

**2022-2023**

# **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 2022**

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*Contacts for Additional Information*

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***King's Fork High School***  
351 King's Fork Road  
Suffolk, VA 23434  
**[www.sps.k12.va.us/schools/kfhs](http://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](http://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](http://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](http://www.prudencenter.net)**  
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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 9<sup>th</sup> grade in 2018 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 block classes. On odd days, students attend their first block, third block, fifth block, and seventh block 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 (1) verified credit in Science, Social Science or Mathematics
- Grade 11 Successfully completed at least ten (10) units including English 10 and one (1) Mathematics, one (1) Science and one (1) 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 (2) Mathematics, two (2) Sciences, and two (2) Social Sciences and enrollment in those courses which will lead to graduation upon successful completion AND have verified one (1) Mathematics, one (1) Science, one (1) Social Science and one (1) English for a total of four (4) 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 a 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:

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

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

Example:

88/B First Semester

94/A Second Semester

182

$182 \div 2 = 91/A$ - 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, indicating the number of students having a higher rank.

### Example:

<b>Student No. 1</b>	<b>3.988</b>	<b>Rank 1</b>	<b>Student No. 3</b>	<b>3.897</b>	<b>Rank 3</b>
<b>Student No. 2</b>	<b>3.988</b>	<b>Rank 1</b>	<b>Student No. 4</b>	<b>3.897</b>	<b>Rank 3</b>

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 of work and any high school credits earned in 7<sup>th</sup> or 8<sup>th</sup> 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 that 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 pathways 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 Requirement**

**Students enrolled in 9<sup>th</sup> 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. Service learning is embedded in the curriculum and students will complete the experience under the direction of a teacher. Service learning requires students to use the Five C's (collaboration, communication, citizenship, creativity, critical thinking) established in the Profile of a Virginia Graduate. Service learning will take place during Government, Honors Government, AP Government courses and other elective courses. During a service learning experience, students identify an interest and a community need, and then develop and complete a project. Students complete structured activities before, during, and after the experience to reflect and self-assess. Students will complete the project as part of their regular instruction. School counselors will annually monitor the students' progress towards meeting the service learning requirement.

### **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 9<sup>th</sup> 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**

<i><b>Discipline Area</b></i>	<i><b>Standard Diploma Standard Credits</b></i>	<i><b>Advanced Diploma Standard Credits</b></i>
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
<b><i>Total Credits</i></b>	<b>22</b>	<b>26</b>

#### ***Notes for Standard Diploma***

<b>Discipline Area</b>	<b>Courses required to complete this requirement:</b>
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 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***

<b>Discipline Area</b>	<b>Courses required to complete this requirement:</b>
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)**

For students entering the ninth grade for the first time in 2018-2019, students will be required to earn verified credits by passing a five End-of-Course SOL tests in certain subject areas prior to high school graduation.

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

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

- 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.
- 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.
- 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**

<b>Students entering during the 10<sup>th</sup> grade or the beginning of 11<sup>th</sup> grade</b>	<b>5 verified credits:</b> 2 English; 1 History; 1 Science; 1 Math
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**Students entering during the 11<sup>th</sup> grade or the beginning of 12<sup>th</sup> 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 Mathematics (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 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 languages 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 ninth grade for the first time in 2018-2019 and thereafter, and meet 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, and
- 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 Recognitions

### 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 coursework 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 transferable 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](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

<b>1130</b>	<b>ENGLISH 9</b>
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**

<b>1130H</b>	<b>HONORS ENGLISH 9</b>
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**

<b>1140</b>	<b>ENGLISH 10</b>
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**

<b>1140H</b>	<b>HONORS ENGLISH 10</b>
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  
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.

**Sequential Elective Course:** Literacy Strategies for High School II (1182)

**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.

**Sequential Elective Course:** Literacy Strategies for High School I (1181)

**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.

**Sequential Elective Course:** Journalism II (1210)

**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 newspapers and/or yearbooks. 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.

**Sequential Elective Course:** Journalism (1200)

**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.

**Sequential Elective Course:** Advanced Composition (1177)

**1177 ADVANCED COMPOSITION**

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

The advanced composition 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, theme, 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.

**Sequential Elective Course:** Creative Writing (1171)



## World Language

*World Languages may be used for a sequential elective for students on a standard diploma.*

<b>5990</b>	<b>AMERICAN SIGN LANGUAGE I</b>
Grades	9-12
Prerequisite(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. Teachers and students will communicate in the targeted language during at least 50% of the class.

<b>5995</b>	<b>AMERICAN SIGN LANGUAGE II</b>
Grades	10-12
Prerequisite(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.

<b>5997</b>	<b>AMERICAN SIGN LANGUAGE III</b>
Grades	11-12
Prerequisite(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. Teachers and students will communicate in the targeted language during at least 90% of the class.

<b>5998</b>	<b>HONORS AMERICAN SIGN LANGUAGE IV</b>
Grades	11-12
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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. Teachers and students will communicate in the targeted language during the class. **Summer Assignment: REQUIRED**

**5310 LATIN I**  
Grades 8-12  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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 to 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 graduation for EL students only.

**5720**                                 **ENGLISH AS A SECOND LANGUAGE II**  
Grades                                 9-12  
Prerequisite(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 to 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 graduation for EL students only.

**5730**                                 **ENGLISH AS A SECOND LANGUAGE III**  
Grades                                 9-12  
Prerequisite(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 to 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 graduation for EL students only.

**5731**                                 **ENGLISH AS A SECOND LANGUAGE IV**  
Grades                                 9-12  
Prerequisite(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 to 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 graduation for EL students only.

**01008G10055**                     **ENGLISH AS A SECOND LANGUAGE V**  
Grades                                 9-12  
Prerequisite(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 to 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 graduation for EL students only.

## Health and Physical Education

### **7700 ADAPTED PHYSICAL EDUCATION**

Grade 9-12  
Prerequisite(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 with instruction in the least restrictive environment.

### **7300 HEALTH AND PHYSICAL EDUCATION 9**

Grade 9  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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.

**Sequential Elective:** Sports, Exercise, and Health Science (08016)

**08016**

**SPORTS, EXERCISE, AND HEALTH SCIENCE**

Grade

12

Prerequisite(s):

Health and PE 10 and Government issued Photo ID, must be a graduating senior

Credit:

One (weighted +.5)

Assessment:

National Academy of Sports Medicine Personal Training and Fitness Certification (Certified Personal Trainer)

Students will learn nutrition, human anatomy, fitness assessment, first aid, organization, and community skills. This course is designed for students interested in earning a fitness industry credential. This credential will give the student the opportunity to access the high demand market of personal training. This course is also a gateway to other careers such as Sports Medicine, Athletic Training, and Physical Therapy.

**Sequential Elective:** Advanced Health and Physical Education(7640)

## History and Social Sciences

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

Students will explore the historical development of life from Prehistory 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.

<b>2215H</b>	<b>HONORS WORLD HISTORY AND GEOGRAPHY to 1500 A. D.</b>
Grade	9
Prerequisite(s):	“B” or better in Grade 8 – History
Credit:	One (weighted + .5)
SOL:	<i>End-of-Course Test required for students needing a verified Social Studies credit</i>

Students will explore the historical development of life from Prehistory 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**

<b>2216</b>	<b>WORLD HISTORY AND GEOGRAPHY 1500 A.D. TO PRESENT</b>
Grade	10
Prerequisite(s):	World History and Geography to 1500 A.D.
Credit:	One
SOL:	<i>End-of-Course Test required for students needing a verified Social Studies credit</i>

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 19<sup>th</sup> and 20<sup>th</sup> 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.

<b>2216H</b>	<b>HONORS WORLD HISTORY AND GEOGRAPHY FROM 1500 A.D. TO PRESENT</b>
Grade	10
Prerequisite(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  
Prerequisite(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  
Prerequisite(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 the 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  
Prerequisite(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  
Prerequisite(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 21<sup>st</sup> century. Major emphasis 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  
Prerequisite(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 (12<sup>th</sup> may take as elective)  
Prerequisite(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)  
College Code: HIS 121 and HIS 122  
*SOL: End-of-Course Test required for students needing a verified Social Studies credit*

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 Americans through Post Civil War Reconstruction. The second semester will survey the rise of industry and cities in the 19<sup>th</sup> century through U.S. challenges and policies in the 20<sup>th</sup> century.

**2440 VIRGINIA and UNITED STATES GOVERNMENT**  
Grade 12  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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**

**E2952 DUAL CREDIT UNITED STATES GOVERNMENT**  
Grade 12  
Prerequisite(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 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: PLS 135 and PLS 136

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  
Prerequisite(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.

**2900 PSYCHOLOGY**  
Grades 11-12  
Prerequisite(s): None

Credit: One

This general study of psychology will focus on the study of human behavior. As an introduction to the field of psychology, this course includes consideration of psychological principles, terminology, major theories, careers, methods of experimentation, and practical applications.

**2800 ECONOMICS**

Grades 11-12

Prerequisite(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

Prerequisite(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

Prerequisite(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

Prerequisite(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.

<b>DE2951</b>	<b>DUAL CREDIT INTRODUCTION TO PSYCHOLOGY</b>
Grade	11 or 12
Prerequisite(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); 3 hours of college credit (upon successful completion)
College Code:	PSY 200

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

<b>3131</b>	<b>ALGEBRA 1 PART 1</b>
Grade	9
Prerequisite(s):	Below a “C” 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, 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.

<b>3132</b>	<b>ALGEBRA 1 PART 2</b>
Grade	9-10
Prerequisite(s):	Successful completion of Algebra I, Part 1
Credit:	One credit
SOL:	<i>End-of-Course Test REQUIRED</i>

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

<b>3120</b>	<b>PERSONAL LIVING AND FINANCE</b>
Grade	9-12
Prerequisite(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 checkbook; 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.

<b>3130</b>	<b>ALGEBRA I</b>
Grades	7-12
Prerequisite(s):	Successfully completion of 8 <sup>th</sup> grade Math Course
Credit:	One
SOL:	<i>End-of-Course Test REQUIRED</i>

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 practical 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.

<b>3134</b>	<b>ALGEBRA, FUNCTIONS, AND DATA ANALYSIS</b>
Grade	9-12



Prerequisite(s): Algebra I, Algebra I Part 2 or 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  
Prerequisite(s): Algebra I or Algebra I part 2  
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  
Prerequisite(s): "B" or better in Algebra I, A 435 scale score on Algebra 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  
Prerequisite(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

Prerequisite(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  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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***

### **02911G0912 DATA SCIENCE**

Grade 9 - 12  
Prerequisite(s): Geometry  
Credit: One

Through the use of open-source technology tools, students will identify and explore problems that involve the use of relational database concepts and data-intensive computing to find solutions and make generalizations. Students will engage in a data science problem solving structure to interact with large data sets as a means to

formulate problems, collect and clean data, visualize data, model to predict, and communicate effectively about data formulated solutions.

**3190 PROBABILITY AND STATISTICS**

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

Students will be introduced to the basic concepts of statistics and 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  
Prerequisite(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 piecewise-defined. Teachers and students will use graphing utilities. **Summer Assignment: REQUIRED**

**Sequential Elective Course:** Advanced Placement Calculus BC (02125C111)

**02125C111 ADVANCED PLACEMENT CALCULUS BC**

Grades 11 or 12  
Prerequisite(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 covers 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**

**Sequential Elective Course:** Advanced Placement Calculus AB (3177)

**3192 ADVANCED PLACEMENT STATISTICS**

Grade 12  
Prerequisite(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.

<b>DE3230</b>	<b>DUAL CREDIT PRE-CALCULUS</b>
Grade	11 or 12
Prerequisite(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.

<b>DE3231</b>	<b>DUAL CREDIT CALCULUS</b>
Grade	11 or 12
Prerequisite(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,

## Computer Science

<b>10020</b>	<b>COMPUTER SCIENCE FOUNDATIONS</b>
Grade	9-10
Prerequisite(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.

**Sequential Elective Course:** AP Computer Science Principles (10160)

<b>10160</b>	<b>ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES</b>
Grade	10-12
Prerequisite(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.

**Sequential Elective Course:** Computer Science Foundations (10160)

<b>3186</b>	<b>DUAL CREDIT MICRO-COMPUTERS (Introduction to Digital and Information Literacy and Computer Applications)</b>
Grade	11 or 12
Prerequisite(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); 3 hours of college credit (upon successful completion)
College Code:	ITE 152 (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.

## Science

### **4269 ENVIRONMENTAL SCIENCE**

Grade 9  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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.

### **4310H HONORS BIOLOGY**

Grades 9-12  
Prerequisite(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
Prerequisite(s):	“B” or better in Chemistry or Honors Chemistry <b>AND</b> B or better in Biology or Honors Biology
Credit:	Two (weighted + 1)
<i>AP Exam:</i>	<i>Optional</i>
College Code:	HIS 121 and HIS 122
<i>SOL:</i>	<i>End-of-Course Test required for students needing a verified Social Studies credit</i>

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
Prerequisite(s)	”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 EARTH SCIENCE II: OCEANOGRAPHY**

Grade	11 or 12
Prerequisite(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 BIOLOGY II: ECOLOGY**

Grade	11 or 12
Prerequisite(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/Prerequisite(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/Prerequisite(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 at an accelerated pace and with in-depth problem solving. 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.

**4470 ADVANCED PLACEMENT CHEMISTRY**

Grade 11-12

Prerequisite(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

Prerequisite(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 improve and expand laboratory techniques including collection and interpretation of data and using appropriate technology.

**4330 BIOLOGY II: ANATOMY and PHYSIOLOGY**

Grade 10-12  
Co/Prerequisite(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.

**4270 ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**

Grade 11 or 12  
Prerequisite(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  
Prerequisite(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  
Prerequisite(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 AND PERFORMING ARTS COURSES**

## Visual Arts

**ART: Courses fulfill the Fine Arts requirement for graduation.**

<b>9120</b>	<b>ART I</b>
Grades	9-12
Prerequisite(s):	None
Credit:	One

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

**Sequential Elective Course:** Art II (9130)

<b>9130</b>	<b>ART II</b>
Grades	10-12
Prerequisite(s):	Art I
Credit:	One

Students will continue the work begun 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.

**Sequential Elective Course:** Art III (9140)

<b>9140</b>	<b>ART III</b>
Grades	11-12
Prerequisite(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.

**Sequential Elective Course:** Art IV (9145)

<b>9145</b>	<b>ART IV</b>
Grade	12
Prerequisite(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 styles with an 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.

<b>9171</b>	<b>DUAL CREDIT HISTORY AND APPRECIATION OF ART (I and II)</b>
Grade	11 or 12
Prerequisite(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

**MUSIC: Courses fulfill the Fine Arts requirement for graduation.**

### **9232 BEGINNING BAND**

Grades 9-12  
Prerequisite(s): None  
Credit: One (1)

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

**Sequential Elective Course:** Intermediate Band (9233), Advanced Band (9234), Small Instrumental Ensemble (9250)

### **9233 INTERMEDIATE BAND**

Grades 9-12  
Prerequisite(s): Beginning band or private instruction on wind or percussion instruments  
Credit: One (1)

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.

**Sequential Elective Course:** Advanced Band (9234), Small Instrumental Ensemble (9250)

### **9234 ADVANCED BAND**

Grades 9-12  
Prerequisite(s): Audition Selection is based on technical skills and instrumental need. Successful completion of Intermediate Band.  
Credit: One (1)

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.

**Sequential Elective Course:** Small Instrumental Ensemble (9250)

### **9222 MUSIC HISTORY AND APPRECIATION**

Grades 9-12  
Prerequisite(s): Beginning band, chorus or private instruction on any instrument; knowledge of the basic fundamentals of music  
Credit: One (1)

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

Prerequisite(s): Beginning band, orchestra, private instruction on a strings, wind, or percussion instrument, or permission of the instructor.  
Credit: One (1)

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

**9237 BEGINNING ORCHESTRA**

Grades 9-12  
Prerequisite(s): None  
Credit: One (1)

Students will acquire and define technical and expressive skills with orchestral instruments and in individual and ensemble performance. Students identify parts of their instrument and demonstrate proper instrument care, playing posture, instrument positions, fingerings, music literacy skills, and production. Students apply emerging music skills to create and notate original work. Performance is required.

**Sequential Elective Course:** Intermediate Orchestra (9238), Advanced Orchestra (9239), Small Instrumental Ensemble (9250)

**9238 INTERMEDIATE ORCHESTRA**

Grades 9-12  
Prerequisite(s): Middle school string class, private study, or audition  
Credit: One (1)

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.

**Sequential Elective Course:** Advanced Orchestra (9239), Small Instrumental Ensemble (9250)

**9239 ADVANCED ORCHESTRA**

Grades 9-12  
Prerequisite(s): Intermediate orchestra, private study, or audition  
Credit: One (1)

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.

**Sequential Elective Course:** Small Instrumental Ensemble (9250)

**9250 SMALL INSTRUMENTAL ENSEMBLE**

Grades 9-12  
Prerequisite(s): Beginning band, orchestra, private instruction on a strings, wind, or percussion instrument, or permission of the instructor.  
Credit: One (1)

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

**9260 BEGINNER CHORUS**

Grades 9-12  
Prerequisite(s): None  
Credit: One (1)

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.

**Sequential Elective Course:** Intermediate Chorus (9285), Small Vocal Ensemble (9280), Advanced Chorus (9289)

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

Grades 9-12  
Prerequisite(s): Beginner Chorus or Audition  
Credit: One (1)

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.

**Sequential Elective Course:** Small Vocal Ensemble (9280), Advanced Chorus (9289)

**9280 SMALL VOCAL ENSEMBLE**

Grades 10-12  
Prerequisite(s): Audition  
Credit: One (1)

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.

**Sequential Elective Course:** Advanced Chorus (9289)

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

Grades 10-12  
Prerequisite(s): Audition  
Credit: One (1)

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

**THEATRE: Courses fulfill the Fine Arts requirement for graduation**

**1410 THEATRE I**  
Grades 9-12  
Prerequisite(s): None  
Credit: One (1) 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, and attend local and professional theatrical productions. Students will learn about all performing venues. (A 2.0 GPA is required to participate in VHSL events).

**Sequential Elective Course:** Theatre II (1420), Theatre III (1423), Theatre IV (1426)

**1420 THEATRE II**  
Grades 10-12  
Prerequisite(s): Theatre I  
Credit: One (1) 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, and attend local and professional theatrical productions. Students will learn about all performing venues. (A 2.0 GPA is required to participate in VHSL events).

**Sequential Elective Course:** Theatre I (1410), Theatre III (1423), Theatre IV (1426)

**1423 THEATRE III**  
Grades 11-12  
Prerequisite(s): Theatre II  
Credit: One (1) 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 the 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).

**Sequential Elective Course:** Theatre I (1410), Theatre II (1420), Theatre IV (1426)

**1426 THEATRE IV**  
Grades 11-12  
Prerequisite(s): Theatre III  
Credit: One (1) 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.

# **ADDITIONAL ELECTIVE COURSES**

## Service Learning

<b>9828</b>	<b>SERVICE LEARNING</b>
Grades	11-12
Prerequisite(s):	None
Credit:	One (1)

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 solve problems, thereby developing leadership and teamwork 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. **NOTE: This course meets the service learning local requirement for graduation.**

## Military Science

<b>AF7913</b>	<b>MILITARY SCIENCE—AIR FORCE JUNIOR ROTC I</b>
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, including weekly inspections. Students will also learn the basics of military drills 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.***

<b>AF7916</b>	<b>MILITARY SCIENCE—AIR FORCE JUNIOR ROTC II</b>
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.*

<b>AF7918</b>	<b>MILITARY SCIENCE—AIR FORCE JUNIOR ROTC III</b>
Grades:	11-12
Prerequisite:	AFJROTC II
Credit:	One (1)

**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.*

<b>AF7919</b>	<b>MILITARY SCIENCE—AIR FORCE JUNIOR ROTC IV</b>
Grade:	12
Prerequisite:	AFJROTC III

Credit: One (1)

**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 sequences 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 Certifications are subject to change based on alignment of specific program based competencies.

#### **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 examination that meets 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 earned 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

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 II (8089)
- Foundations of Agriculture, Food, and Natural Resources (8006)

**8024 AGRICULTURE BUSINESS OPERATIONS II**

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)

**8006 FOUNDATIONS OF AGRICULTURE, FOOD AND NATURAL RESOURCES**

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)

**8008 INTRODUCTION TO ANIMAL SYSTEMS**

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

**Industry Credential Available: NOCTI Animal Systems**

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)

**8088 VETERINARY SCIENCE I**

Classes Held at The College & Career Academy at Pruden  
Grades: 11-12  
Prerequisite(s): 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)

**8089 VETERINARY SCIENCE II**

Classes Held at The College & Career Academy at Pruden  
Grades: 11-12  
Prerequisite(s): 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

#### **8437 ARCHITECTURAL DRAWING AND DESIGN**

Grades: 10-12

Prerequisite(s): 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)
- Introduction to Engineering Design PLTW (8439)
- Technical Drawing and Design (8435)

#### **8533**

#### **ELECTRICITY I**

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)

**8534**                      **ELECTRICITY II**  
Classes Held at The College & Career Academy at Pruden  
Grades: 10-12  
Prerequisite(s): 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)

**8616**                      **UTILITY/HEAVY CONSTRUCTION I**  
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)

**8617**                      **UTILITY/HEAVY CONSTRUCTION II**  
Classes Held at The College & Career Academy at Pruden  
Grades: 11-12  
Prerequisite(s): 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 (8616)

### **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

### **8415 COMMUNICATION SYSTEMS**

Grades: 09-12  
Prerequisite(s): 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)

### **8459 DIGITAL VISUALIZATION**

Grades: 10-12  
Prerequisite(s): 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)

### **8458 GRAPHIC COMMUNICATIONS SYSTEMS**

Grades: 10-12

Prerequisite(s): 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

### **6131 BUSINESS LAW**

Grades: 10-12

Prerequisite(s): 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)
- Computer Information Systems (6612)
- Advanced Accounting (6321)
- Digital Applications (6611)
- Business Management (6135)
- Medical Systems Administration (6730)

6135                                **BUSINESS MANAGEMENT**  
Grades:                            10-12  
Prerequisite(s):                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)
- Digital Applications (6611)
- Advanced Accounting (6321)
- Entrepreneurship (9093)
- Business Law (6131)
- Entrepreneurship (9093)
- Computer Information Systems (6612)
- Marketing (8120)
- Medical Systems Administration (6730)

6612                                **COMPUTER INFORMATION SYSTEMS**  
Grades:                            9 -12  
Prerequisite(s):                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)
- Cybersecurity Software Operations (6304)
- Digital Applications (6611)
- Entrepreneurship (9093)
- Medical Systems Administration (6730)

### **COOPERATIVE EDUCATION**

Grades: 9-12  
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.

### **6611 DIGITAL APPLICATIONS**

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)

### **6730 MEDICAL SYSTEMS ADMINISTRATION**

Grades: 11-12  
Prerequisite(s): 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 healthcare 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.

### **8285 Early Childhood, Education, and Services I**

Dual Enrollment - Offered jointly with Paul D. Camp Community College  
(2.0 GPA required to enroll)  
(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)

**8286 EARLY CHILDHOOD, EDUCATION, AND SERVICES II**

Classes Held at The College & Career Academy at Pruden

Dual Enrollment - Offered jointly with Paul D. Camp Community College  
(2.0 GPA required to enroll)  
(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)

**9078 EDUCATION FOR EMPLOYMENT I – PREPARATION**

Grades: 9-11

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.

**9080 EDUCATION FOR EMPLOYMENT II – PREPARATION**

Grades: 10-12

Prerequisite(s): 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.

**9062/11/SDV110/EDU100/EDU190 VIRGINIA TEACHERS FOR TOMORROW I**

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

Grades: 11-12

Prerequisite(s): 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)

**9072/EDU198/EDU199**

**VIRGINIA TEACHERS FOR TOMORROW II**

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

Grade: 12

Prerequisite(s): 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)

**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

### **6320 ACCOUNTING**

Grades: 10-12

Prerequisite(s): 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)

### **6321 ADVANCED ACCOUNTING**

Grades: 11-12

Prerequisite(s): 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)

**6120 ECONOMICS AND PERSONAL FINANCE**

Grade: 10-12

Prerequisite(s): 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 post-secondary 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

<b>8333</b>	<b>EMERGENCY MEDICAL TECHNICIAN I</b>
	Classes Held at The College & Career Academy at Pruden
Dual Enrollment	- Offered jointly with Paul D. Camp Community College (2.0 GPA required to enroll) (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); <i>1st semester of a one-year program</i>

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.**

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

- Emergency Medical Technician II (8334)

<b>8334</b>	<b>EMERGENCY MEDICAL TECHNICIAN II</b>
	Classes Held at The College & Career Academy at Pruden
Dual Enrollment	- Offered jointly with Paul D. Camp Community College (2.0 GPA required to enroll) (Dual Credit - 4)
Grades:	11-12
Prerequisite(s):	Emergency Medical Technician I 8333 Introduction to Health and Medical Sciences 8302 (Recommended)
Credits:	One and a half (1.5); <i>2nd semester of a one-year program</i>

**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 complete 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)

#### **8302 INTRODUCTION TO HEALTH AND MEDICAL SCIENCES**

Grades: 09-12

Prerequisite(s): None

Credit: One (1)

**Industry Credential Available: Workplace Readiness Skills for the Commonwealth**

Introduction to Health and Medical Sciences will introduce the students to a variety of healthcare careers and develop 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 System Administration (6730)

#### **8345 MEDICAL ASSISTANT I**

Classes Held at The College & Career Academy at Pruden

Grades: 11-12

Prerequisite(s): 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)

**8346**

#### **MEDICAL ASSISTANT II**

Classes Held at The College & Career Academy at Pruden

Grades: 11-12

Prerequisite(s): 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)

**8355**

#### **NURSE AIDE I (CONDENSED)**

Classes Held at The College & Career Academy at Pruden

Grades: 11-12

Prerequisite(s): 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)

**8356**

**NURSE AIDE II (CONDENSED)**

Classes Held at The College & Career Academy at Pruden

Grades: 11-12

Prerequisite(s): 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

**8275**

**CULINARY ARTS I**

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 provide 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)

**8276**

**CULINARY ARTS II**

Classes Held at The College & Career Academy at Pruden

Grades: 11-12

Prerequisite(s): 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 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)

**8202**

**HOSPITALITY, TOURISM, AND RECREATION I**

Grade: 10-12

Prerequisite(s): 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

**8743**

**MASTER BARBER I**

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 barber shop 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)

**8744**

**MASTER BARBER II**

Classes Held at The College & Career Academy at Pruden

Grades: 11-12

Prerequisite(s): Master Barber I (8743)

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 barber shop 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)

**8745**

**COSMETOLOGY I**

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, 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)

**8746**

**COSMETOLOGY II**

Classes Held at The College & Career Academy at Pruden

Grades: 11-12

Prerequisite(s): Cosmetology I (8745)

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 the total of two 36-week courses:

- Cosmetology I (8745)

**8219**

**INDEPENDENT LIVING**

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)

**8248**

**INTRODUCTION TO FASHION CAREERS**

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)

### **8229 NUTRITION AND WELLNESS**

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

**6302**

### **CYBERSECURITY FUNDAMENTALS**

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)

**6304**

### **CYBERSECURITY SOFTWARE OPERATIONS**

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)

**6306 CYBERSECURITY SOFTWARE OPERATIONS ADVANCED**

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)

**8628 CYBERSECURITY SYSTEMS TECHNOLOGY**

Classes Held at The College & Career Academy at Pruden

Dual Enrollment - Offered jointly with Paul D. Camp Community College (2.0 GPA required to enroll)  
 (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)

**8629**                                    **CYBERSECURITY SYSTEMS TECHNOLOGY, ADVANCED**  
 Classes Held at The College & Career Academy at Pruden  
 Dual Enrollment - Offered jointly with Paul D. Camp Community College (2.0 GPA required to enroll)  
 (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)

**8400**                                    **GAME DESIGN AND DEVELOPMENT**  
 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)

**8401**                                    **GAME DESIGN AND DEVELOPMENT, ADVANCED**  
 Classes Held at The College & Career Academy at Pruden  
 Grades: 11-12  
 Prerequisite(s): 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

<b>8403</b>	<b>TECHNOLOGY FOUNDATIONS</b>
Grades:	09-12
Prerequisite(s):	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 further learn how and why technology works. They work in groups to build and control systems using engineering design in the development of 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)

<b>8405</b>	<b>TECHNOLOGY TRANSFER</b>
Grades:	10-12
Prerequisite(s):	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 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)

#### **8672**

#### **WELDING I**

Classes Held at The College & Career Academy at Pruden

Dual Enrollment - Offered jointly with Paul D. Camp Community College (2.0 GPA required to enroll)

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)

#### **8673**

#### **WELDING II**

Classes Held at The College & Career Academy at Pruden

Dual Enrollment - Offered jointly with Paul D. Camp Community College (2.0 GPA required to enroll)

(Dual Credit 3)

Grades: 11-12

Prerequisite(s): 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

#### **8130                                   ADVANCED MARKETING**

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:                                9-12

Prerequisite(s):                    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.

#### **8125                                   DIGITAL AND SOCIAL MEDIA MARKETING**

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)

### **9093 ENTREPRENEURSHIP**

Grades: 09-12

Prerequisite(s): None

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

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

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

### **8140 FASHION MARKETING**

Grades: 10-12

Prerequisite(s): 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)

8120                                **MARKETING**  
Grades:                            09-12  
Prerequisite(s):                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)
- Digital and Social Media Marketing (8125)
- Entrepreneurship (9093)
- Fashion Marketing (8140)
- Introduction to Fashion Careers (8248)
- Marketing (8120)

## 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

### **8436 ENGINEERING DRAWING AND DESIGN**

Grades: 10-12

Prerequisite(s): 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)

## 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 including 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.

<b>8435</b>	<b>TECHNICAL DRAWING AND DESIGN</b>
Grades:	09-12
Prerequisite(s):	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)
- Digital Visualization (8459)
- Engineering Drawing and Design (8436)
- Introduction to Engineering Design PLTW (8439)
- 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

<b>8506</b>	<b>AUTOMOTIVE TECHNOLOGY I</b>
	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 drivetrain 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)

**8507**                            **AUTOMOTIVE BODY TECHNOLOGY II**  
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/NOCTI Automotive Technician-Core**

Automotive Body Technology II students will build upon their basic knowledge of automotive technology, exploring more advanced tasks in engine repair, automatic transmission and transaxle, manual drivetrain 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)

**8676**                            **AUTOMOTIVE BODY TECHNOLOGY I**  
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*

In the global automotive collision repair industry, there is a growing demand for qualified auto body technicians. Automotive 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)

**8677**

**AUTO BODY TECHNOLOGY II**

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/NOCTI Collision Repair and Refinishing Technology**

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 Spanish IV	Honors Latin IV
Honors English 10	Honors Spanish V	Honors Latin V
Honors English 11	Honors French IV	Honors Sign Language
Honors English 12	Honors French V	Honors Biology
Physics	Honors Algebra II and Trigonometry	
Honors Chemistry	Mathematical Analysis	Anatomy and Physiology
Honors Geometry	Honors World History & Geography to 1500 AD	

Honors World History & Geography from 1500 AD to the Present  
Honors Virginia and United States History  
Honors Virginia and United States Government

### 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 are not offered due to low enrollment. If approved, transportation **will not** be provided.)*

### Advanced Placement Courses

AP Language and Composition	AP Biology
AP Literature and Composition	AP Psychology
AP Calculus AB	AP United States History
AP Calculus BC	AP United States Government and Politics
AP Computer Science Principles	AP European History
AP Physics	AP Chemistry
AP Statistics	AP Spanish Language
AP World History: Modern	

**\*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 Geometry
Pre-Dip /AP Literature and Composition	Pre-Ap Algebra II/Trigonometry
Pre-Dip French II	Pre-Dip Biology

Pre-Dip Latin II  
Pre-Dip Spanish II  
Pre-Dip French III  
Pre-Dip Spanish III

Pre-Dip Chemistry  
Pre-Dip World History to the 20<sup>th</sup> 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, or 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 World Language V (French, Spanish, or 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	Instrumental Music
Performing Arts (Musical Theatre)	Vocal Music
Dance	Visual Arts

### **Dual-Enrollment Courses (DC)**

*(All courses pending enrollment.)*

*Students may request in writing to attend DC courses at another Suffolk High School.*

DC English Composition	DC Biology	DC Chemistry
DC Pre-Calculus	DC Government	DC History & Appreciation of Art
DC Calculus	DC History	DC Virginia Teachers for Tomorrow I
DC Micro Computers	DC Introduction to Psychology	DC Virginia Teachers for Tomorrow II

## **SPECIAL PROGRAMS**

### **International Baccalaureate (IB) Diploma Programme**

KING'S FORK HIGH SCHOOL, AN IB WORLD SCHOOL

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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.

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The IB offers six subject groups. Diploma candidates must select one subject from each group 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 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 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 offered 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 mathematical 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 comprises 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 20<sup>th</sup> 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, Spanish IV, or IB Spanish ab initio  
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, Spanish V, or IB Spanish ab initio  
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**

<b>IB1130</b>	<b>PRE-DIP ENGLISH</b>
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***

<b>IB1140</b>	<b>PRE-DIP ENGLISH</b>
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**

**IB01007 11 12 IB ENGLISH LITERATURE, HIGHER LEVEL**

Grade 11

Prerequisite(s): 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**

**IB01007 12 22 IB ENGLISH LITERATURE, HIGHER LEVEL**

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, WORLD LANGUAGE**

**IB5122 PRE-DIP FRENCH II**

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**

**IB5132 PRE-DIP FRENCH III**



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***

**IB5142**                      **IB FRENCH IV**  
Grade 11  
Prerequisite(s): 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***

**IB5152**                      **IB FRENCH V**  
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***

**IB5522**                      **PRE-DIP SPANISH II**  
Grade 9  
Prerequisite(s): “B” or better in Spanish I  
Credit: One

In Pre-Dip Spanish II twentieth-century 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***

**IB5532**                      **PRE-DIP SPANISH III**  
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**

**IB5542**                      **IB SPANISH IV**  
Grade                        11  
Prerequisite(s):            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**

**24068H1112**                **IB SPANISH AB INITIO Standard Level**  
Grade                        11  
Prerequisite(s):            IB Diploma Candidates ONLY; highly recommend Spanish II/III with teacher recommendation  
Credit:                        One (weighted +1)

IB Spanish ab initio is a two-year, standard level course for juniors and seniors. Students develop the ability to communicate in the target language through the study of language, themes, and texts. In doing so, they also develop conceptual understandings of how language works. Communication is evidenced through receptive, productive, and interactive skills across a range of contexts and purposes that are appropriate to the level of the course. **Summer Assignment: REQUIRED**

**IB5552**                      **IB SPANISH V, STANDARD LEVEL**  
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**

**IB2351**                      **PRE-DIP WORLD HISTORY to the 20<sup>th</sup> CENTURY**  
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-20<sup>th</sup> 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**

**IB2445**                      **PRE-DIP /ADVANCED PLACEMENT U.S. GOVERNMENT AND POLITICS**  
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**

**IB2360**                      **IB HISTORY 11, HIGHER LEVEL**  
Grade                              11  
Prerequisite:                    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 an 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**

**IB2361**                      **IB HISTORY 12, HIGHER LEVEL**  
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 an 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**

**IB2903**                      **IB PSYCHOLOGY 11**  
Grade                              11  
Prerequisite:                    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**

<b>IB2904</b>	<b>IB PSYCHOLOGY 12</b>
Grade	11
Prerequisite(s):	Successful Completion of IB2903 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**

<b>IB4310</b>	<b>PRE-DIP BIOLOGY</b>
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**

<b>IB03057 11 12</b>	<b>IB BIOLOGY 11</b>
Grade	11
Prerequisite(s):	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**

<b>IB03057 12 22</b>	<b>IB BIOLOGY 12</b>
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***

<b>IB4410</b>	<b>PRE-DIP CHEMISTRY</b>
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***

<b>IB03107 11 22</b>	<b>IB CHEMISTRY 11</b>
Grade:	11
Prerequisite:	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 with 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***

<b>IB03107 12 22</b>	<b>IB CHEMISTRY 12</b>
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 with 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**

<b>IB03157 11 12</b>	<b>IB PHYSICS 11</b>
Grade	11
Prerequisite(s):	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**

<b>IB03157 12 22</b>	<b>IB PHYSICS 12</b>
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 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

<b>IB3143</b>	<b>PRE-DIP GEOMETRY</b>
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 an 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**

<b>IB3137</b>	<b>PRE-DIP ALGEBRA II/TRIGONOMETRY</b>
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**

**02139SL12 & 02139HL12 IB MATH: APPLICATIONS & INTERPRETATION 11**

Grade 11  
Prerequisite: 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.

**02140SL12 & 02140HL12 IB MATH: ANALYSIS & APPROACHES 11**

Grade 11  
Prerequisite: 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.

**02139SL22 & 02139HL22 IB MATH: APPLICATIONS & INTERPRETATION 12**

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**

**02140SL22 & 02140HL22 IB MATH: ANALYSIS & APPROACHES 12**

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.*

*These courses may meet the sequential elective graduation requirement.*

<b>IB 9194</b>	<b>IB VISUAL ARTS 11</b>
Grade	11
Prerequisite:	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 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 the level of artistic ability. The course requires college-level performance and work habits. **Summer Assignment: REQUIRED**

<b>IB9195</b>	<b>IB VISUAL ARTS 12</b>
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 perspective 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 the level of artistic ability. The course requires college-level performance and work habits. **Summer Assignment: REQUIRED // IB Assessments: REQUIRED**

<b>IB9294S &amp; IB9294H</b>	<b>IB MUSIC 11</b>
Grade	11
Prerequisite:	Overall GPA of 3.0
Credit:	One (weighted +1)

IB Music is a two-year course that 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 that requires college-level performance and work habits. **Summer Assignment: REQUIRED**

**IB9295S & IB295H     IB MUSIC 12**

Grade                    12  
Prerequisite(s):        Successful Completion of IB Music 11 (IB 9294)  
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 that requires college-level performance and work habits. **Summer Assignment: REQUIRED // IB Assessments: REQUIRED**

**IB1197                    IB THEORY OF KNOWLEDGE 11**

Grade                    11  
Prerequisite:            Overall GPA of 3.0  
Credit:                    One (weighted +1)

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**

**IB1198                    IB THEORY OF KNOWLEDGE 12**

Grade                    12  
Prerequisite(s):        IB Theory of Knowledge 11 (B average recommended) and an overall GPA of 3.0  
Credit:                    One (weighted +0.5)  
Prerequisite:            Overall GPA of 3.0

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 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.

**Sequential Elective Course:** Principles of Engineering (8441)

### **8441 PRINCIPLES OF ENGINEERING**

Grade 10  
Prerequisite(s): Introduction to Engineering Design  
Credit: One (weighted +0.5)

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.

**Sequential Elective Course:** Digital Electronics (8440), Civil Engineering and Architecture (8430)

### **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 as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

**Sequential Elective Course:** Engineering Design and Development (8443)

### **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.

**Sequential Elective Course:** Engineering Design and Development (8443)

<b>8443</b>	<b>ENGINEERING DESIGN &amp; DEVELOPMENT</b>
Grade	12
Prerequisite(s):	Digital Electronics 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 *AP World 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  <i>**Must meet Pre-Calculus level and select additional upper level courses.</i>	*Introduction to Engineering Design *Principles of Engineering *Digital Electronics *Civil Engineering and Architecture *Engineering Design & Development

## **Project Lead the Way (PLTW)**

### **Biomedical Sciences**

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 including 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.

**Sequential Elective Course:** Human Body Systems (8380)

#### **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 Manikin®; 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.

**Sequential Elective Course:** Medical Interventions (8381)

#### **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.

**Sequential Elective Course:** Biomedical Innovation (8382)

#### **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

<u>English</u>	<u>Social Studies</u>	<u>Science</u>	<u>Mathematics</u>	<u>PLTW</u>
*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 *AP World 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 Biology *Honors Chemistry *Physics *AP Biology *AP Chemistry *AP Physics *AP Environmental Science *DE Biology  <b><i>**Non-Earth Science students must take one of the following combinations:</i></b> <ul style="list-style-type: none"> <li>● <i>Physics w/ Anatomy &amp; Physiology</i></li> <li>● <i>Physics w/ AP Psychology</i></li> </ul>	*Geometry *Honors Geometry *Honors Algebra I/Trig *Math Analysis *DE Pre-Calculus *AP Calculus AB *AP Calculus BC *Discrete Mathematics *AP Statistics *DE Calculus  <b><i>**Must meet Pre-Calculus level and select additional upper level courses.</i></b>	*Principles of the Biomedical Sciences *Human Body Systems *Medical Interventions *Biomedical Innovations

## Center for Performance and Production Arts

<b>05124G10011</b>	<b>TECHNOLOGY/ELECTRONIC MUSIC</b>
Grades	9-12
Prerequisite(s):	None
Credit:	One (1)

Technology/Electronic Music allows students to acquire and define technical and expressive skills using technological advances in music production. Technology/Electronic Music enables students to use critical thinking skills to study and apply advanced musical concepts in a variety of classroom structures (e.g., Music Technology, Music Appreciation, Music History/Literature, Independent Study, etc.) apart from traditional ensemble settings. Students develop skills in reading and understanding a variety of musical notations. Students develop, improvise, draft, refine, and share musical ideas. Students respond to, describe, interpret, and evaluate music and explore music from a variety of cultural influences, styles, composers, and historical periods. They examine relationships of music to other fine arts and to other fields of knowledge, and explore connections between music skills and college, career, and workplace skills.

**Sequential Elective Course:** Technology/Electronic Music II

<b>05113</b>	<b>MUSIC THEORY</b>
Grades	9-12
Prerequisite(s):	None
Credit:	One (1)

Music Theory integrates aspects of melody, harmony, rhythm, form, and composition. Emphasis is placed on reading, writing, and notating music, music terminology, analysis, composition, aural skills, and sight-singing. Students recognize, describe, and apply the basic materials and processes of music through an integrated approach, which includes aural, written, creative, and analytical components. Students develop, draft, refine, and share musical ideas. Students investigate career opportunities in music and identify connections between music and other fields of knowledge.

<b>05107</b>	<b>PIANO LAB</b>
Grades	9-12
Prerequisite(s):	None
Credit:	One (1)

Piano Lab allows students to acquire and define technical and expressive skills with the piano/keyboard in individual and ensemble performances. Piano Lab integrates aspects of melody, harmony, rhythm, form, and composition. Students begin receiving instruction on piano with guidance from the music teacher at any high school grade level. Students identify parts of the instrument and demonstrate proper instrument care, playing posture, instrument positions, fingerings, and production. Students apply emerging music skills to create and notate original work. Music literacy skills are emphasized as students read, notate, and perform music. Students use critical thinking to respond to, describe, interpret, and evaluate works of music as performers and listeners. They describe career options in music and investigate how innovative tools and new media impact the music field. Opportunities are provided for students to participate in local, district, and regional music events as appropriate to their level, ability, and interest.



## 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 9<sup>th</sup> through 12<sup>th</sup> 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.

<b>9603</b>	<b>THEATRE &amp; FILM</b>
Grades	9-12
Prerequisite(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.

**Sequential Elective Course:** This course is a sequential elective when taken for 2 or more years.



<b>9601</b>	<b>VISUAL ARTS</b>
Grades	9-12
Prerequisite(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.

**Sequential Elective Course:** This course is a sequential elective when taken for 2 or more years.

## 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 fifteen (15) college credits needed for the Passport Program, 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 pursuing 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 prerequisites 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 transferable 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 instructors. ***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 agreements to choose from, so check with your college admissions office, or check them out on the [Virginia Education Wizard](#).

Parents and students planning to pursue 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 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 2022-2023

### 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
1177/01103	Advanced Composition
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*
<b>02911G0912</b>	<b>Data Science</b>
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)+
3186	DC MicroComputers+

### 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
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
<b>9222/05116</b>	<b>Music History and Appreciation</b>
9232/05101	Beginning Band
9233/05101	Intermediate Band
9234/05101	Advanced Band
<b>9237/05104</b>	<b>Beginning Orchestra</b>
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
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## 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
<b>08016G1212</b>	<b>Sports, Exercise, and Health Science</b>

## WORLD 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+ (VV)

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

## CENTER FOR PERFORMANCE AND PRODUCTION ARTS

<b>9225/05113</b>	<b>Music Theory</b>
<b>9255/05107</b>	<b>Piano Lab</b>
<b>05124G10011</b>	<b>Technology/Electronic Music</b>

## 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

IB 1130/01001	Pre-Dip English 9*
IB 1140/01002	Pre-Dip English 10*
IB 1150/01007	IB English 11, Higher Level *
IB 1160/01007	IB English 12, Higher Level *
IB 5122/06122	Pre-Dip French II
IB 5132/06123	Pre-Dip French III
IB 5142/06124	IB French 4+
IB 5152/06131	IB French 5+
IB 5522/ 06102	Pre-Dip Spanish II
IB 5532/06103	Pre-Dip Spanish III
<b>24068H1112</b>	<b>IB Spanish ab initio</b>
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	6120/19262	Economics and Personal Finance
IB 5340/06304	IB Latin 4+	6131/12054	Business Law
IB 5350	IB Latin 5+	6135/12052	Business Management
IB 2351/04052	Pre-Dip World History to the 20 <sup>th</sup> Century*	6611/12005	Digital Applications
IB 2445/04157	Pre-Dip /AP U.S. Government and Politics+	6320/12104	Accounting
IB 2360/04054	IB History 11 HL+	6321/12104	Advanced Accounting
IB 2361/04054	IB History 12 HL+	6612/10005	Computer Information Systems
IB 2903/04257	IB Psychology 11 +	6730/14153	Medical Systems Administration
IB 2904/04257	IB Psychology 12 +	8006/18001	Foundations of Agriculture, Food, and Natural Resources
IB 4310/03051	Pre-Dip Biology*	8008/18101	Introduction to Animal Systems
IB 03057 11 12	IB Biology 11 +	8022/18201	Agricultural Business Fundamentals I
IB 03057 12 12	IB Biology 12 +	8024/18201	Agricultural Business Operations II
IB 4410/03101	Pre-Dip Chemistry*	8120/12164	Marketing
IB 03107 11 22	IB Chemistry 11 +	8125/12162	Digital and Social Media Marketing
IB 03107 12 22	IB Chemistry 12 +	8130/12152	Advanced Marketing
IB 03157 11 22	IB Physics 11 +	8140/12153	Fashion Marketing
IB 03157 12 12	IB Physics 12 +	8248/19201	Introduction to Fashion Careers
IB 3143/03073	Pre-Dip Geometry*	8202/16999	Hospitality, Tourism, and Recreation I
IB 3137/02106	Pre-Dip Algebra II/Trigonometry	8219/22904	Independent Living
02139SL12	IB Math Studies Applications & Interpretation SL+	8229/19253	Nutrition and Wellness
02140SL22	IB Mathematics: Analysis & Approaches SL+	8302/14001	Introduction to Health and Medical Sciences
02139HL12	IB Math Studies Applications & Interpretation HL+	8403/21003	Technology Foundations
02140HL22	IB Mathematics: Analysis & Approaches HL+	8405/21052	Technology Transfer
IB 9194/05173	IB Visual Arts 11+	8415/11002	Communication Systems
IB 9195/05173	IB Visual Arts 12+	8435/21101	Technical Drawing and Design
IB 9294/05115	IB Music 11+	8436/21106	Engineering Drawing/Design
IB 9295/05115	IB Music 12+	8437/21103	Architectural Drawing/Design
IB 1197/04304	IB Theory of Knowledge 11*	8458/11155	Graphic Communication
IB 1198/04304	IB Theory of Knowledge 12*	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

**PROJECT LEAD THE WAY®**

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

**CAREER AND TECHNICAL EDUCATION**

**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	8356	Nurse Aide II Condensed
8276/16052	Culinary Arts II	6302/10302	Cybersecurity Fundamentals
8498P1	DC Modeling and Simulation Support Specialist I	8400/10205	Game Design and Development
8498P2	DC Modeling and Simulation Support Specialist II	8401/10205	Game Design and Development, Advanced
8285/19153	Early Childhood Education I	8616/20052	Utility/Heavy Construction I
8286/19153	Early Childhood Education II	8617/20052	Utility/Heavy Construction II
8333/14055	Emergency Medical Technician I	8088/18105	Veterinary Science I
8334/14055	Emergency Medical Technician II	8089/18105	Veterinary Science II
8345/14151	Medical Assistant I	8533/17102	Electricity I
8346/14151	Medical Assistant II	8534/17102	Electricity II
8423/21058	Geospatial Technology I	8672/13207	Welding I
8355	Nurse Aide I Condensed	8673/13207	Welding II
		8743/19102	Barbering I
		8744/19102	Barbering II

### ABBREVIATIONS

AP - Advanced Placement

DC - Dual Credit (High School & College Credit Awarded)

MS - Magnet School

\* - Weighted Honors (+.5)

+ - Weighted AP/IB/DC (+1)

**Bold** - New/Amended Courses

VV - Virtual Virginia Only



## **SCHOOL BOARD MEMBERS**

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

**Phyllis C. Byrum, *Vice-Chair***

**Lorita B. Mayo**

**Karen L. Jenkins**

**Sherri D. Story**

**Tyron D. Riddick**

**Heather D. Howell**

**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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*tmb - 2022*