocabulary of approximately 500 signs and knowledge of the manual alphabet. Expressive and receptive skills will be developed so that students will be able to use correctly in sentences those signs which have been learned using the ASL (American Sign Language or Ameslan) and will understand such sentences when given only in the language of signs. A history of sign language and of the education of the deaf will be included, along with an introduction to terminology used in the field of communicating with deaf persons. Teacher and students will communicate in the targeted language during at least 50% of the class.

5995 **AMERICAN SIGN LANGUAGE II**

Grades 10-12
Pre-requisite(s): "C" or better in Sign Language I recommended
Credit: One

Students will follow the introductory sign language course and add approximately 500 additional signs. Expressive and receptive skills will be developed at an increased speed and in more detailed context. Knowledge of deafness is expanded, and the teacher will cover very simply the physiology of the ear and hearing, the degrees of hearing loss and their implications, the use of hearing aids, and the audiogram. Students are introduced to communication with the deaf-blind. Teacher and students will communicate in the targeted language during at least 75% of the class.

5997 **AMERICAN SIGN LANGUAGE III**

Grades 11-12
Pre-requisite(s): "C" or better in Sign Language II recommended
Credit: One

Students will follow the introductory sign language course and add approximately 500 additional signs. Expressive and receptive skills will be developed at an increased speed and in more detailed context. Knowledge of deafness is expanded, and the teacher will cover very simply the physiology of the ear and hearing, the degrees of hearing loss and their implications, the use of hearing aids, and the audiogram. Students are introduced to communication with the deaf-blind. Teacher and students will communicate in the targeted language during at least 90% of the class.

5998 **HONORS AMERICAN SIGN LANGUAGE IV**

Grades 11-12
Pre-requisite(s): " B" or better in American Sign Language III.
Credit: One (weighted + .5)

Students will continue to develop their proficiencies in the three modes of communicative competence: interaction with other speakers of the language by listening to another person's words, inflections, and intent, and simultaneously render them into the visual language of signs using the mode of communication preferred by the deaf person. Also the student will comprehend the signs, inflections and intent of the deaf person and simultaneously speak them in articulate and appropriate English. Students will interpret different settings and scenarios to improve their interpreting skills. They must be able to access information in other subject areas and compare and contrast cultural elements in deaf culture to hearing culture.

5110 **FRENCH I**

Grades 8-12
Pre-requisite(s): "C" or better in English 8
Credit: One

Students will develop the basic skills of listening, speaking, reading, and writing in French. They will learn how to greet people, tell the time and date, and describe the weather. They will receive an introduction to the culture of French-speaking people. Teacher and students will communicate in the targeted language during at least 50% of the class.

5120 **FRENCH II**

Grades 9-12
Pre-requisite(s): "C" or better in French I recommended
Credit: One

Students will review the vocabulary and grammar learned in French I. They will learn new vocabulary and grammar; improve their skills in listening, speaking, reading, and writing in French; and increase their knowledge of the cultures of the French-speaking people. Teacher and students will communicate in the targeted language during at least 75% of the class.

5130 **FRENCH III**

Grades 10-12
Pre-requisite(s): "C" or better in French II recommended
Credit: One

Students will thoroughly review vocabulary and grammar learned in French I and II while learning new vocabulary and grammar. The basic skills of listening, speaking, reading, and writing will be stressed, as well as the culture of French-speaking people. Teacher and students will communicate in the targeted language during at least 90% of the class.

5140 **HONORS FRENCH IV**

Grades 11-12
Pre-requisite(s): "B" or better in French III
Credit: One (weighted + .5)

In Honors French IV, students continue to develop their communicative competence by interacting orally and in writing with other French speakers, understanding oral and written messages in French, and making oral and written presentations in French. Students will be able to exchange and support opinions on a variety of topics related to contemporary and historical events and issues at a proficiency level commensurate with their study. They will comprehend spoken and written French texts from a variety of authentic sources as well as produce compositions containing well-developed ideas on various topics. Students will use French to access information in other subject areas and will compare and contrast cultural elements found in French-speaking countries with those found in their own. Teacher and students will communicate in the targeted language during at least 80% of the class.
Summer Assignment: REQUIRED

5150 **HONORS FRENCH V**

Grade 12
Pre-requisite(s): "B" or better in French IV
Credit: One (weighted + .5)

Students will communicate entirely in French in the classroom. Students will discuss and interpret current events, social issues, lifestyles of the Franco-phone world and write compositions on assigned topics and topics of their own choosing. Students will prepare oral and written reports on literature written by famous French authors. Teacher and students will communicate in the targeted language during the class. *Summer Assignment: REQUIRED*

5310 **LATIN I**

Grades 8-12
Pre-requisite(s): "C" or better in English 8
Credit: One

Students will be introduced to the basic grammar, vocabulary, and pronunciation of the Latin language. The students learn, at a gradual pace, enough vocabulary and grammar to be able to translate a few sentences at a time and to analyze the grammatical constructions contained in each sentence. The student will learn all six tenses of the verbs with emphasis on the first four, all four conjugations, the first two declensions, all three genders, the active and passive voices, and the indicative and imperative moods of the verbs. The Latin I student will receive limited exposure to culture of the ancient Roman world and mythology.

5320 **LATIN II**

Grades 9-12
Pre-requisite(s): "C" or better in Latin I recommended
Credit: One

Students will learn, at a moderate pace, third declension, pronouns, participles and many more grammatical constructions, and vocabulary. The Latin II student will receive more grammatical exposure to the culture and mythology, a brief introduction to some classical authors, and the subjunctive mood of verbs. The student becomes better able to translate entire paragraphs and stories in Latin.

5330 **LATIN III**

Grades 10-12
Pre-requisite(s): "C" or better in Latin II recommended
Credit: One

Students will receive instructions on the subjective mood, deponent verbs, and other irregular verbs. The Latin III students will learn more vocabulary and more complicated grammatical constructions that enable them to translate selected passages by the text authors and classical authors. Students will learn more about the history and culture of the ancient Roman world through research on various topics of interest pertaining to the ancient Romans.

5340 **HONORS LATIN IV**

Grades 11-12
Pre-requisite(s): "B" or better in Latin III
Credit: One (weighted + .5)

In Honors Latin IV, students continue to develop their communicative competence by interacting orally and in writing Latin, understanding written messages in Latin, and making written presentations in Latin. Students will be able to exchange and support opinions on a variety of topics related to contemporary and historical events and issues at a proficiency level commensurate with their study. They will comprehend written Latin texts from a variety of authentic sources as well as produce compositions containing well-developed ideas on various topics. Students will use Latin to access information in other subject areas and will compare and contrast cultural elements found in classical cultures compared to modern cultures. *Summer Assignment: REQUIRED*

5350 **HONORS LATIN V**

Grade 12
Pre-requisite(s): "B" or better in Latin V
Credit: One (weighted +.5)

Students will expand their knowledge of Latin grammar and vocabulary while increasing the fluency of translation. They will continue to broaden their understanding of classical literature and its relationship to the political and historical events of the time period. *Summer assignment: REQUIRED.*

5510 **SPANISH I**

Grades 8-12
Pre-requisite(s): "C" or better in English 8
Credit: One

Students will develop the basic skills of listening, speaking, reading, and writing in Spanish. They will be able to greet people, tell the date and times, give telephone numbers, express likes and dislikes, and describe the weather. They will receive an introduction to the cultures of Spanish-speaking people. Both Spanish and English will be spoken in class. Teacher and students will communicate in the targeted language during at least 50% of the class.

5520 **SPANISH II**

Grades 9-12
Pre-requisite(s): C" or better in Spanish I recommended
Credit: One

Students will review the vocabulary and grammar presented in Spanish I. They will learn new vocabulary and grammar; improve their skills in listening, speaking, reading, and writing in Spanish; and increase their knowledge of the cultures of the Spanish-speaking people. Teacher and students will communicate in the targeted language during at least 75% of the class.

5530 **SPANISH III**

Grades 10-12
Pre-requisite(s): "C" or better in Spanish II recommended
Credit: One

Students will thoroughly review vocabulary and grammar studied in Spanish I and II while continuing to learn new vocabulary and grammar. The basic skills of listening, speaking, reading, and writing will continue to be stressed, as well as the culture of the Spanish-speaking countries. Teacher and students will communicate in the targeted language during at least 90% of the class.

5540 **HONORS SPANISH IV**

Grades 11-12
Pre-requisite(s): "B" or better in Spanish III
Credit: One (weighted + .5)

In Honors Spanish IV, students continue to develop their communicative competence by interacting orally and in writing with other Spanish speakers, understanding oral and written messages in Spanish, and making oral and written presentations in Spanish. Students will be able to exchange and support opinions on a variety of topics related to contemporary and historical events and issues at a proficiency level commensurate with their study. They will comprehend spoken and written Spanish texts from a variety of authentic sources as well as produce compositions containing well-developed ideas on various topics. Students will use Spanish to access information in other subject areas and will compare and contrast cultural elements found in Spanish-speaking countries with those found in their own. Teacher and students will communicate in the targeted language during the class. *Summer Assignment: REQUIRED.*

5550 **HONORS SPANISH V**

Grade 12
Pre-requisite(s): "B" or better in Spanish IV
Credit: One (weighted + .5)

Students will review vocabulary and grammar learned in Spanish I, II, III, and IV. They will continue to increase their knowledge in vocabulary and grammar; improve their listening, speaking, reading and writing skills; and study the cultures of the Spanish speaking countries. In addition, there will be an introduction to masterpieces of Spanish literature such as *El Cid* and *Don Quixote*. Teacher and students will communicate in the targeted language during the class.
Summer Assignment: REQUIRED

5570 **ADVANCED PLACEMENT SPANISH LANGUAGE**

Grades 11-12
Pre-requisite(s): "B" or better in Spanish IV
Credit: One (weighted +1)
AP Exam: Optional

Students will cover the equivalent of a third-year college course in advanced Spanish writing and conversation. It encompasses aural/oral skills, reading comprehension, grammar, and composition. Topics may include the arts, history, current events, literature, culture, sports, films, newspapers, and magazines etc.
Summer Assignment: REQUIRED

5710 **ENGLISH AS A SECOND LANGUAGE I**

Grades 9-12
Pre-requisite(s): EL identification
Credit: One
Students will receive intensive teaching in English especially designed for English Learners (EL), where English may be a second language. The primary goal of the course is help students understand, read, write, and speak English in order to communicate in social settings, to achieve academically in all subject areas, and to behave in social and culturally appropriate ways. This course satisfies a World Language requirement for a graduation for EL students only.

5720 **ENGLISH AS A SECOND LANGUAGE II**

Grades 9-12
Pre-requisite(s): EL identification & successful completion of ESL I
Credit: One
Students will receive intensive teaching in English especially designed for English Learners (EL), where English may be a second language. The primary goal of the course is help students understand, read, write, and speak English in order to communicate in social settings, to achieve academically in all subject areas, and to behave in social and culturally appropriate ways. This course satisfies a World Language requirement for a graduation for EL students only.

5730 **ENGLISH AS A SECOND LANGUAGE III**

Grades 9-12
Pre-requisite(s): EL identification & successful completion of ESL II
Credit: One
Students will receive intensive teaching in English especially designed for English Learners (EL), where English may be a second language. The primary goal of the course is help students understand, read, write, and speak English in order to communicate in social settings, to achieve academically in all subject areas, and to behave in social and culturally appropriate ways. This course satisfies a World Language requirement for a graduation for EL students only.

5731 **ENGLISH AS A SECOND LANGUAGE IV**

Grades 9-12
Pre-requisite(s): EL identification & successful completion of ESL III
Credit: One
Students will receive intensive teaching in English especially designed for English Learners (EL), where English may be a second language. The primary goal of the course is help students understand, read, write, and speak English in order to communicate in social settings, to achieve academically in all subject areas, and to behave in social and culturally appropriate ways. This course satisfies a World Language requirement for a graduation for EL students only.

01008G10055 **ENGLISH AS A SECOND LANGUAGE V**

Grades 9-12
Pre-requisite(s): EL identification & successful completion of ESL IV
Credit: One
Students will receive intensive teaching in English especially designed for English Learners (EL), where English may be a second language. The primary goal of the course is help students understand, read, write, and speak English in order to communicate in social settings, to achieve academically in all subject areas, and to behave in social and culturally appropriate ways. This course satisfies a World Language requirement for a graduation for EL students only.

Health and Physical Education
Course Sequences and Descriptions

7700 **ADAPTED PHYSICAL EDUCATION**
Grade 9-12
Pre-requisite(s): None
Credit: One

Students with disabilities require special consideration in the planning and implementation of their physical education programs. This course allows students the opportunity to experience the common benefits and activities of regular physical education by providing modification, alternative activities, and adapted equipment for varying abilities. Through careful evaluation, students enrolled in this course are selected based on who requires special support to safely and successfully participate in either a regular or supplemental physical education program. This course provides students in instruction in the least restrictive environment.

7300 **HEALTH AND PHYSICAL EDUCATION 9**
Grade 9
Pre-requisite(s): None
Credit: One

Students will learn proper maintenance of the body through hygiene, nutrition, and identifying and correcting hazards that may cause a reduction in the efficiency of body functions. Students will become physically involved in activities that help cardio-vascular efficiency. Rules and skills are taught to each student for understanding and appreciation of each activity and knowledge that these activities should be carried over into adulthood for a healthier and more enjoyable life. Students may be taught emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice. ***(Health Modules Part I & II – included which will meet the virtual graduation requirement when successfully completed.)***

7405 **HEALTH AND PHYSICAL EDUCATION 10**
Grade 10
Pre-requisite(s): None
Credit: One

Students will learn proper maintenance of the body through hygiene, nutrition, and identifying and correcting hazards that may cause a reduction in the efficiency of body functions. Students will become physically involved in activities that help cardio-vascular efficiency. Rules and skills are taught to each student for understanding and appreciation of each activity and knowledge that these activities should be carried over into adulthood for a healthier and more enjoyable life. Students may be taught emergency first aid, cardiopulmonary resuscitation, and the use of automated external defibrillators, including hands-on practice. Driver Education is taught as part of the tenth grade health course. This unit is 36 hours in length and teaches the responsibility and rules of driving a motor vehicle in the state of Virginia. ***(Health Modules Part I & II– included which will meet the virtual graduation requirement when successfully completed.)***

7640 **ADVANCED HEALTH AND PHYSICAL EDUCATION**
Grades 11-12
Pre-requisite(s): Completion of Health and Physical Education 9 and 10 with a "C" average
Credit: One

Students will further their skills and knowledge in the area of lifetime physical education activities. Students learn the importance of a life plan that includes physical activity and the personal satisfaction to be gained through these activities. Students will participate in and officiate for the following sports: basketball, flag football, horseshoes, softball, shuffleboard, tennis, track and field, volleyball, and weightlifting.

History and Social Sciences
Course Sequences and Descriptions

2215 WORLD HISTORY AND GEOGRAPHY TO 1500 A.D.
Grade 9
Pre-requisite(s): None
Credit: One
SOL: End-of-Course Test required for students needing a verified Social Studies credit

Students will explore the historical development of life from Pre-History to 1500 A.D. Students will explore ancient river civilizations, trading empires, military empires, religions, ancient Greeks, and ancient Romans. Students will compare and contrast civilizations of the Muslim world and Christendom, the Byzantine Empire, Russia and the Middle Ages, with selected civilizations in Africa, Asia, and India. Using a variety of geographic research skills and technological skills, students will examine various cultures and their influence on the physical and ecological environments.

2215H HONORS WORLD HISTORY AND GEOGRAPHY to 1500 A. D.

Grade 9
Pre-requisite(s): "B" or better in Grade 8 – History
Credit: One (weighted + .5)
SOL: *End-of-Course Test required for students needing a verified Social Studies credit*

Students will explore the historical development of life from Pre-History to 1500 A.D. Students will explore ancient river civilizations, trading empires, military empires, religions, ancient Greeks, and ancient Romans. Students will compare and contrast civilizations of the Muslim world and Christendom, the Byzantine Empire, Russia and the Middle Ages, with selected civilizations in Africa, Asia, and India. Using a variety of geographic research skills and technological skills, students will examine various cultures and their influence on the physical and ecological environments. Additional emphasis will be given to research, writing, analysis, and critical thinking skills**. Summer Assignment: REQUIRED**

2215 WORLD HISTORY AND GEOGRAPHY 1500 A.D. TO PRESENT
Grade 10
Pre-requisite(s): World History and Geography to 1500 A.D.
Credit: One
SOL: End-of-Course Test required for students needing a verified Social Studies credit

Students will study the Western Civilization and its impact upon non-western civilizations. They will discuss geographic influences on history as well as political boundaries that developed with the scientific and technological revolutions that created economic, social, and political changes. The people and events of the 19th and 20th centuries will be emphasized for their connections to contemporary issues. Through the use of basic social studies skills and a variety of critical thinking skills, students will develop competence in chronological thinking, historical comprehension, and historical analysis.

2216H HONORS WORLD HISTORY AND GEOGRAPHY FROM 1500 A.D. TO PRESENT
Grade 10
Pre-requisite(s): "B" or better in World History and Geography to 1500 A.D
Credit: One (weighted + .5)
SOL: End-of-Course Test required for students needing a verified Social Studies credit

Students will expand their thinking and understanding of history from the Middle Ages to the present. Students will study how geography influences regions and history with increasing attention to the development of political boundaries, scientific revolutions, and changing economic, social, and political conditions. Additional emphasis will be given to research, writing, analysis, and critical thinking skills.
Summer Assignment: REQUIRED

2380 ADVANCED PLACEMENT WORLD HISTORY: MODERN

Grades 10-12
Pre-requisite(s): "B" or better in World History and Geography to 1500 A.D. or Honors World History and Geography to 1500 A.D.
Credit: One (weighted +1)
SOL: *End-of-Course Testing and/or AP Exam (optional)*

Students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.
This course may be taken in lieu of World History and Geography, 1500 A.D. to Present. ***Summer Assignment: REQUIRED***.

2399 ADVANCED PLACEMENT EUROPEAN HISTORY

Grades 10-12
Pre-requisite(s): "B" or better in World History and Geography to 1500 A.D. or Honors World History and Geography to 1500 A.D.
Credit: One (weighted +1)
SOL: *AP Exam (optional)*

Students will participate in college-level study of European civilizations from high Renaissance period to the recent past. Students will study the factual narrative and analyze and express historical evidence and themes in writing. The focus is on political and diplomatic history, intellectual and cultural history, and social and economic history. Emphasis is placed on the analysis of events and eras, and extensive reading and writing are required. This course may be taken in lieu of World History and Geography, 1500 A.D. to Present. ***Summer Assignment: REQUIRED***.

2360 VIRGINIA AND UNITED STATES HISTORY

Grade 11
Pre-requisite(s): World History and Geography to 1500 A.D.
Credit: One
SOL: End-of-Course Test required for students needing a verified Social Studies credit

Students will explore American history by viewing key events as part of a larger picture. Students will examine reform movements, values, economics, democracies, and foreign affairs. Students will have the opportunity to visit all periods of American history and link events across time. Students will travel from the age of exploration to the modern era and, in doing so, will experience the challenges met by Americans throughout their history.

2360H HONORS VIRGINIA AND UNITED STATES HISTORY

Grade 11
Pre-requisite(s): "B" or better in World History and Geography 1500 A.D. to present or Honors World History Geography 1500
A. D. to present
Credit: One (weighted + .5)
SOL: End-of-Course Test required for students needing a verified Social Studies credit

Students will expand their study of the rise of the American nation and its development with international interests and influences through the 21st century. Major emphases include areas of ideas, thoughts, and philosophies which served as the backbone of the political, economic, and social contributions of various groups throughout the important stages of development. **Summer Assignment: REQUIRED**

2319 **ADVANCED PLACEMENT UNITED STATES HISTORY**

Grade 11
Pre-requisite(s): "B" or better in World History and Geography 1500 A.D. to Present or Honors World History and Geography
1500 A.D. to Present
Credit: One (weighted + 1)
AP Exam: *Optional*

Students will use their analytical skills and factual knowledge to deal critically with the problems in United States history. The course includes extensive reading including summer assignments. Students will be prepared for intermediate and advanced college courses by meeting demands equivalent to those of full year introductory college courses.
Summer Assignment: REQUIRED

DE2950 **DUAL CREDIT UNITED STATES HISTORY**

Grade 11 (12th may take as elective)
College Code: HIS 121 and HIS 122
SOL: *End-of-Course Test required for students needing a verified Social Studies credit*
Pre-requisite(s): " B' or better in World History and Geography 1500 A.D. to present Honors World History and Geography 1500 A.D. to present, and students must meet the Virginia Placement Test (VPT)criteria for the PDCCC, or have taken the ACT, SAT or PSAT.
Credit: One(1) high school (weighted +1); 6 hours of college credit (upon successful completion)

Students will study all aspects of American History with particular attention to the political, economic, social, military, intellectual, and cultural events. The first semester will survey prehistoric American through Post Civil War Reconstruction. The second semester will survey the rise of industry and cities in the 19th century through U.S. challenges and policies in the 20th century.

2440 **VIRGINIA and UNITED STATES GOVERNMENT**

Grade 12
Pre-requisite(s): Virginia and United States History or Honors VA and US History
Credit: One

Students will develop the skills and knowledge necessary for becoming an informed and responsible citizen. Students will develop a basic understanding of the U.S. Constitution and the three branches of government on the federal and state levels. The values and principles of America's democratic system will be emphasized. This course will focus on the awareness of basic rights and responsibilities of a productive citizen in a democratic society.

2440H **HONORS VA and U.S. GOVERNMENT**

Grade 12
Pre-requisite(s): "B" average in VA & US History or Honors VA & US States History
Credit: One (weighted + .5)

Students will expand their study of structure, function, and relationships of state, local, and national government within our federal system. Specific areas of study will allow students to analyze the process of policy making and its impact on economics, political parties, interest groups, and the media. **Summer Assignment: REQUIRED**

2445 **ADVANCED PLACEMENT U.S. GOVERNMENT AND POLITICS**

Grade 12
Pre-requisite(s): "B" or better in VA & US History or Honors VA & U.S. States History
Credit: One (weighted + 1)
AP Exam: *Optional*

Students will complete studies in high school equivalent to a one-semester college introductory course in United States Government and Politics. ***Summer Assignment: REQUIRED***

DE2952 **DUAL CREDIT UNITED STATES GOVERNMENT**

Grade 12
Pre-requisite(s): "B" or better in VA and US History, DC US History, or AP US History. Students must also meet the VPT criteria for PDCCC.
Credit: One (1) high school (weighted + 1); 6 hours of college credit (upon successful completion)
College Code: PLS 211 and PLS 212

Students will expand their study of structure, operation, and process of national, state, and local governments. Includes in-depth study of the three branches of the government and of public policy.

2500 **SOCIOLOGY**

Grades 11-12
Pre-requisite(s): None
Credit: One

Students will examine the basic concepts, principles, and methods central to the scientific study of sociology - the science that studies human society and social behavior. It offers students an introduction to the use of the scientific method as it applies to sociology and provides an introduction to the methods sociologists use to describe and analyze social life.

2800 **ECONOMICS**

Grades 11-12
Pre-requisite(s): None
Credit: One

Students will study the basic elements of the American economy: corporate business, labor unions, and the impact of the various levels of government on the traditional concept of the market economy. How prices are determined; the concept of money, banking, monetary, and fiscal policy; national income; and international trade are introduced. The social, political, and economic impact on decisions made by business, labor, government, and consumers are studied. Students will participate in an applied economics program and a stock market simulation.

2315 **HUMANITIES/ MULTICULTURAL STUDIES**

Grades: 11-12
Pre-requisite(s): None
Credit: One

Students will explore the historical development of immigration in America from exploration to present. Students will examine the diversity of Americans and their impact on United States history. Students will identify the values, customs, culture, vocabulary, and diversity of different ethnic groups. Students will develop ways to reduce prejudice, foster tolerance, and build a commitment to the American ideals of pluralism and democracy. Students will explore the different cultural elements such as religion, language, historical traditions, and customs of our American society.

04107G1011 **AFRICAN-AMERICAN STUDIES**

Grade 11-12
Pre-requisite(s): None
Credit: One

African American Studies is an elective course that is designed to develop an understanding of and explore diverse history and culture of African Americans past and present. It presents a detailed analysis of the African American experience, emphasizing the role African-Americans played in Virginia and United States history.

2902 **ADVANCED PLACEMENT PSYCHOLOGY**

Grades: 11-12
Pre-requisite(s): "B" or better in the previous year Social Studies course
Credit: One (weighted +1)

Students will be introduced to the systemic 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.

DE2951 **DUAL CREDIT INTRODUCTION TO PSYCHOLOGY**

Grade 11 or 12
Pre-requisite(s): "B" or better in English 10 or Honors English 10, and students must meet the Virginia Placement Test (VPT).criteria for the PDCCC, or have taken the ACT, SAT or PSAT.
Credit: One (1) high school (weighted + 1); 6 hours of college credit (upon successful completion)
College Code: PSY 201 and PSY 202

Students will examine human and animal behavior, relating experimental studies to practical problems. Topics will include sensation/perception, learning, motivation, intelligence, psychopathology, and therapy and social – psychology.

Mathematics
Course Sequences and Descriptions

3131 **ALGEBRA 1 PART 1**
Grade 9
Pre-requisite(s): Below a "B" in Grade 8 math (Pre-Algebra)
Credit: One elective credit

Students will review foundational skills and study concepts such as rational numbers, equations, inequalities, data analysis, matrices, relations, functions, and graphs. Real life applications will be identified and explored as they relate to other disciplines. Teachers and students will use technology, manipulatives and graphing calculators.

3132 **ALGEBRA 1 PART 2**
Grade 9-10
Pre-requisite(s): Successful completion of Algebra I, Part 1
Credit: One credit
SOL: *End-of-Course Test REQUIRED*

Students will study concepts such as systems of equations, radical expressions, quadratic equations and functions, translations and applications, factoring , exponents and power functions, polynomials, inequalities, and their graphs.
Teachers and students will use technology, manipulatives and graphing calculators.

3120 **PERSONAL LIVING AND FINANCE**
Grade 9-12
Pre-requisite(s): None
Credit: One elective credit

Students will focus on refining basic math skills to manage personal finances and to make sound financial decisions. Topics may include how to: open a bank account; judge the quality of a bank's services; balance a check book; complete a loan application; understand the implications of an inheritance, the basics of personal insurance policies, consumer rights and responsibilities; deal with salesmen and merchants; manage debt including retail and credit card debt; compute state and federal tax; understand local tax assessments, computation of interest rates, and simple contracts; and contest an incorrect bill.

3130 **ALGEBRA I**
Grades 7-12
Pre-requisite(s): Successfully completion of 8th grade Math Course and SOL **(REQUIRED)**
Credit: One
SOL*:* *End-of-Course Test REQUIRED*

Students will be introduced to the fundamental theory and structure of algebra. Content of this course includes rational numbers, equations, inequalities, radical expressions, translations and applications, relations, functions, graphing, systems of equations and inequalities, polynomials, factoring, quadratics, statistics, and word problems. The topics require students to use algebra as a tool for representing and solving a variety of practical problems. Teachers and students will use graphing calculators.

3134 **ALGEBRA, FUNCTIONS, AND DATA ANALYSIS**
Grade 9-12
Pre-requisite(s): "D" or below in Algebra I **OR** "D" or below in Geometry
Credit: One

This course is designed for students who have completed the standards for Algebra I. 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. Additionally, students will use a transformational approach to graphing functions and writing equations.

3143 **GEOMETRY**

Grades 8-12
Pre-requisite(s): "B" or better in Algebra I or Algebra I, part 2 *(highly recommended)* ***OR*** successful completion of AFDA
Credit: One
SOL: *End-of-Course Test required for students needing a verified Math credit*

Students will study both plane (Euclidean) and solid geometry concepts including points, lines, and planes. The students will apply deductive and inductive logical reasoning skills to properties, theorems and postulates of congruence, equality and inequality. Teachers and students use graphing calculators.

3143H **HONORS GEOMETRY**

Grade 9-12
Pre-requisite(s): "B" or better in Algebra I
A 435 scale score on Alg I SOL *(Highly Recommended)*
Credit: One (weighted + .5)
SOL: *End-of-Course Test required for students needing a verified Math credit*

Students will study geometric figures, trigonometric relationships, and reasoning to justify conclusions. A variety of applications and problem solving techniques including algebraic skills are used to implement the standards. Students will study both plane (Euclidean) and solid geometry concepts including points, lines, and planes. The students will apply deductive and inductive logical reasoning skills to properties, theorems and postulates of congruence, equality and inequality. Teachers and students will use graphing utilities and computer software. ***Summer Assignment: REQUIRED***

3143 **GEOMETRY with LAB**

Grades 9-12
Pre-requisite(s): Successful completion of Algebra I, Part 2 or Algebra I or AFDA
Credit: Two (one mathematics credit and one elective credit)
SOL: *End-of-Course Test required for students needing a verified Math credit*

Students will study both plane (Euclidean) and solid geometry concepts including points, lines, and planes. The students will apply deductive and inductive logical reasoning skills to properties, theorems and postulates of congruence, equality and inequality. Teachers and students use graphing calculators. In addition to the direct Geometry instruction, students will participate in a computer lab. During laboratory times, students will complete on-line Geometry modules for enrichment and/or remediation.

3135 **ALGEBRA II**

Grades 9-12
Pre-requisite(s): "C" or better in Geometry or Honors Geometry *(highly recommended)* **OR** successful completion of *AFDA*
Credit: One
SOL: *End-of-Course Test required for students needing a verified Math credit*

Students will study advanced algebraic concepts including: equations, inequalities, systems of equations, functions, complex numbers, factoring, curves of best fit, normal distribution, and sequences and series. Teachers and students will use graphing calculators.

3137 **HONORS ALGEBRA II AND TRIGONOMETRY**

Grade 9-12
Pre-requisite(s): "B" or better in Honors Geometry or Geometry **AND** "B' or better in Algebra I
Credit: One (weighted + .5)
SOL: *End-of-Course Test required for students needing a verified Math credit*

Students will master the foundation to pursue a sequence of advanced mathematical studies from mathematical analysis to advanced placement calculus. This combined course includes all the standards listed for Algebra II and Trigonometry. Teachers and students will use graphing calculators.
Summer Assignment: REQUIRED

3154 **DISCRETE MATHEMATICS**

Grade 11 or 12
Pre-requisite(s): Successful completion of Algebra II or Honors Algebra II
Credit: One

Students will analyze problems, determine whether or not a solution exists, investigate how many solutions exist, and focus on finding the best solution. Non-traditional techniques for problem solving will be utilized. Teachers and students will use graphing utilities and computers.

3162 **MATHEMATICAL ANALYSIS/PRE-CALCULUS**

Grade 11 or 12
Pre-requisite(s): "B" or better in Algebra II or Honors Algebra II
Credit: One (weighted + .5)

Students will match linear relations, functions and their graphs. They will study trigonometry, advanced functions and their graphs, discrete mathematics, and an introduction to calculus. Topics include curve-sketching techniques, matrices, piecewise and step functions, limits of algebraic functions, transformations, exponential and logarithmic functions, polar equations, vectors, and parametric equations. Teachers and students will use graphing calculators. ***Summer Assignment: REQUIRED***

3190 **PROBABILITY AND STATISTICS**

Grade 11 or 12
Pre-requisite(s): Successful completion of Algebra II or Honors Algebra II
Credit: One

Students will be introduced to the basic concepts of statistics and the probability theory. Topics include averages, measures of variation, frequency distributions, probability functions associated with random variables, binomial distributions, sampling, the normal curve, and statistical methods available for decision making. Students will use statistical software found on graphing calculators and computers.

3177 **ADVANCED PLACEMENT CALCULUS AB**

Grade 12
Pre-requisite(s): "B" or better in Mathematical Analysis or DC Pre-Calculus
Credit: One (weighted + 1)
AP Exam: ***Optional***

Students will complete studies equivalent to an introductory college course. Students will apply the use of derivatives and integrals to calculate the rate of change, area, volume, and their applications. These functions include those that are linear, polynomial, rational, exponential, inverse, logarithmic, trigonometric, inverse trigonometric and piece-wise-defined. Teachers and students will use graphing utilities. ***Summer Assignment: REQUIRED***

02125 **ADVANCED PLACEMENT CALCULUS BC**

Grades 11 or 12
Pre-requisite(s): B or better in AP Calculus AB or equivalent Calculus course
Credit: One (weighted +1)
AP Exam: ***Optional***

Students will extend the content learned in Calculus AB to different types of equations and new topics and introduce them to the topic of sequences and series. It also cover topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. Summer Assignment: REQUIRED

3192 **ADVANCED PLACEMENT STATISTICS**

Grade 12
Pre-requisite(s): "B" or better in Algebra II or Honors Algebra II. Pre-Calculus/Mathematical Analysis and or Probability and Statistics recommended.
Credit: One (weighted + 1)

AP Exam: ***Optional***

Students will complete studies equivalent to an introductory, non-calculus based college course. The four main topics include exploratory analysis of data, appropriate methods of collecting data, using probability to anticipate the distribution of data, and using inferential statistics to form conclusions from data. The main emphasis will be to gain understanding of and be able to express in writing the statistical concepts necessary to successfully complete the AP Statistics exam. *Students are required to take the AP exam.*

DE3230 **DUAL CREDIT PRE-CALCULUS**

Grade 11 or 12
Pre-requisite(s): "B" or better in Algebra II or Honors Algebra II and Trig. Students must score 50 or above on the mathematics placement test administered by Paul D. Camp Community College.
Credit: One (1) high school (weighted + 1); 6 hours of college credit (upon successful completion)
College Code: MATH 161 and MATH 162

Students will pursue college algebra, matrices, algebraic exponential and logarithmic functions, trigonometry, analytical geometry, and sequences and series. Additional topics include curve-sketching techniques, matrices, piecewise and step functions, limits of algebraic functions, transformations, exponential and logarithmic functions, polar equations, vectors, and parametric equations.

DE3231 **DUAL CREDIT CALCULUS**

Grade 11 or 12
Pre-requisite(s): Completion of MTH 161 or equivalent with a grade of C or better. Students must score adequately on the mathematics placement test administered by Paul D. Camp Community College.
Credit: One (1) high school (weighted + 1); 8 hours of college credit (upon successful completion)
College Code: MATH 263 & MATH 264

Students will study topics in differential calculus of one variable including the theory of limits, derivatives, differentials, definite and indefinite integrals and application to algebra and transcendental functions. Additionally, students will complete studies on vectors in three dimensions, definite integrals, methods of integration, indeterminate forms, partial differentiation, and multiple integrals,

3186 **DUAL CREDIT MICRO-COMPUTERS (Introduction to Computer Applications)**

Grade 11 or 12
Pre-requisite(s): Keyboarding (high school or middle school) and students must meet the Virginia Placement Test (VPT) criteria for the PDCCC Credit: One (1) high school (weighted + 1); 6 hours of college credit (upon successful completion)
College Code: ITE 115 and ITE 215 (to be taken on PDCCC campus)

Students will study computer concepts and internet skills and the use of a software suite including word processing, spreadsheets, database and presentation software to demonstrate skills required for computer literacy.

Computer Science
Course Sequences and Descriptions

10020 **COMPUTER SCIENCE FOUNDATIONS**

Grade 9-10
Pre-requisite(s): Algebra I required; Recommended keyboarding course or teacher-approved demonstration and documentation of touch keyboarding skills
Credit: One

Students will transition from block-based programming to a text-based programming language and familiarize themselves with developing and executing computer programs. Students will work with various programming languages and environments, problems, challenges, and activities that will be used to facilitate design, analysis, and implementation of computer programs. Students will use computing tools to explore and create computer programs, facilitate reasoning and problem solving, and verifying solutions.

10160 **ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES**

Grade 10-12
Pre-requisite(s): B or better in Geometry or Honors Geometry and passage of the Algebra I and Geometry EOC exams
Credit: One (weighted +1)

Students will be introduced to the fundamental ideas of computer science and how to apply computational thinking across multiple disciplines. Students will apply creative designs and innovative solutions when developing computational artifacts. Students will learn abstraction, communication of information using data, algorithms, programming, and the Internet.

Science
Course Sequences and Descriptions

4269 **ENVIRONMENTAL SCIENCE**

Grade 9
Pre-requisite(s): None
Credit: One

Students will learn the skills and content necessary for them to analyze current and future environmental issues, both natural and man-made, through a critical lens and to provide a platform to make informed decisions. Students will learn foundational content that will prepare them for either Earth Science or Biology while also including aspects of other disciplines such as civic engagement, mathematics, and engineering. This course provides students the opportunity to learn environmental concepts in-depth and build on the concepts embedded in the Science Standards of Learning.

4210 **EARTH SCIENCE**

Grade 8-12
Pre-requisite(s): Physical Science (Science 8)
Credit: One
SOL: *End-of-Course Test required for students needing a verified Science credit*

Students will investigate and understand features of planet earth, the forces that shape it, its place in the solar system, and its place in the universe. The following topics will be studied: geology, astronomy, oceanography, meteorology, and conservation.

4310 **BIOLOGY**

Grade 9-12
Pre-requisite(s): None
Credit: One
SOL: *End-of-Course Testing REQUIRED*

Students will investigate and understand the following topics: kingdoms of life with emphasis on nomenclature, life processes, anatomy, and the interdependence of the kingdoms of life and ecology, cell structure and function. Science investigations are required.

4310 H **HONORS BIOLOGY**

Grades 9-12
Pre-requisite(s): "B" or better in Physical Science (Science 8) or Earth Science
Credit: One (weighted +.5)
SOL: *End-of-Course Testing REQUIRED*

Students in this laboratory course will be involved in a detailed understanding of living systems. This course is a detailed survey of the kingdoms of life with emphasis upon nomenclature, life processes, anatomy, and the interdependence of the kingdoms of life and ecology. In addition, cell structure and function and the interrelationship of biology with other sciences will be examined. Students will be expected to devise experiments and develop logical conclusions. ***Summer Assignment: REQUIRED***

4370 **ADVANCED PLACEMENT BIOLOGY**

Grade 11 or 12
Pre-requisite(s): "B" or better in Chemistry or Honors Chemistry **AND** B or better in Biology or Honors Biology
Credit: Two (weighted + 1)
AP Exam: *Optional*

Students will learn the equivalent of a college introductory biology course. Students will use a conceptual framework, factual knowledge, and analytical skills to understand the rapidly changing science of biology. ***Summer Assignment: REQUIRED***

DE4700 **DUAL CREDIT BIOLOGY**

Grades 11 – 12 "B" or better in Biology or Honors Biology or Chemistry I or Honors Chemistry and students must meet the Virginia Placement Test (VPT).criteria for the PDCCC, or have taken the ACT, SAT or PSAT.
Credits: Two (2) lab science units (weighted + 1); 8 hours of college credit (upon successful completion) - students must meet the Virginia Placement Test (VPT) criteria for the PDCCC.
Course Code: BIO 101 and BIO 102

Students will explore the fundamental characteristics of living matter from the molecular level to the ecological community, with emphasis on general biological principles. This course introduces the diversity of living organisms, their structure, function, and developmental changes.

4250 **OCEANOGRAPHY**

Grade 11 or 12
Pre-requisite(s): Earth Science
Credit: One

Students will study the many disciplines of oceanography including physics, chemistry, geology, biology, geography, meteorology, and the history of human interaction with the ocean. Students will conduct laboratory exercises focusing on the science of oceanography and the process of asking questions about the ocean and testing these questions to develop theories about the nature of oceans. Topics include oceanographic instruments, the chemistry of seawater, ocean sediments, weather and climate, waves, tides and currents, life in the oceans, habitats, maritime heritage, and current issues created by the interaction of science and technology.

4340 **ECOLOGY**

Grade 11 or 12
Pre-requisite(s): Biology/Honors Biology
Credit: One

Students will explore the local environment and current environmental issues. Students will collect and interpret real world data through laboratory and field activities. Topics will include a general exploration of the ecology of marine, wetland and terrestrial environments and the Chesapeake Bay. The impact of global warming, populations and environmental laws will be explored.

4410 **CHEMISTRY**

Grades 10-12
Co/Pre-requisite(s): "C" or better in Algebra II or Honors Algebra II
Credit: One
SOL: *End-of-Course Test required for students needing a verified Science credit*

Students will investigate and understand the following topics of study: atomic theory, atomic structure, properties of matter, chemical nomenclature, chemical equations, stoichiometry, gas laws, and thermodynamics. Important lab skills are obtained while students learn how to collect and interpret data using appropriate technology.

4410H **HONORS CHEMISTRY**

Grade 10-12
Co/Pre-requisite(s): "B" or in Algebra II or Honors Algebra II
Credit: One (weighted + .5)
SOL: *End-of-Course Test required for students needing a verified Science credit*

Students will investigate and understand atomic structure, properties of matter, chemical equations, stoichiometry, and thermodynamics in an accelerated pace and with in-depth problem solving. Students will improve and expand laboratory techniques including collection and interpretation of data and using appropriate technology. ***Summer Assignment: REQUIRED***

4330 **BIOLOGY II: ANATOMY and PHYSIOLOGY**

Grade 11-12
Co/Pre-requisite(s): "C" or better in Biology or Honors Biology
Credit: One (weighted + .5)

Students will study the structure and function of cells, tissues, and the integumentary, skeletal, muscular, and nervous systems. The content of this semester will introduce common human disease processes relevant to these body systems. Laboratory components include anatomical studies using microscopy and basic laboratory investigations of physiological processes that are suitable for high school study. The course also includes the study of the endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary and reproductive systems. It will introduce common human disease processes that are common to human body systems. Laboratory investigations will include animal dissection.

4470 **ADVANCED PLACEMENT CHEMISTRY**

Grade 11-12
Pre-requisite(s): "B" or better in Chemistry or Honors Chemistry **AND** Algebra II w/Trigonometry/Algebra II
Credit: Two (weighted + 1)
AP Exam: *Optional*

Students will attain a depth of understanding of fundamentals and reasonable competence in dealing with chemical calculations and the mathematical formulation of principles of chemistry. Topics include: atomic structure, stoichiometry, thermodynamics, gas laws, kinetics, reactions in solutions, acid/base reactions, molecular geometry dynamic equilibrium, and nuclear chemistry. ***Summer Assignment: REQUIRED***

DE4701 **DUAL CREDIT COLLEGE CHEMISTRY I/II**

Grade 11 or 12
Pre-requisite(s): "B" or better in Chemistry; Honors Chemistry recommended
Credits: Two lab science units (weighted + 1); 6 hours of college credit (upon successful completion) - students must meet the Virginia Placement Test (VPT).criteria for the PDCCC, or have taken the ACT, SAT or PSAT.
College Code: CHM 111 and CHM 112 (to be taken on PDCCC campus)

Students will explore the fundamental laws, theories, and mathematical concepts of chemistry. Students are expected to use mathematical knowledge to solve various chemical problems and relate chemistry to what occurs outside the classroom.

4270 **ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**

Grade 11 or 12
Pre-requisite(s): "B" or better in Biology or Honors Biology, and Chemistry or Honors Chemistry or currently enrolled in Chemistry or Honors Chemistry.
Credit: Two (weighted + 1)
AP Exam: *Optional*

Students will use chemistry, physics, biology, ecology, earth science, and math to investigate and understand interdependence of earth systems, renewable and nonrenewable resources, environmental quality, global changes, and society influences. Laboratory and field studies are included. ***Summer Assignment: REQUIRED***

4510 **PHYSICS**

Grade 11 or 12
Pre-requisite(s): "B' or better in Algebra II or Honors Algebra II
Credit: One (weighted + .5)

Students will investigate and understand forces and laws of nature. Topics include: motion, momentum, equilibrium, relationships between matter, energy, mechanics, wave motion (sound and light), magnetism, electricity, thermodynamics, and nuclear physics. Intense laboratory work will be employed. This course is a college requirement for students who plan to major in engineering. ***Summer Assignment: REQUIRED***

4570 **ADVANCED PLACEMENT PHYSICS 1**

Grade 11 or 12
Pre-requisite(s): "B" or better in Algebra II or Honors Algebra II
Credit: One (weighted + 1)

Students will develop a deep understanding of foundational principles of physics in classical mechanics and modern physics by applying these principles to complex physical situations that combine multiple aspects of physics rather than present concepts in isolation. Students will discuss, confer, and debate with classmates to explain a physical phenomenon investigated in class. Students will also design and conduct inquiry-based laboratory investigations to solve problems through first-hand observations, data collection, analysis and interpretation. ***Summer Assignment: REQUIRED***

FINE ARTS COURSES

Visual Arts
Course Sequences and Descriptions

ART: Courses fulfill the Fine Arts requirement for graduation.

9120 **ART I**
Grades 9-12
Pre-requisite(s): None
Credit: One

Students will be introduced to the visual arts with a concentration in drawing. The students will be taught the basics in graphics, sculpture, ceramics, design, calligraphy, and art history. With this variety students will understand the choices that exist in the art world.

9130 **ART II**
Grades 10-12
Pre-requisite(s): Art I
Credit: One

Students will continue the work began in Art I with a greater concentration on the dimensional. Students in this course will be required to explore their individuality and concentrate on building self-confidence to make decisions. Students will continue exploring culture and history through the study of art history.

9140 **ART III**
Grades 11-12
Pre-requisite(s): Art II
Credit: One

Students will continue the media of Art I and II but with the approach and variety dictated by the student. At this level the students will be expected to use the acquired working knowledge of subject and media to explore the manipulation of these in his/her individuality.

9145 **ART IV**
Grade 12
Pre-requisite(s): Art III
Credit: One

During Art IV, students will explore, in depth, each of the disciplines and will be introduced to serigraph as a new media. Students in this course will explore individual style with emphasis on creative exploration of subject and media, concentrate on research in art history, and explore careers in the arts. Students will develop a portfolio of work produced over their course of study.

9171 **DUAL CREDIT HISTORY AND APPRECIATION OF ART (I and II)**
Grade 11 or 12
Pre-requisite(s): Open to all students with interest in art history – students must meet Virginia Placement Test (VPT).criteria for the PDCCC, or have taken the ACT, SAT or PSAT.
Credit: One (weighted +1)
Course Code: ART 101 and ART 102 – meet PDCCC Compass criteria (to be taken on PDCCC campus)

The students will explore the history and interpretation of architecture, sculpture, and painting. The course begins with prehistoric art and follows the development of western civilization to the present.

Music
Course Sequences and Descriptions

MUSIC: Courses fulfill the Fine Arts requirement for graduation.

9232 **BEGINNING BAND**
Grades 9-12
Pre-requisite(s): None
Credit: One

Students will explore instruction for first-year musicians on woodwind, brass or percussion instruments. Performance is required.

9233 INTERMEDIATE BAND
Grades 9-12
Pre-requisite(s): Beginning band or private instruction on wind or percussion instruments
Credit: One

Students will explore instrumental music in depth with an emphasis on mid-level playing techniques and terminology. This course offers an opportunity to learn the basic fundamentals of tone production, rhythmic concepts, proper articulation, and the performance of medium band literature. Performance is required.

9234 ADVANCED BAND
Grades 9-12
Pre-requisite(s): Audition. Selection is based on technical skills and instrumental need. Successful completion of Intermediate Band.
Credit: One

Students will explore instrumental music in depth with an emphasis on advanced playing techniques and terminology. Advanced instruction in individual and group performance is stressed. This organization represents the school in concerts, festivals, parades, football games, and other school related activities. Performance is required.

9222 MUSIC APPRECIATION/HISTORY/THEORY
Grades 9-12
Pre-requisite(s): Beginning band, chorus or private instruction on any instrument; knowledge of the basic fundamentals of music
Credit: One

Students will develop a working knowledge of the fundamentals of music as applied to arranging and composition. (This is not a performance based class.)

9250 SMALL INSTRUMENTAL ENSEMBLE
Grades 9-12
Pre-requisite(s): Beginning band or private instruction on a wind or percussion instrument
Credit: One

Students will explore instrumental music in depth. Emphasis is placed on advanced playing techniques and terminology. Performance is required.

9238 **INTERMEDIATE ORCHESTRA**

Grades 9-12
Pre-requisite(s): Middle school string class, private study, or audition
Credit: One

Students will further techniques in orchestral string instruments (violin, viola, cello, string bass) and move into advanced skills. The class will become a performing ensemble encompassing a variety of musical styles for public concerts, district festivals, and other regional string activities. Performance is required.

9239 **ADVANCED ORCHESTRA**

Grades 9-12
Pre-requisite(s): Intermediate orchestra, private study, or audition
Credit: One

Students will further techniques in orchestral string instruments (violin, viola, cello, string bass) and move into advanced skills. The class will become a performing ensemble encompassing a variety of musical styles for public concerts, district festivals, and other regional string activities. Performance is required.

9260 **BEGINNER CHORUS**

Grades 9-12
Pre-requisite(s): None
Credit: One

Beginning chorus is designed for students experiencing their first vocal/choral class. The course emphasizes fundamental vocal development, traditional notation, and the introduction to ensemble singing. Opportunities are provided for students to explore the relationship between music and the other fine arts and between music and disciplines outside the arts. Additionally, students will be introduced to the fundamentals of proper vocal production and its application to performance literature. They will be taught basic music theory. Students will be required to perform.

9285 **INTERMEDIATE CHORUS (MIXED CHORUS - UNSELECTED)**

Grades 9-12
Pre-requisite(s): Beginner Chorus or Audition
Credit: One

Intermediate chorus is designed for students who have achieved competency in beginning vocal/choral skills. Emphasis is placed on the continuing development of vocal production techniques and ensemble participation. The standards require performance, creativity, and investigation at a level of increased ability, as well as an understanding and application of traditional music notation. Opportunities are continued for students to explore the relationship between music and the other fine arts and between music and disciplines outside of the arts. Students will be required to perform and may be required to rehearse after school.

9280 **SMALL VOCAL ENSEMBLE**

Grades 10-12
Pre-requisite(s): Audition
Credit: One

This course is designed for students to continue to practice their vocal performance abilities in a choral setting as defined by the high school music teacher or director. Students will study music theory and be required to perform and rehearse during and after school.

9289 **ADVANCED CHORUS (MIXED CHORUS--SELECTED)**

Grades 10-12
Pre-requisite(s): Audition
Credit: One

Advanced chorus is designed for students to continue to acquire proficiency in ensemble singing and will begin to develop competency in individual performance. Singing with refined expressive qualities, students will perform vocal/choral selections and sight-reading material of increased levels of difficulty. Students will demonstrate expanded abilities in performance, creativity, and analytical investigation and will gain experiential knowledge of leadership and evaluative skills in group and individual settings. Opportunities are continued for students to explore the relationship between music and other disciplines. Students will be required to participate in various in- and out-of-school performances. A wide range of musical selections from classical to show tunes will be performed by students. They will be taught dance and acting skills to prepare for stage presence. Students will be required to perform and may be required to rehearse after school.

Theatre Arts
Course Sequences and Descriptions

THEATRE: Courses fulfill the Fine Arts requirement for graduation

1410 **THEATRE I**
Grades 9-12
Pre-requisite(s): None
Credit: One Fine Arts elective

Students will study theater history, stage terminology and positions, and character analysis. Students will evaluate and present dramatic productions and oral and interpretive readings (monologues, storytelling, and children's theater). Eligible students will participate in Virginia High School League (VHSL) Theater Festivals, attend local and professional theatrical productions. Students will learn about all performing venues. (A 2.0 GPA is required to participate in VHSL events).

1420 **THEATRE II**
Grades 10-12
Pre-requisite(s): Theatre I
Credit: One Fine Arts elective

Students build on basic drama skills developed in Theater Arts I by taking a more hands-on approach to producing and evaluating dramatic productions. The students will continue to develop skills in costuming, applying makeup, operating stage equipment, and producing scenery. Eligible students will participate in Virginia High School League (VHSL) Theater Festivals, attend local and professional theatrical productions. Students will learn about all performing venues. (A 2.0 GPA is required to participate in VHSL events).

1423 **THEATRE III**
Grades 11-12
Pre-requisite(s): Theatre II
Credit: One Fine Arts elective

Students assimilate and build upon concepts learned and skills acquired in Theatre Arts II. Through various types of performance, students investigate acting styles and explore the specific process of playwriting, which includes research, character development, and creation of dramatic structure, conflict, and resolution. Students study and respond to a variety of theatrical experiences that refine their collaborative, analytical, interpretive, and problem-solving skills. They continue to cultivate and refine artistic abilities and appreciation of theatre arts. (A 2.0 GPA is required to participate in VHSL events).

1423 **THEATRE IV**
Grades 11-12
Pre-requisite(s): Theatre III
Credit: One Fine Arts elective

Students, through research, performance, and evaluation, develop artistic criteria that are applied to performing and directing. They study and respond to a variety of theatrical experiences, showcasing and applying their collaborative, analytical, interpretive, and problem-solving skills.

SERVICE LEARNING

9828 **SERVICE LEARNING**

Grades 11-12
Pre-requisite(s): none
Credit: One

Service Learning is a course whose purpose is to develop an appreciation of the concept of service to the community and to develop skills necessary to evaluate the impact of service to others. Students learn to work with others and to solve problems, thereby developing leadership and team work skills. The class will have discussions with public officials and community leaders. Students must complete a service learning project as part of the class curriculum. They reflect on their experiences, maintain a portfolio, and participate in individual and group projects as class requirements.

MILITARY SCIENCE COURSES

MILITARY SCIENCE—AIR FORCE JUNIOR ROTC I (AF7913)

Grades: 9-12
Prerequisites: None
Credit: One
Industry Credential Available: Armed Services Vocational Aptitude Battery Examination (ASVAB)

The Air Force Junior ROTC I course includes leadership education, aerospace science, and wellness. The leadership education component is 40 percent of this course. It consists of the heritage, organization, and traditions of the US Air Force. Leadership education focuses on citizenship and proper wear of the Air Force uniform, to include weekly inspections. Students will also learn the basics of military drill through written exercises and hands-on performance activities. The aerospace science component is also 40 percent of the ROTC I course. It consists of a study of the history of aviation, from man's earliest attempts to fly to modern aviation. Examples include lessons on the Wright Brothers' first flight and how air power was crucial in the outcomes of World Wars I and II. Wellness makes up the final 20 percent of this course. The health and wellness portion of the curriculum includes physical fitness testing and other physical training activities.

Concentration/Specialization Sequences
AFJROTC I and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:

- JROTC II (AF7916)
- JROTC III (AF7918)
- JROTC IV (AF7919)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.

MILITARY SCIENCE—AIR FORCE JUNIOR ROTC II (AF7916)

Grades: 10-12
Prerequisites: AFJROTC I
Credit: One
Industry Credential Available: Armed Services Vocational Aptitude Battery Examination (ASVAB)

Students will continue the AFJROTC instructional curriculum of leadership education (40%), aerospace science (40%), and wellness (20%). The leadership education portion includes communication and personal development, building personal awareness, understanding groups and teams, and preparing for leadership. Students continue to build military drill skills by focusing on more advanced exercises and sequences. Proper uniform wear is emphasized during weekly inspections. The aerospace science component is based on the science of flight. This includes the principles of flight, physics of flight, principles of navigation, and how the atmosphere and weather impact flight, and how flight impacts the human body. The health and wellness portion of the curriculum includes physical fitness testing and other physical training activities.

Concentration/Specialization Sequences
AFJROTC II and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:

- AFJROTC I (AF7913)
- AFJROTC III (AF7918)
- AFJROTC IV (AF7919)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.

MILITARY SCIENCE—AIR FORCE JUNIOR ROTC III (7AF7918)

Grades: 11-12
Prerequisite: AFJROTC II
Credit: One
Industry Credential Available: Armed Services Vocational Aptitude Battery Examination (ASVAB)

Students will continue the AFJROTC instructional curriculum of leadership education (40%), aerospace science (40%), and wellness (20%). The leadership education portion includes the following study areas: personal financial responsibility, career opportunities, obtaining a college degree, obtaining a job, developing career skills, and civic responsibilities. Students continue to build military drill skills by focusing on more advanced exercises and sequences. Proper uniform wear is emphasized during weekly inspections. The aerospace science component is based on a study of space. This includes the history of astronomy, exploration of space, manned and unmanned spaceflight, space technology, and commercial use of space. The health and wellness portion of the curriculum includes physical fitness testing and other physical training activities.

Concentration/Specialization Sequences
AFJROTC III and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:

- AFJROTC I (AF7913)
- AFJROTC II (AF7916)
- AFJROTC IV (AF7919)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.

MILITARY SCIENCE—AIR FORCE JUNIOR ROTC IV (AF7919)

Grade: 12
Prerequisite: AFJROTC III
Credit: One
Industry Credential Available: Armed Services Vocational Aptitude Battery Examination (ASVAB)

Students will continue the AFJROTC instructional curriculum of leadership education (40%), aerospace science (40%), and wellness (20%). The leadership education portion is focused on the principles of management. It includes management theories, planning, decision making, organizing, group behavior, and leadership. Students continue to build military drill skills by focusing on more advanced exercises and sequences. Proper uniform wear is emphasized during weekly inspections. The aerospace science component includes a study of survival where students learn about skills and attitudes necessary to perform survival basics. Students will also perform cadet corps management tasks that put theories of the previous ROTC courses into practice. Students plan, organize, and direct a variety of activities using their communication, decision making, and leadership skills. The health and wellness portion of the curriculum includes physical fitness testing and other physical training activities.

Concentration/Specialization Sequences
AFJROTC IV and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:

- AFJROTC I (AF7913)
- AFJROTC II (AF7916)
- AFJROTC III (AF7918)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.

CAREER AND TECHNICAL EDUCATION COURSES

Career and Technical Education Program

Career and Technical Education courses prepare students for productive futures while meeting the commonwealth's need for well-trained and industry-certified technical workers.

High School Career and Technical Education courses satisfy the requirement for Fine Arts or Practical Arts credit.

Suffolk Public Schools acknowledges the importance of career and technical education to students through diploma seals awarded by the State Board of Education and by recognizing industry credentialing in its diploma requirements.

CTE Sequences

Two Sequential Electives

Effective July 1, 2011, the *Standards of Quality* states "The requirements for a standard high school diploma shall, however, include at least two sequential electives chosen from a concentration of courses selected from a variety of options that may be planned to ensure the completion of a focused sequence of elective courses. Students may take such focused sequence of elective courses in consecutive years or any two years of high school. Such focused sequence of elective courses shall provide a foundation for further education or training or preparation for employment."

Concentration Sequences

A concentration is a coherent sequence of courses as identified in the course listings within this document.

Specialization

A specialization is a choice by a student to specialize in a career by taking additional courses in a specific career pathway as appropriate to his/her career cluster.

Completer

A career and technical education completer is a student who has met the requirements for a career and technical concentration sequence and all requirements for high school graduation, or an approved alternative education program. Students may take additional career and technical education courses that will enhance their career pathway goals.

Industry Credentialing

Certifications/Licenses/Assessments

Completion of certain courses enable students to earn an industry certification, a state license, and/or a national certification from a recognized industry, trade, or professional association. These credentials are beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain these credentials are eligible to earn verified credits toward graduation. Students enrolled in industry credentialing CTE courses are required to take the assigned assessment. Industry Certification assessments are subject to change.

Student-Selected Verified Credit

Students interested in the student-selected verified credit option should discuss the option with their high school counselor. Student-selected verified credit will be awarded for passing each certification or licensure examinations that meet all of the following criteria:

- Industry certification or licensure examinations that are approved to satisfy the requirements for the Board of Education's Career and Technical Education Seal or the Board of Education's Seal of Advanced Mathematics and Technology.
- The teacher and/or the CTE program must be certified by the issuing organization relative to the industry certification or license.
- A standard credit may not be verified more than once.

Standards of Learning (SOL)

All career and technical education courses require strong academic skills. Virginia's academic standards in English, mathematics, science, and history/social science are reinforced in career and technical education classes through real-world applications.

Graduation Requirements Associated With CTE
All students who entered the ninth grade for the first time in 2011-2012 and beyond shall earn one (1) standard credit in Economics and Personal Finance in fulfillment of the graduation requirement for the Standard and Advanced Studies diplomas. The one (1) standard credit earned for the Economics and Personal Finance course (6120) shall count only once towards graduation requirements.

All students who entered the ninth grade for the first time in 2013-2014 and prior to the 2018-2019 school year earn a Virginia Department of Education approved Career and Technical Education (CTE) credential to graduate from a Virginia high school with a standard diploma.

In accordance with the Standards of Quality beginning with first-time ninth grade students in 2018-2019, graduation requirements shall include a requirement that students either (i) complete an Advanced Placement, honors, or International Baccalaureate course or (ii) earn a career and technical education credential that has been approved by the Board, except when a career and technical education credential in a particular subject area is not readily available or appropriate or does not adequately measure student competency, in which case the student shall receive satisfactory competency-based instruction in the subject area to earn credit, to satisfy the standard diploma requirements. The career and technical education credential, when required, could include the successful completion of an industry certification, a state licensure examination, a national occupational competency assessment, or the Virginia workplace readiness skills assessment."

Agriculture, Food & Natural Resources

Production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources

Through participation in the **Virginia Future Farmers of America (FFA) Organization** and/or the **Virginia Health Occupations Students of America (HOSA)**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Options

- Agribusiness Systems
- Animal Systems

Agricultural Business Fundamentals I (8022)

Grades: 10-12
Prerequisite: Foundations of Agriculture, Food, and Natural Resources or Introduction to Animal Systems
Credit: One (1)

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

Students develop the necessary knowledge, skills, habits, and attitudes for employment in agricultural businesses. Emphasis is placed on personal financial management practices, consumer choices, financial records, business structures and procedures, and the economics of marketing agricultural products and services.

Concentration/Specialization Sequences

Agricultural Business Fundamentals I (8022) and the following 36-week course, equivalent to a total of two 36-week courses:

- Agricultural Business Operations II (8024)
- Veterinary Science I (8088)
- Veterinary Science II (8089)
- Introduction to Animal Systems (8008)
- Foundations of Agriculture, Food, and Natural Resources (8006)

Agricultural Business Operations II (8024)

Grades: 11-12
Prerequisite: Agricultural Business Fundamentals
Credit: One (1)

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

This course builds upon knowledge gained in Agricultural Business Fundamentals (8022) and emphasizes agricultural occupations, business procedures, merchandising, marketing, agricultural business management, and emerging or niche markets. Students will learn agricultural product knowledge, agricultural service industry knowledge, and leadership development.

Concentration/Specialization Sequences

Agricultural Business Operations II (8024) and the following 36-week course, equivalent to a total of two 36-week courses:

- Agricultural Business Fundamentals I (8022)
- Introduction to Animal Systems (8008)
- Veterinary Science I (8088)
- Veterinary Science II (8089)

Foundations of Agriculture, Food and Natural Resources (8006)

Grades: 09-10
Prerequisites: None
Credit: One (1)

This course develops a foundation in each of the career pathways in agriculture, food, and natural resources (AFNR), including the global scope of agriculture; concepts in plant, animal, and food science; natural resources and environmental systems; agricultural skills and safety in power, structural, and technical systems; and agribusiness.

Concentration/Specialization Sequences

Foundations of Agriculture, Food and Natural Resources (8006) and the following 36-week course, equivalent to a total of two 36-week courses:

- Agricultural Business Fundamentals I (8022)
- Introduction to Animal Systems (8008)

Introduction to Animal Systems (8008)

Grades: 09-10
Prerequisites: None
Credit: One (1)

Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students learn agricultural mechanics applicable to animal systems. As with all agriculture courses, students will be exposed to principles of leadership and opportunities within student organizations along with Supervised Agricultural Experience opportunities.

Concentration/Specialization Sequences

Introduction to Animal Systems (8008) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Agricultural Business Fundamentals I (8022)
- Agricultural Business Operations II (8024)
- Foundations of Agriculture, Food, and Natural Resources (8006)
- Veterinary Science I (8088)
- Veterinary Science II (8089)

Veterinary Science I (8088)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisites: Introduction to Health and Medical Sciences recommended
Credits: One and a half (1.5); *1st semester of a one-year program*

Veterinary Science I prepares students for postsecondary education and/or careers in veterinary medicine or related fields. Students develop their skills in anatomy, nutrition, medical terminology, sanitation, clinical exams, and

handling animals. Live animal handling may occur. Course content also includes facility maintenance, and office functions, as well as safety practices. The National FFA Organization, Supervised Agricultural Experience (SAE), or related student organization activities are encouraged.

Concentration/Specialization Sequences

Veterinary Science I (8088) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Agricultural Business Fundamentals I (8022)
- Agricultural Business Operations II (8024)
- Introduction to Animal Systems (8008)
- Veterinary Science II (8089)

Veterinary Science II (8089)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisites: Introduction to Health and Medical Sciences recommended
Credits: One and a half (1.5); *2nd semester of a one-year program*

Industry Credential Available: NOCTI Small Animal Science & Technology Assessment

Veterinary Science II students expand their knowledge of animal science and the care of animals, including animal structure and function, microbes and disease prevention, parasitology, and genetics and breeding. Students develop more advanced skills and techniques for assisting the veterinarian/technician in the following areas: performing first aid and surgery, applying aseptic techniques, performing technical functions, administering medication, handling death and dying, working with wildlife, and performing office functions. On-the-job clinical instruction coordinated by the instructor may be included in veterinary offices or animal clinics.

Concentration/Specialization Sequences

Veterinary Science II (8089) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Agricultural Business Fundamentals I (8022)
- Agricultural Business Operations II (8024)
- Introduction to Animal Systems (8008)
- Veterinary Science I (8088)

Architecture and Construction

Designing, planning, managing, building, and maintaining the built environment.

Through participation in the **Technology Student Association (TSA)** and/or **SkillsUSA**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Options

- Construction
- Design/Pre-Construction

Architectural Drawing and Design (8437)

Grades: 10-12
Prerequisite: Introduction to Engineering Design-PLTW (8439) or Technical Drawing and Design (8435)
Credit: One (1)

Industry Credential Available: AutoCAD Certification

Students learn the principles of architecture and increase understanding of working drawings and construction techniques learned in the prerequisite course. Experiences include residential and commercial building designs, rendering, model development, and structural details. Students use computer-aided drawing and design (CADD) equipment and established standards or codes to prepare models for presentation. The course is especially beneficial to future architects, interior designers, or home builders.

Concentration/Specialization Sequences

Architectural Drawing and Design (8437) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Digital Visualization (8459)
- Engineering Drawing and Design (8436)

- Technical Drawing and Design (8435)

Building Trades I (8515)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Credits: One and a half (1.5); *1st semester of a one-year program*
Building Trades I introduce students to skills in the four core areas of residential construction: masonry, carpentry, electricity, and plumbing. Students emphasize safety by earning the 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.
Concentration/Specialization Sequences
Building Trades I (8515) and the following 36-week course, equivalent to a total of two 36-week courses:

- Building Trades II (8516)

Building Trades II (8516)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Credits: One and a half (1.5); 2nd *semester of a one-year program*
Industry Credential Available: NOCTI Fundamentals of Construction Assessment (Level II)
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.
Concentration/Specialization Sequences
Building Trades II (8516) and the following 36-week course, equivalent to a total of two 36-week courses:

- Building Trades I (8515)

Electricity I (8533)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Credits: One and a half (1.5); *1st semester of a one-year program*
Electricity I students will develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They also study electrical theory, navigate the National Electrical Code Book, select and install conductors, and work with panelboards, switchboards, and generators.
Concentration/Specialization Sequences
Electricity I (8533) and the following 36-week course/140 hours, equivalent to a total of two 36-week courses

- Electricity II (8534)

Electricity II (8534)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Prerequisite: Electricity I (8533)
Credits: One and a half (1.5); *2nd semester of a one-year program*
Industry Credential Available: NOCTI: Electrical Construction Technology Assessment
Electricity II students will continue to develop skills in the installation, operation, maintenance, and repair of residential, commercial, and industrial electrical systems. They 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, panelboards, switchboards, grounding systems, and generators.
Concentration/Specialization Sequences
Electricity II (8534) and the following 36-week course/280 hours, equivalent to a total of two 36-week courses

- Electricity I (8533)

Utility/Heavy Construction I (8616)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12

Credits One and a half (1.5); *1st semester of a one-year program*

The Utility/Heavy Construction I program provides both the knowledge and the hands-on skills needed to secure a job as a construction equipment operator. Students learn about safety, site grading and development, excavation, drainage and utility structures, pipe laying, and other topics.

Concentration/Specialization Sequences

Utility/Heavy Construction I (8616) and the following 36-week course, equivalent to a total of two 36-week courses:

- Utility/Heavy Construction II (8617)

Utility/Heavy Construction II (8617)

Classes Held at The College & Career Academy at Pruden

Grades: 11-12

Prerequisite: Utility/Heavy Construction I (8616)

Credits One and a half (1.5); 2nd *semester of a one-year program*

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

The Utility/Heavy Construction II program provides the knowledge and the hands-on skills needed to secure a job as a construction equipment operator. Students learn about site grading and development, excavation, drainage and utility structures, pipe laying, and other topics. They study soil, learn to read blueprints, and gain experience in operating bulldozers, backhoes, front-end loaders, excavators, and skid steers.

Concentration/Specialization Sequences

Utility/Heavy Construction II (8617) and the following 36-week course, equivalent to a total of two 36-week courses:

- Utility/Heavy Construction I (8516)

Arts, Audio/Video Technology and Communications

Designing, producing, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services

Through participation in the **Technology Student Association (TSA)**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Options

- Printing Technology
- Visual Arts

Communication Systems (8415)

Grades: 09-12

Pre-requisite: None

Credit: One (1)

Communication Systems provides experiences in the fields of imaging technology, graphic productions, video and media, technical design, and various modes of communicating information through the use of data. Students develop critical-thinking and problem-solving skills using the universal systems model. Students also learn about the impact of communication on society and potential career fields relating to communications.

Concentration/Specialization Sequences

Communication Systems (8415) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Digital Visualization (8459)
- Graphic Communications Systems (8458)

Digital Visualization (8459)

Grades: 10-12

Prerequisite: Communication Systems (8415) or Technical Drawing and Design (8435) or PLTW Introduction to Engineering Design (8439) (recommended)

Credit: One (1)

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

Students gain experiences related to computer animation by using graphics and design concepts. Students solve problems involving 3-D object manipulation, storyboarding, texturing/mapping, lighting concepts, and environmental geometry. Students create a variety of animations that reflect real-world applications and are introduced to interactive and 3-D animation software. Production of a portfolio showcasing examples of original student work is included.

Concentration/Specialization Sequences

Digital Visualization (8459) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Architectural Drawing and Design (8437)
- Communication Systems (8415)
- Engineering Drawing and Design (8436)
- Graphic Communications Systems (8458)
- Introduction to Engineering Design—PLTW (8439)
- Technical Drawing and Design (8435)

Graphic Communications Systems (8458)

Grades: 10-12
Prerequisite: Communication Systems or Technical Drawing and Design (recommended)
Credit: One (1)

Industry Credential Available: NOCTI Visual Communications and Interactive Media

This course provides experiences related to a wide range of tools and materials used to reproduce information and images. Several mediums are used, including paper, metal, plastic, and fabric. Students develop competencies in message design, composition and assembly, and message transfer and product conversion.

Concentration/Specialization Sequences

Graphic Communication Systems (8458) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Communication Systems (8415)
- Digital Visualization (8459)

Business Management and Administration

Careers that encompass planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations—in every sector of the economy

Through participation in the **Future Business Leaders of America, Inc. (FBLA)**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Options

- Administrative Support
- Business Information Management
- General Management

Business Law (6131)

Grades: 10-12
Prerequisites: None
Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

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, cyber law, and careers in the legal profession. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Concentration/Specialization Sequences

Business Law (6131) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Accounting (6320)
- Advanced Accounting (6321)

- Business Management (6135)
- Computer Information Systems (6612)
- Digital Applications (6611)
- Medical Systems Administration (6730)

Business Management (6135)

Grades: 10-12
Prerequisites: None
Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: NOCTI Business Financial Management Assessment

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. Students may enhance leadership skills by participation in school-based or virtual enterprises, job shadowing, internships, apprenticeships, cooperative education, and/or the Future Business Leaders of America (FBLA).

Concentration/Specialization Sequences

Business Management (6135) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Accounting (6320)
- Advanced Accounting (6321)
- Business Law (6131)
- Computer Information Systems (6612)
- Digital Applications (6611)
- Entrepreneurship (9093)
- Marketing (8120)
- Medical Systems Administration (6730)

Computer Information Systems (6612)

Grades: 09 -12
Prerequisite: Digital Applications (recommended)
Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: Microsoft Office Specialist Excel and PowerPoint

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.

Concentration/Specialization Sequences

Computer Information Systems (6612) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Accounting (6320)
- Advanced Accounting (6321)
- Business Law (6131)
- Business Management (6135)
- Digital Applications (6611)
- Entrepreneurship (9093)
- Medical Systems Administration (6730)

Cooperative Education

Grades: 09-12
Requirement: Current enrollment in a Business occupational course
Credit: One (1)

Cooperative Education is a career preparation method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students may earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve the required minimum of 280 hours to receive one credit. Students should discuss the availability of this program with their high school counselor.

Digital Applications (6611)

Grades: 09-12
Prerequisite: None
Credit: One (1)

Industry Credential Available: Microsoft Office Specialist Word

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. Students who successfully complete this course may be eligible for a rigorous and relevant industry certification examination. Student skills may be enhanced by participation in work-based learning activities and/or the Future Business Leaders of America (FBLA).

Concentration/Specialization Sequences

Digital Applications (6611) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Accounting (6320)
- Advanced Accounting (6321)
- Business Law (6131)
- Business Management (6135)
- Computer Information Systems (6612)
- Cybersecurity Software Operations (6304)
- Medical Systems Administration (6730)

Medical Systems Administration (6730)

Grades: 11-12
Prerequisites: Digital Applications recommended
Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: NOCTI Health Informatics Assessment

Students wishing to gain employment in the health care field may take this course to learn how to use medical technology and apply administrative procedures necessary to be productive employees in a health care environment. Students will learn how to manage office activities, enhance communication skills, identify legal and ethical issues in health care practices, manage financial functions, and enhance employability skills.

Concentration/Specialization Sequence

Medical Systems Administration (6730) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Accounting (6320)
- Advanced Accounting (6321)
- Business Law (6131)
- Business Management (6135)
- Computer Information Systems (6612)
- Introduction to Health and Medical Sciences (8302)
- Digital Applications (6611)

Education and Training

Planning, managing, and providing education and training services, and related learning support services

Through participation in the **Educators Rising**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Option

- Teaching and Training

Cooperative Education

Grades: 09-12
Requirement: Current enrollment in Selected Education and Training Courses
Credit: One (1)

Cooperative Education is a career preparation method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students may earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve the required minimum of 280 hours to receive one credit. Students should discuss the availability of this program with their high school counselor.

Early Childhood, Education, and Services I (8285)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (Dual Credits 10)
Grades: 11-12
Credits: Three (3); *1st year of a two-year program*
Early Childhood, Education and Services I students prepare to be primary providers of home-, family-, or institution-based childcare services by focusing on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; recordkeeping and referral procedures; and work-based learning experiences in on-site labs, local daycare centers, elementary schools, and other institutions under the supervision of the instructor. Students also prepare for continuing education leading to careers in early childhood fields (e.g., medical, social services, education).

Concentration/Specialization Sequences

Early Childhood, Education, and Services I (8285) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Early Childhood, Education, and Services II (8286)
- Independent Living (8219)
- Nutrition and Wellness (8229)
- Virginia Teachers for Tomorrow I (9062)
- Virginia Teachers for Tomorrow II (9072)

Early Childhood, Education, and Services II (8286)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (Dual Credits 12)
Grades: 11-12
Credits: Three (3); *2nd year of a two-year program*

Industry Credential Available: NOCTI - Early Childhood Education and Care-Basic

Early Childhood, Education and Services II students focus on occupational skills needed by personnel employed in early childhood-related careers, such as 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.

Concentration/Specialization Sequences

Early Childhood, Education, and Services II (8286) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Early Childhood, Education, and Services I (8285)
- Nutrition and Wellness (8229)
- Virginia Teachers for Tomorrow I (9062)
- Virginia Teachers for Tomorrow II (9072)

Education for Employment I – Preparation (9078)

Grades: 09-11
Credit: One (1); Two (2) with Cooperative Education
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. This course offers students integrated labor market needs through an applied employment education format.

Education for Employment II – Preparation (/9080)

Grades: 10-12
Prerequisite: Education for Employment I – Preparation (9078)

Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

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. This course offers students integrated labor market needs through an applied employment education format.

Virginia Teachers for Tomorrow I (9062-11/SDV110/EDU100/EDU190)

Dual Enrollment - Offered jointly with Paul D. Camp Community College

Grades: 11-12

Prerequisite: 3.0 GPA derived from predominate college preparatory classes, strong interest in teaching and education, five (5) written teacher recommendations

Credit: One (weighted +1); 6 hours of college credits upon successful completion

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 field experience; and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization, Educators Rising.

Concentration/Specialization Sequences

Virginia Teachers for Tomorrow I (9062) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Early Childhood, Education, and Services I (8285)
- Early Childhood, Education, and Services II (8286)
- Virginia Teachers for Tomorrow II (9072)

Virginia Teachers for Tomorrow II (9072/EDU198/EDU199)

Dual Enrollment - Offered jointly with Paul D. Camp Community College

Grade: 12

Prerequisite: Virginia Teachers for Tomorrow I

Credit: One (weighted +1); 6 hours of college credits upon successful completion

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.

Concentration/Specialization Sequences

Virginia Teachers for Tomorrow II (9072) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Early Childhood, Education, and Services I (8285)
- Early Childhood, Education, and Services II (8286)
- Virginia Teachers for Tomorrow I (9062)

Finance

Planning, services for financial and investment planning, banking, insurance, and business financial management

Through participation in the **Future Business Leaders of America, Inc. (FBLA)**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Option

- Business Finance

Accounting (6320)

Grades: 10-12

Prerequisites: Digital Applications (6611) or teacher-approved demonstration and documentation of touch keyboarding skills (recommended)

Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: Accounting—Basic Assessment/Workplace Readiness Skills for the Commonwealth

Accounting 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 control systems. Business ethics and professional conduct are emphasized. Students learn fundamental accounting procedures, using both manual and electronic systems.

Concentration/Specialization Sequences

Accounting (6320) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Advanced Accounting (6321)
- Business Law (6131)
- Business Management (6135)
- Computer Information Systems (6612)
- Digital Applications (6611)
- Entrepreneurship 9093)
- Medical Systems Administration (6730)

Advanced Accounting (6321)

Grades: 11-12
Prerequisites: Accounting (6320)
Credits**:** One (1); Two (2) with Cooperative Education

Industry Credential Available: Intuit QuickBooks Certified User Certification

Advanced Accounting students gain knowledge of advanced accounting principles, procedures, and techniques used to solve business problems and make financial decisions. Students work in a technology-integrated environment, using accounting and spreadsheet software to analyze, synthesize, evaluate, and interpret business financial data related to inventory, fixed assets, notes/accounts payable and receivable, implementation of a partnership and a corporation, and other specialized accounting systems. Using authentic workplace scenarios that reflect current industry trends and standards, students analyze financial data and acquire knowledge of business ethics.

Concentration/Specialization Sequences

Advanced Accounting (6321) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Accounting (6320)
- Business Law (6131)
- Business Management (6135)
- Computer Information Systems (6612)
- Digital Applications (6611)
- Entrepreneurship (9093)
- Medical Systems Administration (6730)

Economics and Personal Finance (6120)

Grade: 10-12
Prerequisite: None
Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: W!SE Financial Literacy

Students learn how economies and markets operate and how the United States economy is interconnected with the global economy. Additionally they learn how to navigate the financial decisions they must face and to make informed decisions relating to career exploration, budgeting, banking, credit, insurance, spending, financing postsecondary education, taxes, saving and investing, buying/leasing a vehicle, and living independently. They also learn the importance of investing in themselves in order to gain the knowledge and skills valued in the marketplace. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship, more effective participation in the workforce, and career success. The course incorporates all economics and financial literacy objectives included in the Code of Virginia §22.1-200-03B.

Health Science

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development

Through participation in the **Virginia Health Occupations Students of America (HOSA)**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Options

- Therapeutic Services

Emergency Medical Technician I (8333)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (Dual Credit - 5)
Grades: 10-12 (Must be 16 years old prior to the first day of EMT Instruction)
Prerequisite: Introduction to Health and Medical Sciences 8302 (Recommended)
Credits: One and a half (1.5); *1st semester of a one-year program*

The tasks for this course represent the National and Virginia Emergency Medical Services (EMS) Educational Standards. Students explore and apply the fundamentals of EMS, anatomy, physiology, and medical terminology while demonstrating skills in assessing and managing patient care, including assessing the scene and understanding shock, resuscitation, and trauma. Successful completion of this course and instructor endorsement qualifies students to enroll in EMT II to complete the program sequence. Students must complete a minimum of 85 percent of the didactic and lab aspects of the course, per 12VAC5-31-1501 in the Code of Virginia. Successful completion of all course requirements and instructor endorsement may lead to eligibility to take the Virginia State Psychomotor Exam and the National Registry of Emergency Medical Technicians (NREMT) cognitive exam. Students must meet the requirements of the Functional Position Description for the Basic Life Support Provider (refer to EMS.TR.14B and 12VAC5-31-1501 in the Code of Virginia). **Students must be at least 16 years old by the first day of the course offering**. **All students will need to undergo a criminal background check that includes fingerprinting and drug screening.**

Emergency Medical Technician I (8333) and the following 36-week course, equivalent to a total of two 36-week courses:

- Emergency Medical Technician II (8334)

Emergency Medical Technician II (8334)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (Dual Credit - 4)
Grades: 11-12
Prerequisite: Emergency Medical Technician I 8333 Introduction to Health and Medical Sciences 8302 (Recommended)
Credits: One and a half (1.5); 2nd *semester of a one-year program*

Industry Credential Available: NOCTI Emergency Medical Services/Emergency Medical Technician

The tasks for this course represent the National and Virginia Emergency Medical Services (EMS) Educational Standards. Students build on their knowledge and skills for providing basic life support by focusing on the areas of EMS operations, medical emergencies, and management of special patient populations. Supervised field experience that includes at least 10 patient contacts outside of school hours is required. Successful completion of this second course in the sequence will earn the student CTE completer status. Successful completion of all course requirements and instructor endorsement may lead to eligibility to take the Virginia State Psychomotor Exam and the National Registry of Emergency Medical Technicians (NREMT) cognitive exam. Students must meet the requirements of the Functional Position Description for the Basic Life Support Provider (refer to EMS.TR.14B and 12VAC5-31-1501 in the Code of Virginia). Students must complete a minimum of 85 percent of the didactic and lab aspects of the course, per 12VAC5-31-1501 in the Code of Virginia. **Students must be at least 16 years old by the first day of the course offering**. **All students will need to undergo a criminal background check that includes fingerprinting and drug screening.**

Concentration/Specialization Sequences

Emergency Medical Technician II (8334) and the following 36-week course, equivalent to a total of two 36-week courses:

- Emergency Medical Technician I (8333)

Introduction to Health and Medical Sciences (8302)

Grades: 09-12
Prerequisite: None
Credit: One (1)

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

Introduction to Health and Medical Sciences will introduces the students to a variety of healthcare careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. healthcare system and to learn basic healthcare terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the healthcare environment. Students also begin gaining job-seeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care.

Concentration/Specialization Sequences

Introduction to Health and Medical Sciences (8302) and the following 36-week course, equivalent to a total of two 36-week courses:

- Nurse Aide I Condensed (8355)

Medical Assistant I (8345)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisites: Introduction to Health and Medical Sciences (8302) recommended
Credits: Three (3); *1st year of a two-year program*

Medical Assistant I students will gain foundational knowledge in basic anatomy and physiology, medical ethics, medical asepsis, terminology, medical mathematics, and legal responsibilities. Students also develop basic skills and techniques to assist the healthcare provider and/or other medical professionals in patient examinations, basic emergency care, simple laboratory tests, and administrative duties. Additionally, students explore medical assisting career pathways through Health Occupations Student Association (HOSA) and potential on-the-job clinical instruction and/or observation in a healthcare facility.

Concentration/Specialization Sequences

Medical Assistant I (8345) and the following 36-week course, equivalent to a total of two 36-week courses:

- Medical Assistant II (8346)

Medical Assistant II (8346)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisites: Medical Assistant I (8345)
Credits: Three (3); *2nd year of a two-year program*

Industry Credential Available: NOCTI: Medical Assisting

Medical Assistant II students will apply and implement medical-assisting skills and techniques learned in Medical Assistant I. They also learn management of health records; cardiopulmonary resuscitation; care and use of equipment; collection and analysis of laboratory specimens; special diagnostic testing related to basic diseases and disorders, treatment, and medication; and job preparedness skills. Advanced on-the-job clinical experience in a healthcare facility is a part of the course. Successful completion of the program may lead to employment in a healthcare setting and an industry credential.

Concentration/Specialization Sequences

Medical Assistant II (8346) and the following 36-week course, equivalent to a total of two 36-week courses:

- Medical Assistant I (8345)

Nurse Aide I Condensed (8355)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisite: Introduction to Health and Medical Sciences (recommended)

Credits: One and a half (1.5); *1st semester of a one-year program*
Nurse Aide I Condensed, offered as an occupational preparation course beginning at the 11th-grade level, emphasizes the study of nursing occupations as related to the healthcare system. Students study normal growth and development, simple body structure and function, and medical terminology and are introduced to concepts of infection prevention and disease processes. They receive elementary skill training in patient-nurse aide relationships; measuring and recording of vital signs; cardiopulmonary resuscitation; and general care of the patient. Limited on-the-job instruction in nursing homes and other healthcare facilities is part of the course. This course can be used to prepare the student for Nurse Aide II Condensed so that all competencies for a certified nurse aide are met and as an introduction to careers in nursing, health professions, and STEM-H professions.

Concentration/Specialization Sequences
Nurse Aide I Condensed (8355) and the following 36-week course, equivalent to a total of two 36-week courses:
- Introduction to Health and Medical Sciences (8302)
- Nurse Aide II Condensed (8356)

Nurse Aide II Condensed (8356)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisite: Introduction to Health and Medical Sciences (recommended)
Credits: One and a half (1.5); *2nd semester of a one-year program*
Industry Credential Available: NOCTI Nursing Assisting Assessment/VBON Certified Nurse Aide Exam
Nurse Aide II Condensed is an occupational preparation course, emphasizing advanced skill training in areas such as catheter care, range of motion, bowel and bladder training, care of the dying, selected procedures for maternal and infant care, and admission and discharge procedures. Students learn diseases and body systems as related to advanced clinical care of the acute medical-surgical patient, the chronically ill, and the elderly. On-the-job instruction in a licensed nursing home is part of the course. Upon completion of the nurse aide program, the student is eligible to take the nurse aide certification exam that leads to employment as a certified nurse aide in hospitals and nursing homes.

Concentration/Specialization Sequences
Nurse Aide II Condensed (8356) and the following 36-week course, equivalent to a total of two 36-week courses:
- Nurse Aide I Condensed (8355)

Hospitality and Tourism

Encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events, and travel related services

Through participation in the **Family, Career and Community Leaders of America, Inc. (FCCLA)**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Option
- Restaurant and Food/Beverage Services

Culinary Arts I (8275)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Credits: Three (3); *1st year of a two-year program*
Industry Credential Available: NOCTI Culinary Arts Prep
Culinary Arts I provides students with a foundational understanding of the food service industry and opportunities to build technical skills in food preparation and service. Students examine basic rules of kitchen safety and sanitation, of

purchasing and receiving, and of fundamental nutrition. The curriculum incorporates math and science in culinary applications.

Concentration/Specialization Sequences

Culinary Arts I (8275) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Culinary Arts II (8276)
- Independent Living (8219)
- Nutrition and Wellness (8229)

Culinary Arts II (8276)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisite: Culinary Arts I (8275)
Credits: Three (3); *2nd year of a two-year program*

Industry Credential Available: ServSafe and NOCTI Culinary Arts ACF

Culinary Arts II will continue to provide students acquire a comprehensive knowledge of the food service industry while refining their technical skills. Students apply kitchen safety and sanitation, nutritional principles, and advanced food-preparation techniques. Students complete work-based learning in venues such as the a la carte kitchen, the dining room, and catered functions.

Concentration/Specialization Sequences

Culinary Arts II (8276) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Culinary Arts I (8275)
- Independent Living (8219)
- Nutrition and Wellness (8229)

Hospitality, Tourism, and Recreation I (8202)

Grade: 10-12
Prerequisite: None
Credit: Two (Double-block classes)

Industry Credential Available: NOCTI Hospitality Management-Food and Beverage Assessment

Students will begin preparation for employment in hospitality industries by focusing on principles of operations in food services, recreation, hospitality planning and business relations. Special attention is paid to the development of culinary skills (food sanitation, food preparation, and serving) and customer service skills.

Concentration/Specialization Sequences

Hospitality, Tourism and Recreation I (8202) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Independent Living (8219)
- Nutrition and Wellness (8229)

Human Services

Preparing individuals for employment in career pathways that relate to families and human needs

Through participation in the **Family, Career and Community Leaders of America, Inc. (FCCLA)**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Options

- Consumer Services
- Family and Community Services
- Personal Care Services

Master Barber I (8743)

Classes Held at The College & Career Academy at Pruden
Grades: 10-11
Credits: Three (3); *1st year of a two-year program*

Barbering I is the study of hair, scalp, and skin. Students will study and prepare in a clinical lab setting, using mannequins and live models for manipulative practice. The program emphasizes safety and sanitation,

communication, and management skills. Related areas of study include psychology, ethics, and professional image. Competency completions prepare the students to work or apprentice in a local barbershop or beauty salon.

Concentration/Specialization Sequences

Master Barber I (8743) and the following 36-week course/420 hours, equivalent to a total of two 36-week courses

- Master Barber II (8744)

Master Barber II (8744)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Credits: Three (3); *2nd year of a two-year program*

Industry Credential Available: Virginia Board of Barbers and Cosmetologists

Barbering II is the study of hair, scalp, and skin. Students will study and prepare in a clinical lab setting, using mannequins and live models for manipulative practice. The program emphasizes safety and sanitation, communication, and management skills. Related areas of study include psychology, ethics, and professional image. Competency completions prepare the students to work or apprentice in a local barbershop or beauty salon.

Concentration/Specialization Sequences

Master Barber II (8744) and the following 36-week course/420, equivalent to a total of two 36-week courses

- Master Barbering, I (8743)

Cosmetology I (8745)

Classes Held at The College & Career Academy at Pruden
Grades: 10-11
Credits: Three (3); *1st year of a two-year program*

Cosmetology I students will study hair, skin, and nails and their related care. Students are grounded in theory as they prepare to practice procedures in a clinical lab setting or classroom, using manikins for manipulative skill practice. The first-year course emphasizes personal safety, professionalism, and sanitation and disinfection of equipment and facilities. Students develop skills in shampooing and conditioning hair, as well as styling and cutting hair. They are introduced to chemical texture services and develop skills in manicure and pedicure procedures.

Concentration/Specialization Sequences

Cosmetology I (8745) and the following 36-week courses, equivalent to a total of two 36-week courses:

- Cosmetology II (8746)

Cosmetology II (8746)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Credits: Three (3); *2nd year of a two-year program*

Industry Credential Available: NOCTI Cosmetology Assessment / Virginia Board of Barbers and Cosmetologists

Cosmetology II students will build on their theoretical foundation of general sciences and practices in cosmetology to increase proficiency in hair cutting and styling on live models, with attention to professionalism, client consultation, safety, and infection control. Students are trained in safe chemical processes related to permanent waves, relaxers, lightening, and coloring hair. In addition, students learn to care for skin, hands, and feet, developing experience in providing facials, manicures, pedicures, and nail enhancements. Students will be introduced to a business management unit with a focus on managing the salon.

Concentration/Specialization Sequences

Cosmetology II (8546) and the following 36-week courses, equivalent to total of two 36-week courses:

- Cosmetology I (8745)

Independent Living (8219)

Grades: 09-12
Prerequisite: None
Credits: One (1)

Students in Independent Living will build life skills focusing on establishing positive relationships, balancing work and family life, investigating careers, making responsible consumer choices, applying nutrition and wellness knowledge, and studying child development and parenting.

Concentration/Specialization Sequences

Independent Living (8219) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Culinary Arts I (8275)
- Culinary Arts II (8276)
- Hospitality, Tourism, and Recreation I (8202)
- Introduction to Fashion Careers (8248)
- Nutrition and Wellness (8229)
- Early Childhood, Education, and Services I (8285)

Introduction to Fashion Careers (8248)

Grades: 09-12
Prerequisite: None
Credit: One (1)

Introduction to Fashion Careers focus on identifying and exploring the individual careers within the apparel, accessory, and textile design, manufacturing, and merchandising industry. Units of study include the relationships that exist among all areas of the clothing industry; related global and economic issues; apparel, accessory, and textile technology; exploration of careers, including entrepreneurial opportunities in related areas; and the skills and personal characteristics necessary for success in careers in the apparel, accessory, and textile design, manufacturing, and marketing industry.

Concentration/Specialization Sequences

Introduction to Fashion Careers (8248) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Advanced Marketing (8130)
- Digital and Social Media Marketing (8125)
- Entrepreneurship (9093)
- Fashion Marketing (8140)
- Independent Living (8219)
- Marketing (8120)

Nutrition and Wellness (8229)

Grades: 10-12
Prerequisite: None
Credits: One (1)

Industry Credential Available: Workplace Readiness Skills for the Commonwealth Examination

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

Concentration/Specialization Sequences

Nutrition and Wellness (8229) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Culinary Arts I (8275)
- Culinary Arts II (8276)
- Early Childhood Education I (8285)
- Early Childhood Education II (8286)
- Hospitality, Tourism, and Recreation I (8202)
- Independent Living (8219)

Information Technology

Entry-level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services

Academic and Career Pathway Options

- Information Support and Services
- Network Systems
- Programming and Software Development

Cybersecurity Fundamentals (6302)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Prerequisites: None
Credits: One and a half (1.5); *1st semester of year one of a two-year program*
Industry Credential Available: Microsoft Technology Associates Exams
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, and examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.
Concentration/Specialization Sequences
Cybersecurity Fundamentals (6302) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Cybersecurity Software Operations (6304)
- Cybersecurity Software Operations, Advanced (6306)
- Cybersecurity Systems Technology (8628)

Cybersecurity Software Operations (6304)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Prerequisites: Cybersecurity Fundamentals (6302)
Credits: One and a half (1.5); 2nd *semester of a year one of a two-year program*
Industry Credential Available: CompTIA Certification
Cybersecurity Software Operations is designed to teach many aspects of computer support and network administration. Students learn networking concepts, from usage to components, and create peer-to-peer network systems and client server networks. Students learn how to install and configure network cards and connect them to networks; to install the operating systems; to create, set up, and manage accounts; to load software; and to establish, implement, and maintain network integrity security plans. This course may cover software-based network operating systems, such as Windows Server or Linux, to prepare students with a foundation in computer network administration.
Concentration/Specialization Sequences
Cybersecurity Software Operations (6304) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Computer Information Systems (6612)
- Cybersecurity Fundamentals (6302)
- Cybersecurity Software Operations, Advanced (6306)
- Digital Applications (6611)

Cybersecurity Software Operations Advanced (6306)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisites: Cybersecurity Software Operations (6304)
Credits: Three (3); 2nd *year of a two-year program*
Industry Credential Available: CompTIA Certifications
Cybersecurity Software Operations, Advanced continues to teach aspects of network administration, focusing on the management and support of network users and systems. The topics covered include understanding the responsibilities of computer professionals, training end users, evaluating new technology, developing system policies, troubleshooting

workstations, managing network services and protocols, and effectively using email and business communications. Students learn communication protocols, troubleshooting techniques for systems and client-server networks, website management, and other advanced networking topics. Techniques that are used to install operating systems, set up and manage accounts, load software, and create and implement security plans are taught. This course may provide instruction about software-based network operating systems, such as Windows Server or Linux. Instruction will emphasize preparation for industry certification.

Concentration/Specialization Sequences

Cybersecurity Software Operations, Advanced (6306) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Cybersecurity Fundamentals (6302)
- Cybersecurity Software Operations (6304)

Cybersecurity Systems Technology (8628)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (Dual Credits 6)
Grades: 10-12
Prerequisites: Cybersecurity Fundamentals (6302)
Credits: One and a half (1.5); 2nd *semester of a year one of a two-year program*

Industry Credential Available: CompTIA Certification

Cybersecurity Systems Technology students will 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, peripherals, use system tools, and diagnostic software. They develop skills in computer networking and resource sharing. In addition, students explore the relationships between internal and external computer components. Upon successful completion of the course, students may qualify to take a CompTIA certification exam.

Concentration/Specialization Sequences

Cybersecurity Systems Technology (8628) and the following 36-week course, equivalent to a total of two 36-week courses:

- Cybersecurity Systems Technology, Advanced (8629)
- Cybersecurity Fundamentals (6302)

Cybersecurity Systems Technology, Advanced (8629)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (Dual Credits 6)
Grades: 11-12
Prerequisites: Cybersecurity Systems Technology (8628)
Credits: Three (3); 2nd *year of a two-year program*

Industry Credential Available: CompTIA Certification

Cybersecurity Systems Technology, Advanced students will provide students with training in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks. Students explore the following: Basic network design and connectivity, network documentation, network limitations and weaknesses, and network security, standards and protocols. 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 additional CompTIA certification exams.

Concentration/Specialization Sequences

Cybersecurity Systems Technology (8629) and the following 36-week course, equivalent to a total of two 36-week courses:

- Cybersecurity Systems Technology (8628)

Game Design and Development (8400)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Prerequisites: Cybersecurity Fundamentals (6302)
Credits: One and a half (1.5); 2nd *semester of a year one of a two-year program*

Game Design and Development students will create innovative games through the application of graphic design, animation, audio, and writing skills. Students will work in teams while developing program-solving, critical thinking, and effective communication skills. They will analyze, design, prototype, and critique interactive games within a project management environment. Career opportunities across multiple industries, including the entertainment and educational arenas, will be explored.

Concentration/Specialization Sequences

Game Design and Development (8400) and the following 36-week course, equivalent to a total of two 36-week courses:

- Game Design and Development, Advanced (8401)

Game Design and Development, Advanced (8401)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisites: Game Design and Development (8400)
Credits: Three (3); 2nd *year of a two-year program*

Industry Credential Available: Unity Certified Associate

Game Design and Development, Advanced students will work collaboratively in teams to refine their game design skills as they apply graphic design, animation, audio and writing skills to create innovative games for education and entertainment. This project-based course enhances problem solving, project management, and communication skills through the analysis, design, construction, and critique of interactive games. Students will learn about career opportunities in game design and development and investigate the training and certification requirements.

Concentration/Specialization Sequences

Game Design and Development, Advanced (8401) and the following 36-week course, equivalent to a total of two 36-week courses:

- Game Design and Development (8400)

Manufacturing

Planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities engineering

Through participation in the **Technology Student Association (TSA)** and/or **SkillsUSA**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Option

- Production

Technology Foundations (8403)

Grades: 09-12
Prerequisites: None
Credit: One (1)

Technology Foundations is a beginning high school course, students acquire a foundation in technological material, energy, and information and apply processes associated with the technological thinker. Challenged by laboratory activities, students create new ideas and innovations, build systems, and analyze technological products to learn further how and why technology works. They work in groups to build and control systems using engineering design in the development of a technology.

Concentration/Specialization Sequences

Technology Foundations (8403) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Technical Drawing and Design (8435)
- Technology Transfer (8405)

Technology Transfer (8405)

Grades: 10-12
Prerequisite: Technology Foundations (8403)
Credit: One (1)

Industry Credential Available: Workplace Readiness Skills for the Commonwealth Examination

Technology Transfer students will learn that technology transfer occurs when a new user applies an existing technology developed for one purpose to a different function. Groups work together, applying mathematics, science, and engineering concepts to projects that combine systems such as energy and power, agriculture and biotechnology, information and communication, manufacturing, construction, transportation, and medical technologies. Students engage in thematic activities to learn that the transfer of a technology from one society to another can cause cultural, social, economic, and political changes that affect both societies to varying degrees. Students who have not earned the Workplace Readiness Skills for the Commonwealth Examination will be administered the assessment.

Concentration/Specialization Sequences

Technology Transfer (8405) and the following 36-week course, equivalent to a total of two 36-week courses:

- Technology Foundations (8403)

Welding I (8672)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College
Grades: 11-12
Credits: One and a half (1.5); *1st semester of a one-year program*

Welding is required by a wide variety of industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter tools and products. Professional welders are in high demand and can earn accordingly. Students in Welding I are taught to use manual welding, cutting, and electrical arc welding processes to fabricate and join metal parts according to diagrams, blueprints, and specifications. Students will also learn all safety-related practices and techniques, including earning the OSHA 10 card.

Concentration/Specialization Sequences

Welding I (8672) and the following 36-week course, equivalent to a total of two 36-week courses:

- Welding II (8673)

Welding II (8673)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (Dual Credit 3)
Grades: 11-12
Prerequisite: Welding I (8672)
Credits: One and a half (1.5); 2nd *semester of a one-year program*

Industry Credential Available: SENSE Training Program Certification Examination (Level 1, Entry-Level Welder)/ NOCTI Welding

Welding II teaches advanced welding students how to fine-tune their craft and to perform welds in various positions, using multiple welding processes. Students prepare to pass relevant industry certifications. Welding is required by a wide variety of industries—anywhere fusible materials and high heat are needed to manufacture, repair, or alter products. Professional welders are in high-demand and can earn accordingly.

Concentration/Specialization Sequences

Welding II (8673) and the following 36-week course, equivalent to a total of two 36-week courses:

- Welding I (8672)

Marketing

Planning, managing, and performing marketing activities to reach organizational objectives

Through participation in the **DECA: An Association of Marketing Students**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Option

- Marketing Management

Advanced Marketing (8130)

Grade: 11-12
Credits: One (1); Two (2) with Cooperative Education

Industry Credential Available: National Professional Certification in Customer Service and Sales

Advanced Marketing students build on knowledge gained in a prior Marketing course. Students participate in supervisory and management activities focusing on the marketing mix, purchasing, financing, human resources, global marketing, pricing, and emerging technologies. Students will prepare for advancement in marketing careers and postsecondary education. Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events.

Concentration/Specialization Sequences

Advanced Marketing (8130) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Digital and Social Media Marketing (8125)
- Entrepreneurship (9093)
- Fashion Marketing (8140)
- Introduction to Fashion Careers (8248)
- Marketing (8120)

Cooperative Education

Grades: 09-12
Prerequisite: Current Enrollment in Selected Marketing Courses
Credit: One (1)

Cooperative Education is a career preparation method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students may earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve the required minimum of 280 hours to receive one credit. Students should discuss the availability of this program with their high school counselor.

Digital and Social Media Marketing (8125)

Grade: 09-12
Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: National Professional Certification in Customer Service and Sales

Digital and Social Media Marketing introduces students to digital and social media marketing. Students explore principles, strategies, tools, and tactics related to consumers, branding, advertising, and promotions. Students explore how success is measured in a digital and social media marketing campaign. This course emphasizes ethics, laws, and security. Students also investigate business and marketing plans as well as careers in digital and social media marketing.

Concentration/Specialization Sequences

Digital and Social Media Marketing (8125) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Advanced Marketing (8130)
- Entrepreneurship (9093)
- Fashion Marketing (8140)
- Introduction to Fashion Careers (8248)
- Marketing (8120)

Entrepreneurship (9093)

Grades: 09-12
Prerequisite: None
Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: National Professional Certification in Customer Service and Sales

Entrepreneurship will introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an entrepreneurial venture, using design thinking and business model development. Students will learn about financial statements, marketing principles, sales and customer service, and basic economic principles for successful operation.

Concentration/Specialization Sequences

Entrepreneurship (9093) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Accounting (6320)
- Advanced Accounting (6321)
- Advanced Marketing (8130)
- Business Management (6135)
- Computer Information Systems (6612)
- Digital and Social Media Marketing (8125)
- Fashion Marketing (8140)
- Introduction to Fashion Careers (8248)
- Marketing (8120)

Fashion Marketing (8140)

Grades: 10-12
Prerequisite: None
Credit: One (1); Two (2) with Cooperative Education

Industry Credential Available: National Professional Certification in Customer Service and Sales

Fashion Marketing is a 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 the course. Computer/technology applications supporting this course are studied.

Concentration/Specialization Sequences

Fashion Marketing (8140) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Advanced Marketing (8130)
- Digital and Social Media Marketing (8125)
- Entrepreneurship (9093)
- Introduction to Fashion Careers (8248)
- Marketing (8120)

Marketing (8120)

Grades: 09-12
Prerequisite: None
Credits: One (1), Two with Cooperative Education

Industry Credential Available: National Professional Certification in Customer Service and Sales

Marketing 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.

Concentration/Specialization Sequences

Marketing (8120) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Advanced Marketing (8130)
- Business Management (6135)
- Digital and Social Media Marketing (8125)
- Entrepreneurship (9093)
- Fashion Marketing (8140)
- Introduction to Fashion Careers (8248)

Science, Technology, Engineering and Mathematics (STEM)

Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services

Through participation in the **Technology Student Association (TSA)** and/or **SkillsUSA**, students have opportunities to apply knowledge and skills learned in the classroom.

Academic and Career Pathway Option

- Engineering and Technology

Engineering Drawing and Design (8436)

Grades: 10-12
Prerequisite: Introduction to Engineering Design (8439) or Technical Drawing and Design (8435)
Credit: One (1)

Industry Credential Available: AutoCAD Certification

Engineering Drawing and Design students use a graphic language for product design, technical illustration, evaluation of designs, and engineering drawings. They increase their understanding of drawing techniques learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems. They work in teams to design solutions for an identified need.

Concentration/Specialization Sequences

Engineering Drawing and Design (8436) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Architectural Drawing and Design (8437)
- Digital Visualization (8459)
- Technical Drawing and Design (8435)

Geospatial Technology I (8423)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (Four Credits)
Grades: 09-12
Credits: Three (3)

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

Geospatial Technology program provides experiences pertaining to the study and use of geographic information systems (GIS), global positioning systems (GPS), remote sensing (RS), and mobile technologies. Fundamentally, these technologies allow students to explore and analyze the natural and human-made world, locally, globally, and beyond. Students use tools, processes, and techniques to create, store, access, manipulate, and revise data to solve human challenges. These experiences employ real-world spatial analysis models and guidelines for integrating, interpreting, analyzing, and synthesizing data, with a focus on both the implications and the limitations of geospatial technologies.

Modeling & Simulation Support Specialist I & II (8498P I & II)

Classes Held at The College & Career Academy at Pruden
Dual Enrollment - Offered jointly with Paul D. Camp Community College (15 Semester Hours)
Grades: 11-12
Credits: Three (3) per course

Industry Credential Available: Autodesk Certified User Examination/Microsoft Technology Associate

The curriculum outlines tasks and competencies over two instructional years: Modeling & Simulation Support Specialist I & II. Year one of the proposed Modeling & Simulation Support Specialist course will include the following competencies/tasks: Computer skills/EXCEL applications, digital visualization techniques and applications, data collection, presentation and analysis, career studies, communication skills, basic programming, problem-solving and design solutions. Competencies/tasks for the proposed year two curriculum will include operating system instruction, networking and troubleshooting with hardware/software applications. In addition, a semester-long project-based learning opportunity contextual to the student's career goals will be required. The contextual project will pair students with mentors in workplaces related to their respective career goals. Thus, this program will enable students to identify a concern and address a problem/issue related to their career goals.

Project Lead the Way (PLTW)

Refer to the Special Programs section in this document for course descriptions and more information.

The **Engineering** program empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. Courses engage students in compelling, real-world challenges that help them become better collaborators and thinkers. From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality. This program is located at Nansemond River High School beginning in the 9th grade and is open to all Suffolk Public Schools students. Students must apply for this program during their eighth grade year.

The **Biomedical Science** program empowers students to explore and find solutions to some of today's most pressing medical challenges. Through scaffolded activities that connect learning to life, students step into the roles of biomedical science professionals and investigate topics including human medicine, physiology, genetics, microbiology, and public health. Students work together in teams to find unique solutions, and in the process, learn in-demand, transferable skills to include critical thinking and communication. This program is located at Lakeland High School beginning in the 9th grade and is open to all Suffolk Public Schools students. Students must apply for this program during their eighth grade year.

Software Design/Gaming and Simulation (8498/ITP 100 & 193)

Class held at Tidewater Community College
Grades: 11-12
Prerequisite: Algebra II
Credit: One (weighted +1)
Students will be introduced to computerized modeling, simulation, and animation desired by engineering and business communities. This course introduces principles and practices of software development, which includes instruction in critical thinking, problem solving, and essential programming logic in structured and object-oriented design using contemporary tools. Additionally this course introduces students to the concepts and terminology of the modeling and simulation field. The course familiarizes the student with the types of software used in the development and the analysis of project results. Students will also discuss gaming concepts and develop two-dimensional games using a variety of tools. Upon successful completion of this course, a student may earn college credit at Tidewater Community College in the Associate of Applied Science Degree program in Technical Studies with a Specialization in Modeling and Simulation.

Technical Drawing and Design (8435)

Grades: 09-12
Prerequisite: None
Credit: One (1)
Technical Drawing and Design is a foundation course, students learn the basic language of technical drawing and design, and they design, sketch, and make technical drawings, models, or prototypes of real design problems. The course is especially recommended for future engineering and architecture students.

Concentration/Specialization Sequences

Technical Drawing and Design (8435) and one of the following 36-week courses, equivalent to a total of two 36-week courses:

- Architectural Drawing and Design (8437)
- Civil Engineering and Architecture PLTW (8430)
- Digital Electronics PLTW (8440)
- Digital Visualization (8459)
- Engineering Drawing and Design (8436)
- Technology Foundations (8403)

Transportation, Distribution and Logistics

Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related support services dealing with infrastructure, logistics, equipment, and facilities

Academic and Career Pathway Option

Facility and Mobile Equipment Maintenance

Automotive Technology I (8506)

Classes Held at The College & Career Academy at Pruden
Grades: 10-11
Credits: Three (3); *1st year of a two-year program*
Industry Credential Available: Automotive Service Excellence Certification Examination

Automotive Technology I students will explore, handle, and perform basic functions in engine repair, automatic transmission and transaxle, manual drive train and axles, suspension and steering systems, and brakes. Students who successfully complete the Automotive Technology program may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination. The ASE Student Certification is the first step in building a career as a service professional in the automotive industry.

Concentration/Specialization Sequences

Automotive Technology I (8506) and the following 36-week course, equivalent to a total of two 36-week courses:

- Automotive Technology II (8507)

Automotive Technology II (8507)

Classes Held at The College & Career Academy at Pruden
Grades: 11-12
Prerequisite: Automotive Technology (8506)
Credits: Three (3); 2nd *year of a two-year program*

Industry Credential Available: Automotive Service Excellence Certification Examination

Automotive Technology II students will build upon their basic knowledge of automotive technology, exploring more advanced tasks in engine repair, automatic transmission and transaxle, manual drive train and axles, suspension and steering systems, and brakes. They also learn about electrical, electronic, and HVAC systems in automobiles. Upon successful completion of the course, students may be eligible to take the Automotive Service Excellence (ASE) Student Certification examination.

Concentration/Specialization Sequences

Automotive Technology II (8507) and the following 36-week course, equivalent to a total of two 36-week courses:

- Automotive Technology I (8506)

Auto Body Technology I (8676)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Credits: One and a half (1.5); 1*st semester of a one-year program*

In the global automobile collision repair industry, there is a growing demand for qualified auto body technicians. Auto Body Technology I students are taught damage analysis, estimating, customer service, non-structural analysis, damage repair, and welding. Students work with a variety of materials, using metal finishing and body filling techniques to prepare surfaces and repair panels. Students who successfully complete this program sequence may be eligible to take the Automotive Service Excellence (ASE) Student Certification examinations.

Concentration/Specialization Sequences

Auto Body Technology I (8676) and the following 36-week course, equivalent to a total of two 36-week courses:

- Auto Body Technology II (8677)

Auto Body Technology II (8677)

Classes Held at The College & Career Academy at Pruden
Grades: 10-12
Prerequisite: Auto Body Technology (8676)
Credits: One and a half (1.5); 2nd *semester of a one-year program*

Industry Credential Available: ASE Collision Repair and Refinish and Non-Structural Analysis & Damage

Auto Body Technology II students will explore painting and refinishing techniques that include surface preparation, spray gun and related equipment operation, paint mixing, matching, and applying, and final vehicle detailing. Students who successfully complete this program sequence may be eligible to take the Automotive Service Excellence (ASE) Student Certification examinations.

Concentration/Specialization Sequences

Auto Body Technology II (8677) and the following 36-week course, equivalent to a total of two 36-week courses:

- Auto Body Technology I (8676)

ADVANCED STUDIES COURSES

Students who demonstrate advanced academic skill or wish to challenge their academic ability may choose to enroll in advanced level courses. Advanced level courses are offered at the secondary level for all students who meet the course prerequisites. The courses listed below are offered at each school; however, course enrollment may affect course offerings from year to year. Many courses include a required summer assignment. AP and IB courses have nationally credentialed exams given in the spring. All students and parents must determine whether the student will take these exams by November. Payment of the examination(s) may be required and is the responsibility of the student and his/her parents. Students enrolled in an AP and IB courses may not be required by the division to take the state end of course SOL assessment for that corresponding course if the student took the AP or IB equivalent assessment. Please see each academic content area or specialty program description for a full course description.

Honors Courses
Honors English 9
Honors English 10
Honors English 11
Honors English 12
Honors Spanish IV
Honors French IV
Honors Latin IV
Honors Spanish V
Honors French V
Honors Latin V
Honors Sign Language
Honors Biology
Honors Chemistry
Anatomy and Physiology
Physics
Honors Algebra II and Trigonometry
Mathematical Analysis
Honors Geometry
Honors World History & Geography to 1500 AD
Honors World History & Geography from 1500 AD to the Present
Honors Virginia and United States Government
Honors Virginia and United States History

Advanced Placement Courses
(All courses may be offered pending enrollment. Students may request in writing to attend AP courses at another Suffolk High School if courses not offered due to low enrollment. If approved, transportation will not provided.)

AP Language and Composition
AP Literature and Composition
AP Calculus AB
AP Calculus BC
AP Computer Science Principles
AP Statistics
AP World History: Modern
AP European History
AP Chemistry
AP Biology
AP Psychology
AP United States History
AP United States Government and Politics
AP Physics
AP Spanish Language
Note The AP courses listed above are the only courses for which Suffolk Public Schools will provide test administration in May. Students who wish to challenge other AP Exams must make other arrangements for testing.

Pre-Diploma (Pre-Dip) Courses
Pre-Dip English
Pre-Dip /AP Literature and Composition
Pre-Dip French II
Pre-Dip Latin II
Pre-Dip Spanish II
Pre-Dip French III
Pre-Dip Spanish III
Pre-Dip Geometry
Pre-Dip Algebra II/Trigonometry
Pre-Dip Biology
Pre-Dip Chemistry
Pre-Dip World History to the 20th Century
Pre-Dip /AP U.S. Government and Politics

IB Courses
IB English HL 11
IB Mathematics 11 or Math Studies 11
IB Biology 11, IB Chemistry 11, or IB Physics 11
IB Environmental Systems and Societies 11
IB History 11 HL
IB Foreign Language IV (French, Spanish, Latin)
IB Theory of Knowledge 11
IB Elective (*IB Visual Arts 11, IB Psychology 11, IB Music 12, or an additional science)*
IB English 12 HL
IB Mathematics 12 or Math Studies 12 SL
IB Biology 12, IB Chemistry 12, or IB Physics 12
IB History HL 12,
IB Foreign Language V (French, Spanish, Latin)
IB Theory of Knowledge I2
IB Elective (*IB Visual Arts 12, IB Psychology 12, IB Music 12, or second year of additional science)*

Governor's School for the Arts
(Audition Required)
Theatre and Film
Performing Arts (Musical Theatre)
Dance
Instrumental Music
Vocal Music
Visual Arts

Dual-Enrollment Courses
(All courses pending enrollment. Students may request in writing to attend DC courses at another Suffolk High School.
DC English Composition
DC Pre-Calculus
DC Calculus
DC Micro Computers
DC History & Appreciation of Art
DC Chemistry
DC Biology
DC Government
DC History
DC Introduction to Psychology
DC Virginia Teachers for Tomorrow I
DC Virginia Teachers for Tomorrow II

Virtual Virginia Courses

Students have the option of enrolling in virtual courses through the Virginia Department of Education Virtual Virginia program. Students enrolled in these courses will be assigned a block for completing the course virtually. The courses listed below are available only through Virtual Virginia and are approved for credit in Suffolk Public Schools. Course descriptions for Virtual Virginia may be found on the Virtual Virginia Website.

Course Number	Course Name	Grade Level(s)	Credit
01069G1011	World Mythology	Grades 9-12	1 Credit
2212	AP Human Geography	Grades 10-12	1 Credit (+1)
2450	AP Government and Politics Comparative	Grade 12	1 Credit (+1)
04205E1011	AP Economics	Grades 11-12	1 Credit (+1)
2900	Psychology	Grades 10-12	1 Credit
3185	AP Computer Science A	Grades 11-12	1 Credit (+1)
4260	Earth Science II- Astronomy	Grades 9-12	1 Credit
4420	Chemistry II-Advanced Chemistry	Grades 10-12	1 Credit
4571	AP Physics 2	Grades 11-12	1 Credit (+1)
5010	Arabic I	Grades 8-12	1 Credit
5020	Arabic II	Grades 9-12	1 Credit
5530	Arabic III	Grades 9-12	1 Credit
5580	AP Spanish Literature	Grades 11-12	1 Credit (+1)
5810	Chinese I	Grades 8-12	1 Credit
5820	Chinese II	Grades 9-12	1 Credit
5830	Chinese III	Grades 9-12	1 Credit
5840	Chinese IV	Grades 9-12	1 Credit
5860	AP Chinese	Grades 11-12	1 Credit (+1)
9151	AP Art History	Grades 11-12	1 Credit (+1)
5990	American Sign Language I	Grades 8-12	1 Credit

SPECIAL PROGRAMS

International Baccalaureate (IB) Diploma Programme

KING'S FORK HIGH SCHOOL, AN IB WORLD SCHOOL

The International Baccalaureate Diploma Programme is an advanced, comprehensive program of study, offering an integrated approach to learning across the disciplines. Many colleges and universities view the IB Diploma Programme as the most compelling course of study a student can pursue. Such universities have offered extensive credit and/or preferential admissions consideration to IB diploma candidates. Recognized worldwide, the IB Diploma Programme's in-depth approach to academic disciplines fosters skills that will remain with students for their lifetime.

The IB offers six subject groups. Diploma candidates must select one subject from each groups one through five. Candidates' may select one subject from Group 6, or they may select an additional subject from groups three or four. At least three (and not more than four) subjects are taken at the higher level (HL), the others at the standard level (SL). Students are able to explore some subjects in depth and others more broadly. Active citizenship and global perspectives are encouraged in each area of the curriculum. Upon completion of the course work, students take an external IB assessment in each subject. In addition to courses and exams, students must also complete the Extended Essay, Theory of Knowledge (TOK), and Community Activity Service (CAS) requirements in order to earn the IB Diploma. Students in the program are also eligible to receive the Virginia Advanced Studies Diploma.

The six subject areas of the International Baccalaureate Program are:

Group 1 – Language A, First Language
Students ideally develop strong written and oral skills, respect for the literary heritage of their first language, and an international perspective. English: Literature is the course offering in this group.

Group 2 – Language B, Foreign Language
All diploma students are required to study a second language. Second language courses allow students to use the language in a range of contexts and for many purposes, while focusing on written and spoken communication. Courses in this group include French B, Spanish B, and Spanish ab initio.

Group 3 – Individuals and Societies
Students develop a critical appreciation for human experience and behavior, the varieties of physical, economic and social environments that people inhabit, and the history of social and cultural institutions. Courses in this group include History and Psychology.

Group 4 – Experimental Sciences
Students develop practical laboratory skills and work collaboratively through interdisciplinary group projects. Students develop an awareness of moral and ethical issues, and a sense of social responsibility is fostered by examining local and global issues. Courses in this group include Biology, Chemistry, and Physics.

Group 5 – Mathematics
All candidates are required to complete a mathematics course. Two options are available to serve the different abilities and levels of student interests. Each course aims to deepen a student's understanding of mathematics as a discipline and to promote confidence and facility in the use of mathematic language. Courses in this group include Mathematics and Math Studies.

Group 6 – The Arts and other Electives
Students will have the opportunity to experience creativity in the context of disciplined, practical research into the relevant genres. There will also be a strong emphasis placed on the different cultural contexts. Students may select Visual Arts or Music or an additional course from group 3 or 4.

Admission to the program is through application only. Information can be found on the IB Website.

IB EXAM PROCEDURES
IB examinations are taken by students in May of their senior year and are evaluated externally. The International Board of Examiners prepares oral and written examinations. The Board of Examiners has the final authority on the setting of examinations and the assessment of all candidates for the awarding of IB diplomas and certificates. Students must take

examinations in most IB subjects. These exams are assessed on a scale of 1-7. A minimum score of 24, plus satisfactory completion of the Theory of Knowledge course, the CAS activities, and the Extended Essay are required for the awarding of the IB Diploma. Three of the exams are taken at the standard level **(SL)** and three at the higher level **(HL).** Generally speaking, the HL exams test more knowledge and are more difficult than the SL exams. Students are advised to take their HL exams in areas of their greatest strengths.

EXTENDED ESSAY
The Extended Essay (4000 words) is defined as an in-depth study of a limited topic chosen from one of the six subject areas of the IB Diploma curriculum. It is designed to provide the candidate the opportunity to engage in independent research. Students are expected to begin work on the project during the junior year and the summer between the junior and senior years under the supervision of an advisor.

THEORY OF KNOWLEDGE (TOK)
TOK is taken over two years, the junior year and senior year. Students examine the philosophical framework of each academic discipline while learning to reflect critically and logically on ideas originating in the other courses. While there is no IB exam in this seminar course, students are required to submit an essay for external scoring by the IB Organization and to make an oral presentation.

CREATIVITY, ACTIVITY, SERVICE (CAS)
CAS is comprised of various activities that may include designing and implementing service projects, participating in individual and team sports, and assisting with community and social service activities. While the Creativity and Activity components of CAS can largely be met through extracurricular programs, the Service component is the responsibility of the student. IB Diploma Program students must complete and submit a portfolio of their CAS activities. Each school appoints a CAS Coordinator who is responsible for providing a varied choice of activities for students.

Pre-Diploma (Pre-Dip) and IB courses are listed as follows:

Grade 9
Pre-Dip English 9
Pre-Dip Geometry or Algebra II/Trigonometry
Pre-Dip Biology
Pre-Dip World History to the 20th Century
Pre-Dip Foreign Language (French II or Spanish II)
Health/PE 9
One elective

Grade 10
Pre-Dip English 10
Pre-Dip Algebra II/Trigonometry
Pre-Dip Chemistry
Pre-Dip Advanced Placement U. S. Government and Politics
Pre-Dip Foreign Language (French III or Spanish III)
Health/PE 10
One elective

Grade 11
IB English Literature HL 11
IB Math: Analysis and Approaches 11 or IB Math: Applications and Interpretation 11
IB Biology 11, IB Chemistry 11, or IB Physics 11
IB History 11 HL
IB French IV or Spanish IV
IB Theory of Knowledge 11
IB Elective (*IB Visual Arts 11, IB Psychology 11, IB Music 11, or an additional science)*

Grade 12
IB English Literature 12 HL
IB Math: Analysis and Approaches 12 or IB Math: Applications and Interpretation 12
IB Biology 12, IB Chemistry 12, or IB Physics 12
IB History HL 12,
IB French V or Spanish V
IB Theory of Knowledge I2
IB Elective (*IB Visual Arts 12, IB Psychology 12, IB Music 12, or second year of additional science)*

Group 1

LANGUAGE A, FIRST LANGUAGE - ENGLISH

PRE-DIP ENGLISH (IB1130)
Grade 9
Prerequisite(s): B or better in English 8
Credit: One (weighted +0.5)
In this course, students prepare to meet the requirements of IB 11 and 12 English. As they study classics of world literature, they acquire experiential knowledge of literary genres and terms. Both written and oral literary analyses, including a fully documented research report, are regularly required. This course focuses on improving oral skills in preparation for the oral commentaries. There is also an emphasis on formal, expository writing. The volume, difficulty, and pacing of assignments are challenging.
Summer Assignment: REQUIRED

PRE-DIP ENGLISH (IB1140)
Grade 10
Prerequisite(s): Successful completion of Pre-Dip English 9
Credit: One (weighted +0.5)
Students in this class are challenged to think critically, to synthesize literature, and to write effectively. The course will emphasize British literature, but will include literary works from many countries. In addition, information concerning cultural, historical, philosophical, and psychological backgrounds are addressed. The genres will include epics, dramas, novels, and a major focus on poetry. ***Summer Assignment: REQUIRED***

IB ENGLISH LITERATURE, HIGHER LEVEL (IB1150)
Grade 11
Pre-requisite: Successful completion of Pre-Dip English 10
Credit: One (weighted +1)
This is the first year of a two-year intensive course in which students develop knowledge of the literature and culture of both the United States and other countries. Reading from a variety of genres and texts, students develop and practice detailed and critical analysis in oral and written forms. Numerous written and oral assignments are graded both internally and externally by the International Baccalaureate Organization. This is the first in a two-year sequence of higher level English culminating with a series of external examinations that may provide college-level credit at many colleges and universities. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***
End of Course Testing REQUIRED

IB ENGLISH LITERATURE, HIGHER LEVEL (IB1160)
Grade 12
Prerequisite(s): Successful completion of IB English 11, Higher Level
Credit: One (weighted +1)

This is the second part of a two-year intensive course in which students develop knowledge of the literature and culture of both the United States and other countries. Reading from a variety of genres and texts, students develop and practice detailed and critical analysis in oral and written forms. Numerous written and oral assignments are graded both internally and externally by the International Baccalaureate Organization. This is the second in a two-year sequence of higher level English culminating with a series of external examinations that may provide college-level credits at many colleges and universities. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

Group 2

LANGUAGE B, FOREIGN LANGUAGE

PRE-DIP FRENCH II (IB5122)
Grade 9
Prerequisite(s): "B" or better in French I
Credit: One
In Pre-Dip French II students develop skills in understanding and speaking the language. Areas of emphasis in the course are reading for comprehension, writing for expression and reinforcement, and gaining insights into the culture of the countries where the language is spoken. ***Summer Assignment: REQUIRED***

PRE-DIP FRENCH III (IB5132)
Grade 10
Prerequisite(s): Successful completion of Pre-Dip French II
Credit: One
In Pre-Dip French III students continue to develop competency in the skills of listening, speaking, reading, and writing through meaningful communication and extensive practice. Increasingly, the language is used as the sole medium of communication in the classroom. The culture of the countries where the language is spoken continues to be stressed. ***Summer Assignment: REQUIRED***

IB FRENCH IV (IB5142)
Grade 11
Pre-requisite: Successful completion of Pre-Dip French 3
Credit: One (weighted +1)
IB French 4 is the first part of a two-year course in which students continue to develop proficiency in listening, speaking, reading, and writing the target language. The course prepares students to use the language appropriately in a range of situations and contexts and for a variety of purposes. To fulfill IB internal-assessment requirements, students create and maintain a portfolio of written and recorded samples. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB FRENCH V (IB5152)
Grade 12
Prerequisite(s): Successful Completion of IB French IV
Credit: One (weighted +1)
IB French V is the second part of a two-year course in which students continue to develop proficiency in listening, speaking, reading, and writing the target language. The course prepares students to use the language appropriately in a range of situations and contexts and for a variety of purposes. To fulfill IB internal-assessment requirements, students create and maintain a portfolio of written and recorded samples. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

PRE-DIP SPANISH II (IB5522)
Grade 9
Prerequisite(s): "B" or better in Spanish I
Credit: One
In Pre-Dip Spanish II students develop skills in understanding and speaking the language. Areas of emphasis in the course are reading for comprehension, writing for expression and reinforcement, and gaining insights into the culture of the countries where the language is spoken. ***Summer Assignment: REQUIRED***

PRE-DIP SPANISH III (IB5532)
Grade 10

Prerequisite(s): Successful completion of Pre-Dip Spanish II
Credit: One
In Pre-Dip Spanish III, students continue to develop competency in the skills of listening, speaking, reading, and writing through meaningful communication and extensive practice. Increasingly, the language is used as the sole medium of communication in the classroom. The culture of the countries where the language is spoken continues to be stressed. ***Summer Assignment: REQUIRED***

IB SPANISH IV (IB5542)
Grade 11
Pre-requisite: Successful Completion of Pre-Dip Spanish III
Credit: One (weighted +1)
IB Spanish IV is the first part of a two-year course in which students continue to develop proficiency in listening, speaking, reading, and writing the target language. The course prepares students to use the language appropriately in a range of situations and contexts and for a variety of purposes. To fulfill IB internal-assessment requirements, students create and maintain a portfolio of written and recorded samples. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB SPANISH V, STANDARD LEVEL (IB5552)
Grade 12
Prerequisite(s): Successful Completion of IB Spanish IV
Credit: One (weighted +1)
IB Spanish V is the second part of a two-year course in which students continue to develop proficiency in listening, speaking, reading, and writing the target language. The course prepares students to use the language appropriately in a range of situations and contexts and for a variety of purposes. To fulfill IB internal-assessment requirements, students create and maintain a portfolio of written and recorded samples. The course requires college-level performance and work habits.
Summer Assignment: REQUIRED

Group 3
INDIVIDUALS AND SOCIETIES

PRE-DIP WORLD HISTORY to the 20th CENTURY (IB2351)
Grade 9
Prerequisite(s): Successful completion of Geography 8
Credit: One (weighted + .5)
This course offers a historical and cultural study of world history that enables students to explore the development of people, places, and patterns of life from ancient times until the mid-20th century. This course is a chronologically organized study of world history and geography through the modern era. Topics will consist of the ancient world through the middle ages, as well as the geography and history of Europe, Africa, Asia and Latin America. ***Summer Assignment: REQUIRED***
End of Course Testing REQUIRED

PRE-DIP /ADVANCED PLACEMENT U.S. GOVERNMENT AND POLITICS (IB2445)
Grade 10
Prerequisite(s): Successful completion of Pre-Dip World History
Credit : One (weighted + 1)
Students will complete studies in high school equivalent to a one-semester college introductory course in United States Government and Politics. Students may take the AP exam. ***Summer Assignment: REQUIRED***
AP Exam: Optional

IB HISTORY 11, HIGHER LEVEL (IB2360)
Grade 11
Pre-requisite: Successful Completion of Pre-Dip /AP US Government and Politics
Credit: One (weighted +1)
IB History 11, Higher Level, is the first part of a two-year course. IB History is an in-depth study of twentieth century world history with emphasis on the history of the Americas from 1840 to 1990. This course is designed to develop historical research skills, analytical thinking skills, and skills for interpreting political, military, social, and economic events of the twentieth century. Students engage in extensive reading, independent research, and analysis of primary and secondary source documents.

Students take the Virginia end-of-course Standards of Learning test in United States History. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***
End of Course Testing: REQUIRED

IB HISTORY 12, HIGHER LEVEL (IB2361)
Grade 12
Prerequisite(s): Successful Completion of IB History 11
Credit: One (weighted +1)
IB History 12, Higher Level is the second part of a two-year course. IB History of the Americas is an in-depth study of twentieth century world history with emphasis on the history of the Americas from 1840 to 1990. This course is designed to develop historical research skills, analytical thinking skills, and skills for interpreting political, military, social, and economic events of the twentieth century. Students engage in extensive reading, independent research, and analysis of primary and secondary source documents. The course requires college-level performances and work habits. ***Summer Assignment: REQUIRED***
IB Assessments: REQUIRED

IB PSYCHOLOGY 11 (IB2903)
Grade 11
Pre-requisite: Cumulative GPA of 3.0
Credit: One (weighted +1)
IB Psychology 11 is the first part of a rigorous, two-year course of study in psychology. The course provides students with a broad understanding of psychology and of its different theoretical approaches. The course introduces students to diverse methods of psychological inquiry and promotes ethical practices and responsibilities in psychological investigations. To meet this aim, students study research design, methods, statistics, and ethical issues in psychological research and application and undertake one or more research studies. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB PSYCHOLOGY 12 (IB2904)
Grade 11
Prerequisite(s): Successful Completion of IB Psychology 11
Credit: One (weighted +1)
IB Psychology 12 is the second part of a rigorous two-year course of study in psychology. The course provides students with a broad understanding of psychology and of its different theoretical approaches. The course introduces students to diverse methods of psychological inquiry and promotes ethical practices and responsibilities in psychological investigations. To meet this aim, students study research design, methods, statistics, and ethical issues in psychological research and application and undertake one or more research studies. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***
IB Assessments: REQUIRED

Group 4
EXPERIMENTAL SCIENCES

PRE-DIP BIOLOGY (IB4310)
Grade 9
Prerequisite(s): Successful completion of Science 8
Credit: One (weighted + .5)
Students will explore the characteristics, structure, function and interaction of living things. The course emphasizes the role of the scientist as well as the social, ethical and economic implications of biology and technology in a global society. Students develop experimental design skills through inquiry-based laboratory investigations and compose formal laboratory reports. Topics are studied in the context of local, national and international perspectives. Specific course topics include basic biochemistry, cell structure and function, genetics and biotechnology, theories of evolution, ecology and the environment, the six kingdoms of living things including viruses, animal and plant anatomy, and physiology.
Summer Assignment: REQUIRED
End of Course Testing REQUIRED

IB BIOLOGY 11 (IB4380)
Grade 11
Pre-requisite: Successful completion of Pre-Dip Biology

Credit: One (weighted +1)
This is the first part of a two-year course that provides an in-depth study of biology. The course promotes understanding of the important relationships, processes, mechanisms, extensions, and applications of biological concepts. Through scientific inquiry, students learn that the study of biology is a process. They also apply the knowledge of biology to explore and analyze environmental and social concerns on a global level. Students participate in structured labs, write research papers, design original research projects, and participate in a required IB interdisciplinary group project. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB BIOLOGY 12 (IB4390)
Grade 12
Prerequisite(s): Successful Completion of IB Biology 11
Credit: One (weighted +1)
This is the second part of a two-year course that provides an in-depth study of biology. The course promotes understanding of the important relationships, processes, mechanisms, extensions, and applications of biological concepts. Through scientific inquiry, students learn that the study of biology is a process. They also apply the knowledge of biology to explore and analyze environmental and social concerns on a global level. Students participate in structured labs, write research papers, design original research projects, and participate in a required IB interdisciplinary group project. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***
IB Assessments: REQUIRED

PRE-DIP CHEMISTRY (IB4410)
Grade 10
Prerequisite(s): Successful completion of Pre-Dip Biology
Credit: One (weighted + .5)
Students will develop a foundation of chemical concepts and principles for understanding the structure and properties of matter. Emphasis is placed on utilizing investigative skills to solve problems and to understand the interrelationships among the basic concepts of modern chemistry. Topics are studied in the context of local, national and international perspectives. Specific topics include chemical reactions, bonding, acids, gases and salts, atomic structure, kinetic theory and gasses, electron arrangement, oxidation and reduction, and organic chemistry. Students develop an understanding of the moral, ethical, social, economic, and environmental implications of using science and technology in a global context. Students have experience working with open-ended labs, data-based questions, and IB assessment formats. ***Summer Assignment: REQUIRED.***
End of Course Testing: REQUIRED

IB CHEMISTRY 11 (IB4480)
Grade 11
Pre-requisite: Successful completion of Pre-Dip Chemistry
Credit: One (weighted +1)
This is the first part of a two-year course that provides an in-depth study of chemistry. IB Chemistry 11 develops the ability to analyze critically scientific literature and to develop manipulative and experimental skills necessary to perform college-level scientific investigations. Students participate in structured labs, write research papers, design original research projects, and participate in a required IB interdisciplinary group project. Student-centered cooperative learning as well as teacher-directed instruction provides the student a college-level chemistry experience. The course increases student awareness of global issues pertaining to chemistry. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB CHEMISTRY 12 (IB4490)
Grade 12
Prerequisite(s): Successful Completion of IB Chemistry 11
Credit: One (weighted +1)
This is the second part of a two-year course that provides an in-depth study of chemistry. IB Chemistry 12 develops the ability to analyze critically scientific literature and to develop manipulative and experimental skills necessary to perform college-level scientific investigations. Students participate in structured labs, write research papers, design original research projects, and participate in a required IB interdisciplinary group project. Student-centered cooperative learning as well as teacher-directed instruction provides the student a college-level chemistry experience. The course increases student awareness of global issues pertaining to chemistry. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***
IB Assessments: REQUIRED

IB PHYSICS 11 (IB4580)
Grade 11

Pre-requisite: overall GPA of 3.0
Credit: One (weighted +1)
This is the first part of a two-year course that provides an in-depth study of topics in physical measurement, mechanics, thermal physics, oscillations and waves, electric currents, fields and forces, atomic and nuclear physics, and energy, power and climate change. Students participate in structured labs, write research papers, design original research projects, and participate in a required IB interdisciplinary group project. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB PHYSICS 12 (IB4590)
Grade 12
Prerequisite(s): Successful Completion of IB Physics 11
Credit: One (weighted +1)
This is the second part of a two-year course that provides an in-depth study topics in physical measurement, mechanics, thermal physics, oscillations and waves, electric currents, fields and forces, atomic and nuclear physics, and energy, power and climate change. Sustainability is the integrative theme of the course. Students participate in structured labs, write research papers, design original research projects, and participate in a required IB interdisciplinary group project. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***
IB Assessments: REQUIRED

Group 5
MATHEMATICS

PRE-DIP GEOMETRY (IB3143)
Grade 9
Prerequisite(s): "B" or better in Algebra I
Credit: One (weighted + .5)
Students learn the principles of geometry and are rigorously required to demonstrate logical, step-by-step problem-solving techniques. Topics are studied in the context of local, national and international perspectives. Additional topics include introduction to truth tables, negation, quantifiers, the laws of sines and cosines, three-dimensional coordinates, and vectors. Emphasis is also placed on symbolic logic and geometric probability. ***Summer Assignment: REQUIRED***
End of Course Testing REQUIRED

PRE-DIP ALGEBRA II/TRIGONOMETRY (IB3137)
Grade 10
Prerequisite(s): Successful completion of Pre-Dip Geometry
Credit: One (weighted + .5)
This course combines all of the traditional Algebra 2 and Trigonometry objectives with additional topics including probability and statistics. Emphasis is placed on matrices, functions, graphing, conic sections, trigonometry, and real-world application of mathematics principles. Topics are studied in the context of local, national and international perspectives. Students demonstrate proficiency in solving problems using algebraic and graphic methods and a graphing calculator. ***Summer Assignment: REQUIRED***
End of Course Testing REQUIRED

IB MATH: APPLICATIONS & INTERPRETATION 11 (02139SL22 & 02139HL22)
Grade 11
Pre-requisite: Successful Completion of Pre-Dip Algebra 2/Trigonometry
Credit: One (weighted +1)
The first year of a two-year course covering fundamentals in algebra and functions expanding on topics found in Algebra II. New topics include matrices and their applications for solving systems of equations; piecewise functions; an introduction to formal proofs; and a more formal investigation of geometry using Voronoi diagrams, adjacency matrices, and tree and cycle diagrams. Statistical theory will include basic measures of spread and central tendency as well as a formal introduction to hypothesis testing through the normal, Chi-squared, binomial, and Poisson distributions.

IB MATH: ANALYSIS & APPROACHES 11 (02140SL22 & 02140HL22)
Grade 11
Pre-requisite: Successful Completion of Pre-Dip Algebra 2/Trigonometry
Credit: One (weighted +1)

The first year of a two year course covering fundamentals in algebra and functions expanding on topics found in Algebra II. New topics will include partial fractions, formal proofs, and trigonometry using reciprocal functions and more involved trigonometric identities. Probability theory will include a formal presentation of expectation through a variety of distributions and Bayes theorem, as well as an introduction to hypothesis testing using the normal distribution.

IB MATH: APPLICATIONS & INTERPRETATION 12 (02139SL22 & 02139HL22)
Grade 12
Prerequisite(s): Successful Completion of IB Math: Applications & Interpretation 11
Credit: One (weighted +1)
The second year of a two-year course covering fundamentals in algebra and functions expanding on topics found in Algebra II. New topics include matrices and their applications for solving systems of equations; piecewise functions; an introduction to formal proofs; and a more formal investigation of geometry using Voronoi diagrams, adjacency matrices, and tree and cycle diagrams. Statistical theory will include basic measures of spread and central tendency as well as a formal introduction to hypothesis testing through the normal, Chi-squared, binomial, and Poisson distributions.
. ***Summer Assignment: REQUIRED***
IB Assessments: REQUIRED

IB MATH: ANALYSIS & APPROACHES 12 (02140SL22 & 02140HL22)
Grade 12
Prerequisite(s): Successful Completion of IB Math: Analysis & Approaches 11
Credit: One (weighted +1)
The second year of a two year course covering fundamentals in algebra and functions expanding on topics found in Algebra II. New topics will include partial fractions, formal proofs, and trigonometry using reciprocal functions and more involved trigonometric identities. Probability theory will include a formal presentation of expectation through a variety of distributions and Bayes theorem, as well as an introduction to hypothesis testing using the normal distribution.
Summer Assignment: REQUIRED
IB Assessments: REQUIRED

Group 6

THE ARTS AND OTHER ELECTIVES
Students may select Visual Arts or Music or Additional Courses from Group 3 or Group 4

IB VISUAL ARTS 11 (IB 9194)
Grade 11
Pre-requisite: Overall GPA of 3.0
Credit: One (weighted +1)
IB Visual Arts 11 is the first part of a two-year course of study designed to stimulate and train the student's visual awareness, increase the student's perceptive and critical responses to the art of various cultures, and to enable the student to discover, develop, and enjoy different means of creative visual expression. The student is encouraged to develop an intensely personal view of the human condition and of nature through the study of visual arts and to develop an informed attitude towards art and design in all its forms, both in history and in the contemporary world. The student may pursue one of two options at the standard level depending on interest and on level of artistic ability. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB VISUAL ARTS 12IB9195
Grade 12
Prerequisite(s): Successful Completion of IB Visual Arts 11, Standard Level
Credit: One (weighted +1)
IB Visual Arts 12 is the second part of a two-year course of study designed to stimulate and train the student's visual awareness, increase the student's perceptive and critical responses to the art of various cultures, and to enable the student to discover, develop, and enjoy different means of creative visual expression. The student is encouraged to develop an intensely personal view of the human condition and of nature through the study of visual arts and to develop an informed attitude towards art and design in all its forms, both in history and in the contemporary world. The student may pursue one of two options at the standard level depending on interest and on level of artistic ability. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB Assessments: REQUIRED

IB MUSIC 11 (IB9294)
Grade 11
Pre-requisite: Overall GPA of 3.0
Credit: One (weighted +1)
IB Music is a two-year course which allows for exploration of the shared human perceptions and emotions that temper our lives. It demands that the educated musician and music lover be able to recognize and articulate musical elements realized in diverse examples of music making. Therefore, IB music students will develop their performance skills through solo music making; develop compositional skills through exploration and investigation of musical elements; use appropriate musical language and terminology to describe and reflect a critical understanding of music; develop perceptual skills in response to music; and demonstrate knowledge and understanding of music in relation to time and place. This is an IB elective course which requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB MUSIC 12 (IB9295)
Grade 12
Prerequisite(s): Successful Completion of IB Music 12
Credit: One (weighted +1)
IB Music 12 is a continuation of IB Music II. This course allows for exploration of the shared human perceptions and emotions that temper our lives. It demands that the educated musician and music lover be able to recognize and articulate musical elements realized in diverse examples of music making. Therefore, IB music students will develop their performance skills through solo music making; develop compositional skills through exploration and investigation of musical elements; use appropriate musical language and terminology to describe and reflect a critical understanding of music; develop perceptual skills in response to music; and demonstrate knowledge and understanding of music in relation to time and place. This is an IB elective course which requires college-level performance and work habits. ***Summer Assignment: REQUIRED***
IB Assessments: REQUIRED

IB THEORY OF KNOWLEDGE 11 (IB1197)
Grade 11
Pre-requisite: Overall GPA of 3.0
Credit: One (weighted +0.5)
Students who are candidates for the International Baccalaureate Diploma are required to complete Theory of Knowledge. Part 1 is taken in the spring of the junior year and part 2 in the fall of the senior year. Students learn to better understand themselves as "knowers" by exploring the various methods they use to "know" the truth of a given thought, feeling, or belief. This exploration also involves how various "ways of knowing" are applied to all of the areas of knowledge in the IB curriculum: mathematics, natural science, human science, history, art, and ethics. Through the study of eastern and western philosophies, logic and reason, intuition, and faith, students explore various belief systems, both personal and global, in an attempt to determine their "truth." To accomplish this, students read selected texts, write about their findings, and discuss, in great detail, their own thoughts on course topics. Students must complete an internal assessment in the form of a presentation and an external assessment in the form of a 1,200-1,600 word essay that addresses one of the prescribed titles. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***

IB THEORY OF KNOWLEDGE 12 (IB1198)
Grade 12
Prerequisite(s): IB Theory of Knowledge 11 (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +0.5)
Students who are candidates for the International Baccalaureate Diploma are required to complete Theory of Knowledge. Part II of this course is taken in the fall of the student's senior year. Students learn to better understand themselves as "knowers" by exploring the various methods they use to "know" the truth of a given thought, feeling, or belief. This exploration also involves how various "ways of knowing" are applied to all of the areas of knowledge in the IB curriculum: mathematics, natural science, human science, history, art, and ethics. Through the study of eastern and western philosophies, logic and reason, intuition, and faith, students explore various belief systems, both personal and global, in an attempt to determine their "truth." To accomplish this, students read selected texts, write about their findings, and discuss, in great detail, their own thoughts on course topics. Students must complete an internal assessment in the form of a presentation and an external assessment in the form of a 1,200-1,600 word essay that addresses one of the prescribed titles. The course requires college-level performance and work habits. ***Summer Assignment: REQUIRED***
IB Assessments: REQUIRED

Project Lead the Way (PLTW)

Engineering

This program empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. Courses engage students in compelling, real-world challenges that help them become better collaborators and thinkers. From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality.

8439 Introduction to Engineering Design
Grade 9
Prerequisite(s): None
Credit: One (weighted +1)
Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work.

8441 Principles of Engineering
Grade 10
Prerequisite(s): Introduction to Engineering Design
Credit: One (weighted +1)
Students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation through problems that are engaging and challenging. Skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation are enhanced.

8440 Digital Electronics
Grade 11
Prerequisite(s): Principles of Engineering
Credit: One (weighted +1)
From smartphones to appliances, digital circuits are all around us. This course provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such a combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

8430 Civil Engineering and Architecture
Grade 11
Prerequisite(s): Principles of Engineering
Credit: One (weighted +1)
This course teaches the important aspects of building and site design and development. Students apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3-D architectural design software.

8443 Engineering Design & Development
Grade 12
Prerequisite(s): Digital Engineering and Civil Engineering and Architecture
Credit: One (weighted +1)
The knowledge and skills students acquire throughout the PLTW engineering courses listed above come together in this course as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing Engineering Design and Development ready to take on any career or post-secondary program.

PLTW Engineering Approved Courses

English	Social Studies	Science	Mathematics	PLTW
*English *English 9 *Honors English 9 *English 10 *Honors English 10 *English 11 *Honors English 11 *AP Language and Composition *English 12 *Honors English 12 *AP Literature and Composition *DE English	*World History and Geography I *Honors World History and Geography I *World History and Geography II *Honors World History and Geography II *AP European History *U.S. and Virginia History *Honors U.S. and Virginia History *AP U.S. History *DE U.S. History *U.S. Government and Politics *Honors U.S. Government and Politics *AP U.S. Government *DE U.S. Government and Politics	*Honors Earth Science *Honors Biology *Honors Chemistry *Physics *AP Biology *AP Chemistry *AP Physics *AP Environmental Science *DE Biology *DE Chemistry	*Honors Geometry *Honors Algebra II/Trig *Math Analysis *DE Pre-Calculus *AP Calculus AB *AP Calculus BC *AP Statistics *DE Calculus * AP Computer Science Principles	*Introduction to Engineering Design *Principles of Engineering *Digital Electronics *Civil Engineering and Architecture *Engineering Design & Development

Project Lead the Way (PLTW)

Biomedical Science

This program empowers students to explore and find solutions to some of today's most pressing medical challenges. Through scaffolded activities that connect learning to life, students step into the roles of biomedical science professionals and investigate topics including human medicine, physiology, genetics, microbiology, and public health. Students work together in teams to find unique solutions, and in the process, learn in-demand, transferable skills to include critical thinking and communication.

8379 Principles of the Biomedical Sciences
Grade 9
Prerequisite(s): None
Credit: One (weighted +1)
In this introductory course, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

8380 Human Body Systems
Grade 10
Prerequisite(s): Principles of the Biomedical Sciences
Credit: One (weighted +1)
Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

8381 Medical Interventions
Grade 11
Prerequisite(s): Human Body Systems
Credit: One (weighted +1)
Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

8382 Biomedical Innovation
Grade 12
Prerequisite(s): Medical Interventions
Credit: One (weighted +1)
In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent project with a mentor or advisor from a university, medical facility, or research institution.

PLTW Biomedical Sciences Approved Courses

English	Social Studies	Science	Mathematics	PLTW
*Honors English 9 *Honors English 10 *Honors English 11 *AP Language and Composition *Honors English 12 *AP Literature and Composition *DE English	*World History and Geography I *Honors World History and Geography I *World History and Geography II *Honors World History and Geography II *U.S. and Virginia History *Honors U.S. and Virginia History *AP U.S. History *DE U.S. History *U.S. Government and Politics *Honors U.S. Government and Politics *AP U.S. Government *DE U.S. Government and Politics	*Honors Biology *Honors Chemistry *Physics *AP Biology *AP Chemistry *AP Physics *AP Environmental Science *DE Biology ***Non-Earth Science students must take one of the following combinations:*** • ***Physics w/ Anatomy & Physiology*** • ***Physics w/ AP Psychology***	*Geometry *Honors Geometry *Honors Algebra II/Trig *Math Analysis *DE Pre-Calculus *AP Calculus AB *AP Calculus BC *Discrete Mathematics *AP Statistics *DE Calculus ***Must meet Pre-Calculus level and select additional upper level courses such as:*** • ***AP Computer Science Principles***	*Principles of the Biomedical Sciences *Human Body Systems *Medical Interventions *Biomedical Innovations

Governor's School for the Arts

Governor's School for the Arts courses fulfill the Fine Arts requirement for graduation

The Governor's School for the Arts (GSA) is a regional secondary fine arts school sponsored by the Virginia Department of Education and the public school divisions of Chesapeake, Franklin, Isle of Wight, Norfolk, Portsmouth, Southampton, Suffolk and Virginia Beach. It is one of the specialized Virginia public schools designated as "Governor's Schools" with the mission to provide intensified educational opportunities for gifted and talented students.

The Governor's School for the Arts provides an intensive comprehensive fine arts program of studies for 9th through 12th grade students who are planning or considering careers in the arts. The programs are designed for students who have innate artistic talent and potential for growth, along with a high degree of commitment to developing their talents.

GSA provides pre-professional, individualized and focused instructional programs in dance, instrumental and vocal music, musical theatre, theatre and film, and visual arts for students with a high degree of innate artistic talent and potential for growth. Students are committed to developing their talents and are considering or planning careers in the arts.

Students take academic classes at their regular high schools in the morning and attend GSA in the afternoon for three hours daily during the regular academic year. Transportation to and from GSA is provided by the student's school division. Classes may be individual lessons, small or large groups or rehearsals. The average class size is 12. Students may earn three credits for each year they attend GSA. There is no tuition cost to the students.

Rising ninth through eleventh grade students may apply for acceptance to the Governor's School for the Arts. Students are selected based on individual ability, interest, and potential artistic growth. Interviews, auditions, portfolio reviews, and application materials are used in the selection process.

9603 THEATRE & FILM
Grades 9-12
Pre-requisite(s): Audition
Credits: Three (+.5 weighted per credit)

Theatre and film students gain a strong foundation in all aspects of the art of theatre and of film. Emphasis is placed on the rich cultural history of the art forms as well as practical applications in performance techniques for those on the Performance Track and design techniques for those on the Design/Tech Track. All students gain a strong background in theatre history and dramatic literature. Performance track students will study many performance techniques including classic acting styles as well as modern stage and film techniques. Design/Tech students will use state of the art equipment to explore stage lighting, scenic and sound design as well as costuming and stage projections. Students from both tracks are eligible to have a secondary focus on playwriting or filmmaking. Filmmaking students will learn all aspects of filmmaking including writing a screenplay, using cameras, light and sound equipment as well as editing. All filmmaking students will have several opportunities to create short films. Instructors include area professionals as well as visiting artists. Advanced students have the opportunity for internships with the Virginia Stage Company.

9604 PERFORMING ARTS (MUSICAL THEATRE)
Grades 9-12
Pre-requisite(s): Audition
Credits: Three (+.5 weighted per credit)

Musical Theatre students are provided a challenging, intensive program of study designed to develop performance skills in voice, dance and acting to the advanced level necessary to compete in today's complex and ever-changing entertainment industry.

9600 **DANCE**
Grades 9-12
Pre-requisite(s): Audition
Credits: Three (+.5 weighted per credit)

Dance students receive professional training while encouraging the student's personal development and artistic expression. The primary focus of the program is ballet and modern dance this program offers comprehensive studies in ballet, modern dance and jazz techniques as well as dance composition, character, partnering, somatics & Pilates conditioning, pointe, with areas of focus in contemporary repertory and contemporary & classical ballet repertory. The program is designed to prepare students for auditions to prestigious colleges and dance repertory schools for the career-minded dancer.

9602 **INSTRUMENTAL MUSIC**
Grades 9-12
Pre-requisite(s): Audition
Credits: Three (+.5 weighted per credit)

Instrumental Music students participate in GSA Orchestra three major concerts each year, modeling its programming after the traditions of the world's finest orchestras while staying ahead of the ever-evolving ways that orchestras can serve their loyal community of listeners. Students may also participate in the Jazz and Big Band to learn Jazz Studies with a focus on performance and music theory.

9602 **VOCAL MUSIC**
Grades 9-12
Pre-requisite(s): Audition
Credits: Three (+.5 weighted per credit)

Vocal Music students receive in-depth, comprehensive training in Voice, Theory, Sight Singing, and Diction. Classes include: Music History, Art Song Literature, Vocal Music Survey, Opera Workshop and Directing Opera Productions. The program is designed to prepare students for college and professional careers in singing opera and classical repertoire.

9601 **VISUAL ARTS**
Grades 9-12
Pre-requisite(s): Audition
Credits: Three (+.5 weighted per credit)

Through classroom and studio experiences, students with a high level of commitment gain the historic perspective, fluency of criticism, capacity for innovation, and technical skills needed to produce sophisticated and original works of art. The program includes classes in drawing, art history and criticism, and elective studios such as painting, photography, screen-printing, intaglio, lithography, computer imaging, ceramic sculpture, construction, assemblage, and welding. Visual Arts teachers are professional artists. University study programs are available for advanced students.

Paul D. Camp Community College Degree/Certificate Program

Paul D. Camp Community College Certificate
PDCCC General Education Certificate

Paul D. Camp Community College in collaboration with Suffolk Public Schools offers a General Education Certificate and Diploma Program. This program is composed of high school credits required for an Advanced Studies Diploma and thirty-three (33) college credits needed for the General Education Certificate or sixty-one (61) college credits needed for the General Studies Associate Degree. Students pursing these programs must earn credits in the following disciplines: English, Humanities, Social Science, Science, Mathematics, Health and Physical Education, and Electives. This program is open to all students who meet the course pre-requisites listed in the course descriptions in the academic section of this document.

Students are eligible to participate in this program if the following items are completed:

- Student is a high school junior or senior. Exceptions for freshman and sophomores must be approved by the College president.
- Approved by the high school principal or school counselor director for course registration;
- Complete Paul D. Camp Community College Application
- Accepted for admission by the college
- Qualified, i.e. amply prepared for the demands of a college level course by successfully completing the college placement test or providing acceptable scores from the PSAT, SAT ACT, or SOL Math exam.

This program is tuition based and subject to the community college pricing scale. Although there is a cost associated with the course work, the rate is usually considerably lower than the four year college/university cost. In addition to giving students college level course experience and college credit, parents may save money.

Community college courses are transferrable to four (4) year institutions (check with the four year college/university for their transfer policy). As with all college courses, the course availability will be contingent on student enrollment and credentialed instructor. ***In addition, Suffolk Public Schools students also need to complete the second part of specified courses to receive dual credit.***

Virginia's community colleges offer students more than the opportunity to earn a degree or certificate. They provide a gateway to the commonwealth's four-year colleges and universities. Through system-wide agreements, students who graduate from one of Virginia's 23 community colleges with an associate's degree and a minimum grade point average may obtain GUARANTEED admission to more than 20 of the commonwealth's colleges and universities. See the VCCS website for more information.

In addition, individual colleges have even more transfer agreement to choose from, so check with your college admissions office, or check them out on the Virginia Education Wizard.

Parents and students planning to purse this program are highly encouraged to set up a session with the school counselor to discuss the specifics of this program. The school counselor will be able to share information related to the requirements of the four year college/university that the student plans to attend after high school and develop a Four Year Plan of Study that is specific to the student's goals. During this session, the counselor can also share information concerning scholarship opportunities available once the student graduates from high school. Some colleges may accept for Guaranteed Admission students with completed associate degrees while in high school. Since the student will have multiple college credits prior to graduation, some colleges/universities will classify the student as an upperclassman; therefore, the student may not be eligible for some freshmen level scholarships.

HIGH SCHOOL COURSE OFFERINGS AT A GLANCE
2020-2021

ENGLISH

1130/01001	English 9
1130H/01001	Honors English 9*
1140/01002	English 10
1140H/01002	Honors English 10*
1150/01003	English 11
1150H/01003	Honors English 11*
1160/01004	English 12
1160H/01004	Honors English 12*
1171/01104	Creative Writing
1181/01067	Literacy Strategies for High School I
1182/01067	Literacy Strategies for High School II
1195/01006	AP Literature and Composition +
1196/01005	AP Language & Composition +
1200/11101	Journalism I
1210/11101	Journalism II
1300/01151	Fundamentals of Public Speaking
1517/01999	Advanced Creative Writing
01069G1011	World Mythology (VV)
DE1600/01004	DC English Composition +

MATHEMATICS

3120/02003	Personal Living & Finance
3130/02052	Algebra I
3131/02053	Algebra I, Part I
3132/02054	Algebra I, Part II
3134/99001	Algebra, Functions, & Data Analysis
3135/02056	Algebra II
3137/02106	Honors Algebra II &Trigonometry*
3143/02072	Geometry or Geometry Lab
3143H/02072	Honors Geometry*
3154/02102	Discrete Mathematics
3162/02104	Mathematical Analysis*
3177/02124	AP Calculus AB+
02125C10011	AP Calculus BC+
3186/10999	DC Micro Computers (Computer Application)+
3190/02201	Probability and Statistics
3192/02203	AP Statistics+
DE3230/02104	DC Pre-Calculus+
DE3231/02121	DC Calculus+

COMPUTER SCIENCE

10020	Computer Science Foundations
10160	AP Computer Science Principles+
3185	AP Computer Science A (VV)+

SCIENCE

4210/03001	Earth Science
4250/03005	Oceanography
4269/03003	Environmental Science
4270/03207	AP Environmental Science+
4310/03051	Biology
4310H/03051	Honors Biology *
4330/03053	Biology II: Anatomy and Physiology*
4340/03063	Ecology
4370/03056	AP Biology+
4410/03101	Chemistry
4410H/03101	Honors Chemistry*
4470/03106	AP Chemistry+
4510/03151	Physics*
4260	Astronomy (VV)
4420	Advanced Chemistry (VV)
4570/03155	AP Physics 1+
4571	AP Physics 2 (VV)+
DE4700/03999	DC Biology+
DE4701/03999	DC Chemistry+

MILITARY SCIENCE (Aerospace Science)

AF7913/09151	Air Force Junior ROTC I
AF7916/09152	Air Force Junior ROTC II
AF7918/09153	Air Force Junior ROTC III
AF7919/09154	Air Force Junior ROTC IV

SOCIAL STUDIES

2215/04052	World History & Geography to 1500 A.D.
2215H/04052	Honors World History & Geography to 1500 A.D*
2216/04053	World History & Geography 1500 A.D. to present
2216H/04053	Honors World History & Geography from 1500 A.D. to present*
2380	**AP World History: Modern**
2315/04302	Humanities/Multicultural Studies
2319/04104	AP U.S. History*
2360/04101	VA & U.S. History
2360H/04101	Honors VA & U.S. History*
2399/04056	AP European History+
2902/04256	AP Psychology+
2440/04151	VA & U.S. Government
2440H/04151	Honors VA & U.S. Government*
2445/04157	AP Government & Politics+
2450/04158	AP Government and Politics: Comparative (VV)+
2212	AP Human Geography (VV)+
04205E1011	AP Economics (VV)+
2900	Psychology (VV)
2500/04258	Sociology
2800/04201	Economics
04107G1011	**African-American Studies**
DE 2952/04099	DC Government+
DE2950/04999	DC U.S. History+
DE2951/04254	DC Introduction to Psychology+

FINE ARTS

9120/05154	Art I
9130/05154	Art II
9140/05154	Art III
9145/05154	Art IV
9151/05153	AP Art History+ (VV)
DE9171	DC History & Appreciation of Art+
1410/05051	Theatre I
1420/05059	Theatre II
1423/05058	Theatre III
1426/05057	Theatre IV
9222/05116	Music Appreciation/History/Theory
9232/05101	Beginning Band
9233/05101	Intermediate Band
9234/05101	Advanced Band
9238/05104	Intermediate Orchestra
9239/05104	Advanced Orchestra
9250/05106	Small Instrumental Ensemble
9260/05110	Beginner Chorus
9280/05111	Small Vocal Ensemble
9285/05110	Intermediate Chorus – (Mixed Chorus Unselected)
9289/05110	Advanced Chorus—(Mixed Chorus Select)

SERVICE LEARNING

9828/22999	Service Learning

HEALTH & PHYSICAL EDUCATION

7700/08049	Adapted Physical Education
7300/08052	Health & P.E. 9
7405/08201	Health & P.E. 10
7640/08005	Advanced Physical Education

FOREIGN LANGUAGE

5010/06721	Arabic I (VV)
5110/06121	French I
5120/06122	French II
5130/06123	French III
5140/06124	Honors French IV*
5150/06125	Honors French V*
5170/06132	AP French Language+
5310/06301	Latin I
5320/06302	Latin II
5330/06303	Latin III
5340/06304	Honors Latin IV*
5350/06305	Honors Latin V*
5370/06313	AP Latin: Vergil+ (VV)
5510/06101	Spanish I
5520/06102	Spanish II
5530/06103	Spanish III
5540/06104	Honors Spanish IV*
5550/06105	Honors Spanish V*
5570/06112	AP Spanish Language+
5810/06721	Chinese I (VV)
5990/06801	Sign Language I
5995/06802	Sign Language II
5997/06803	Sign Language III
5998/06804	Honors Sign Language IV*
5710/01008	English as a Second Language I
5720/01008	English as a Second Language II
5730/01008	English as a Second Language III
5731/01008	English as a Second Language IV
01008G10055	English as a Second Language V

GOVERNOR'S SCHOOL FOR THE ARTS

9600	Dance – MS*
9601	Visual Arts – MS*
9602	Instrumental Music – MS*
9602	Vocal Music – MS*
9603	Theatre – MS*
9604	Performing Arts – MS*

INTERNATIONAL BACCALAUREATE

IB1130/01001	Pre-Dip English 9*
IB1195/01002	Pre-Dip English 10*
IB1150/01007	IB English 11, Higher Level *
IB1160/01007	IB English 12, Higher Level *
IB5122/06122	Pre-Dip French II
IB5132/06123	Pre-Dip French III
IB 5142/06124	IB French 4+
IB 5152/06131	IB French 5+
IB5522/ 06102	Pre-Dip Spanish II
IB5532/06103	Pre-Dip Spanish III
IB 5542/06104	IB Spanish 4+
IB 5552/06111	IB Spanish 5+
IB 5320/06302	Pre-Dip Latin 2
IB 5330/06303	Pre-Dip Latin 3
IB 5340/06304	IB Latin 4+
IB 5350	IB Latin 5+
IB2351/04052	Pre-Dip World History to the 20th Century*
IB2445/04157	Pre-Dip /AP U.S. Government and Politics+
IB 2360/04054	IB History 11 HL+
IB 2361/04054	IB History 12 HL+
IB 2903/04257	IB Psychology 11 +
IB 2904/04257	IB Psychology 12 +
IB4310/03051	Pre-Dip Biology*
IB 4380/03057	IB Biology 11 +
IB 4390/03057	IB Biology 12 +
IB4410/03101	Pre-Dip Chemistry*
IB 4480/03107	IB Chemistry 11 +
IB 4490/03107	IB Chemistry 12 +
IB 4280/03208	IB Environmental Systems & Societies 11 +
IB 4281/03208	IB Environmental Systems and Societies 12 +
IB 4580/03157	IB Physics 11 +
IB 4590/03157	IB Physics 12 +
IB3143/03073	Pre-Dip Geometry*
IB3137/02106	Pre-Dip Algebra II/Trigonometry*
02139SL22	IB Math Studies Applications &

	Interpretation SL+
02140SL22	IB Mathematics: Analysis & Approaches SL+
02139HL22	IB Math Studies Applications & Interpretation HL+
02140HL22	IB Mathematics: Analysis & Approaches HL+
IB 9194/05173	IB Visual Arts 11+
IB 9195/05173	IB Visual Arts 12+
IB9294/05115	IB Music 11+
IB9295/05115	IB Music 12+
IB1197/04304	IB Theory of Knowledge 11*
IB1198/04304	IB Theory of Knowledge 12*

PROJECT LEAD THE WAY®

8379/14254	Principles of the Biomedical Sciences +
8380/14251	Human Body Systems+
8381/14063	Medical Interventions+
8382/14255	Biomedical Innovation+
8430/21021	Civil Engineering and Architecture+
8439/21017	Introduction to Engineering Design+
8440/21023	Digital Electronics+
8441/21018	Principals of Engineering+
8443/21007	Engineering Design and Development+

CAREER AND TECHNICAL EDUCATION

6120/19262	Economics and Personal Finance
6131/12054	Business Law
6135/12052	Business Management
6611/12005	Digital Applications
6320/12104	Accounting
6321/12104	Advanced Accounting
6612/10005	Computer Information Systems
6730/14153	Medical Systems Administration
8006/18001	Foundations of Agriculture, Food, and Natural Resources
8008/18101	Introduction to Animal Systems
8022/18201	Agricultural Business Fundamentals I
8024/18201	Agricultural Business Operations II
8120/12164	Marketing
8125/12162	Digital and Social Media Marketing
8130/12152	Advanced Marketing
8140/12153	Fashion Marketing
8248/19201	Introduction to Fashion Careers
8202/16999	Hospitality, Tourism, and Recreation I
8219/22904	Independent Living
8229/19253	Nutrition and Wellness
8302/14001	Introduction to Health and Medical Sciences
8403/21003	Technology Foundations
8405/21052	Technology Transfer
8415/11002	Communication Systems
8435/21101	Technical Drawing and Design
8436/21106	Engineering Drawing/Design
8437/21103	Architectural Drawing/Design
8458/11155	Graphic Communication
8459/11153	Digital Visualization
9062/19151	DC Virginia Teachers for Tomorrow I+
9072/19151	DC Virginia Teachers for Tomorrow II+
9078/22153	Education for Employment I – Preparation
9080/22902	Education for Employment II – Preparation
9093/12053	Entrepreneurship Education

THE COLLEGE & CAREER ACADEMY AT PRUDEN

8506/20104	Automotive Technology I
8507/20104	Automotive Technology II
8515/17009	Building Trades I
8516/17009	Building Trades II
8676/20117	Auto Body Technology I
8677/20117	Auto Body Technology II
8745/19101	Cosmetology I
8746/19101	Cosmetology II
8628/10109	Cybersecurity Systems Technology
8629/10109	Cybersecurity Systems Technology, Advanced
6304/10302	Cybersecurity Software Operations
6306/10302	Cybersecurity Software Operations, Advanced
8275/16052	Culinary Arts I
8276/16052	Culinary Arts II
8498P1	DC Modeling and Simulation Support Specialist I
8498P2	DC Modeling and Simulation Support Specialist II
8285/19153	Early Childhood Education I
8286/19153	Early Childhood Education II
8333/14055	Emergency Medical Technician I
8334/14055	**Emergency Medical Technician II**
8345/14151	Medical Assistant I
8346/14151	Medical Assistant II
8423/21058	Geospatial Technology I
8355	**Nurse Aide I Condensed**
8356	**Nurse Aide II Condensed**
6302/10302	Cybersecurity Fundamentals
8400/10205	Game Design and Development
8401/10205	Game Design and Development, Advanced
8616/20052	Utility/Heavy Construction I
8617/20052	Utility/Heavy Construction II
8088/18105	Veterinary Science I
8089/18105	Veterinary Science II
8533/17102	Electricity I
8534/17102	Electricity II
8672/13207	Welding I
8673/13207	Welding II
8743/19102	Barbering I
8744/19102	Barbering II

ABBREVIATIONS

AP	-	Advanced Placement	*	-	Weighted Honors (+.5)
DC	-	Dual Credit (High School & College Credit Awarded)	+	-	Weighted AP/IB/DC (+1)
			Bold	-	New/Amended Courses
MS	-	Magnet School	VV	-	Virtual Virginia Only

SCHOOL BOARD MEMBERS

Phyllis C. Byrum, Chair

Judith Brooks-Buck, Ph.D., Vice-Chair

Karen L. Jenkins

Lorita B. Mayo

David P. Mitnick

Tyron D. Riddick

Sherri D. Story

Suffolk Public Schools does not discriminate on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies.

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