2018-2019
Program of Studies
(For Students Entering High School Prior To 2018)

An Educational and Career Planning Guide for Secondary Students

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

Effective: September 2018
(Revision: August 2018)
Contacts for Additional Information

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

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

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

The College and Career Academy at Pruden
4169 Pruden Boulevard
Suffolk, VA  23434
www.prudencenter.net
925-5650
Fall 2018

Deran R. Whitney, Ed. D.
Superintendent

Dear Students and Parents:

Suffolk Public Schools is committed to preparing our students with the skills they will need to adapt to a rapidly changing world. Many students graduating from our high schools are likely to hold jobs that do not even exist today! This Program of Studies booklet is designed to help students make the connection between their high school courses and their future career plans.

We encourage families to use this booklet to develop a secondary instructional program that prepares students for work and future education when they leave high school. This Program of Studies is designed to assist with long-range program planning and the selection of courses for the next school year. Inside you will find new, exciting options for earning college credit.

It is imperative that all students and parents be aware of the new graduation requirements implemented with students entering grade 9 in 2013-2014. Charts detailing requirements for a standard diploma and an advanced studies diploma are found in this booklet.

The course descriptions and prerequisites are important factors when considering the student’s personal abilities and interests. Students should select courses that can contribute to the accomplishment of their educational, personal, and career goals. Parents are asked to help their children realize that the educational choices made today affect the opportunities available to them in the future.

If you have questions or need clarification about information included in this booklet, please talk with the school counselor or other staff members at your child’s school.

Sincerely,

Deran R. Whitney, Ed.D.
Superintendent

tmb
# TABLE OF CONTENTS

TABLE OF CONTENTS ............................................................................................................................................................... 1

GENERAL INFORMATION ........................................................................................................................................................................ 3

IMPORTANT INFORMATION FOR PARENT(S) ........................................................................................................................................ 3

Promotion Policy .................................................................................................................................................................................. 3

Grading Scale ...................................................................................................................................................................................... 4

Class Ranking ..................................................................................................................................................................................... 4

Testing .................................................................................................................................................................................................. 5

GRADUATION REQUIREMENTS ................................................................................................................................................................ 5

STANDARD DIPLOMA ......................................................................................................................................................................... 7

ADVANCED STUDIES DIPLOMA .......................................................................................................................................................... 9

MODIFIED STANDARD DIPLOMA ..................................................................................................................................................... 11

APPLIED STUDIES DIPLOMA .......................................................................................................................................................... 13

GRADUATION REQUIREMENTS (Verified Credits) .................................................................................................................................. 14

DIPLOMA SEALS ................................................................................................................................................................................... 14

Governor's Seal .................................................................................................................................................................................... 14

Board of Education Seal ................................................................................................................................................................. 14

Board of Education's Career & Technical Education Seal ................................................................................................................ 14

Board of Education's Advanced Mathematics & Technology Seal .................................................................................................. 15

Board of Education's Excellence in Civics Education Seal ........................................................................................................... 15

Virginia Seal of Biliteracy ................................................................................................................................................................. 15

OTHER DIPLOMAS AND CERTIFICATES ........................................................................................................................................... 15

International Baccalaureate Diploma .................................................................................................................................................. 15

Special Recognition .................................................................................................................................................................................. 16

COURSE SELECTION and REGISTRATION PROCESS ..................................................................................................................... 17

DROP/ADD PROCEDURES ................................................................................................................................................................. 17

COURSE SEQUENCES AND DESCRIPTIONS ........................................................................................................................................ 18

ACADEMIC COURSES ........................................................................................................................................................................... 19

English .............................................................................................................................................................................................................. 20

Foreign Language .................................................................................................................................................................................. 24

Health and Physical Education .......................................................................................................................................................... 29

History and Social Sciences ............................................................................................................................................................... 30

Mathematics ....................................................................................................................................................................................... 35

Science ................................................................................................................................................................................................. 40

FINE ARTS COURSES ............................................................................................................................................................................. 44

Art .............................................................................................................................................................................................................. 45

Music ................................................................................................................................................................................................. 47

Theatre and Visual Arts ................................................................................................................................................................. 50

SERVICE LEARNING ........................................................................................................................................................................... 51

MILITARY SCIENCE COURSES ........................................................................................................................................................ 52

CAREER AND TECHNICAL EDUCATION COURSES ................................................................................................................................... 54

CTE Sequences ....................................................................................................................................................................................... 55

Industry Credentialing ........................................................................................................................................................................... 55

Agriculture, Food & Natural Resources .......................................................................................................................................... 57

Architecture and Construction .......................................................................................................................................................... 60

Arts, Audio/Video Technology and Communications .................................................................................................................... 63

Business Management and Administration ........................................................................................................................................ 66

Education and Training .................................................................................................................................................................. 71

Finance ............................................................................................................................................................................................... 75

Health Science .................................................................................................................................................................................... 78

Hospitality and Tourism ................................................................................................................................................................. 81

Human Services .................................................................................................................................................................................. 83

Information Technology ................................................................................................................................................................. 86

Manufacturing .................................................................................................................................................................................... 88

Marketing .......................................................................................................................................................................................... 90

Science, Technology, Engineering and Mathematics (STEM) ........................................................................................................... 94

4
GENERAL INFORMATION

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

This Program of Studies is designed to assist students entering 9th grade in prior to 2018 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.

IMPORTANT INFORMATION FOR PARENT(S)

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.

Promotion Policy

The following information applies to students who entered Grade 9 in 2003-2004 through 2017-2018:

- **Grade 9** Successfully completed Grade 8
- **Grade 10** Successfully completed at least five (5) units including English 9, a Mathematics, and three (3) other courses AND have at least one verified credit in Science, Social Science or Mathematics
- **Grade 11** Successfully completed at least ten (10) units including English 10 and one Mathematics, one Science, and one Social Science AND have verified one Mathematics, one Science, and one Social Science for a total of three verified credits
- **Grade 12** Successfully completed at least 15 units including English 11 and two Mathematics, two Sciences, and two Social Sciences and enrollment in those courses which will lead to graduation upon successful completion AND have verified one Mathematics, one Science, one Social Science and one English for a total of four verified credits
- **Graduation** Successfully completed at least 22 units and at least six (6) verified credits: two (2) English, one (1) mathematics, one (1) science, one (1) history, and one (1) student selected.

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

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

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

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Score Range</th>
<th>Progress Statements</th>
<th>General</th>
<th>Honors and Pre-IB + (0.5)</th>
<th>IB, PLTW, Advanced Placement and Dual Enrollment + (1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-93</td>
<td>Outstanding progress, superior work</td>
<td>4.0</td>
<td>4.5</td>
<td>5</td>
</tr>
<tr>
<td>A-</td>
<td>92-90</td>
<td></td>
<td>3.7</td>
<td>4.2</td>
<td>4.7</td>
</tr>
<tr>
<td>B+</td>
<td>89-87</td>
<td></td>
<td>3.3</td>
<td>3.8</td>
<td>4.3</td>
</tr>
<tr>
<td>B</td>
<td>86-83</td>
<td>Good, better than average progress</td>
<td>3.0</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>B-</td>
<td>82-80</td>
<td></td>
<td>2.7</td>
<td>3.2</td>
<td>3.7</td>
</tr>
<tr>
<td>&quot;C+&quot;</td>
<td>79-77</td>
<td></td>
<td>2.3</td>
<td>2.8</td>
<td>3.3</td>
</tr>
<tr>
<td>C</td>
<td>76-73</td>
<td>Average progress</td>
<td>2.0</td>
<td>2.5</td>
<td>3</td>
</tr>
<tr>
<td>C-</td>
<td>72-70</td>
<td></td>
<td>1.7</td>
<td>2.2</td>
<td>2.7</td>
</tr>
<tr>
<td>D+</td>
<td>69-67</td>
<td></td>
<td>1.3</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>D</td>
<td>66-63</td>
<td>Poor, but passing</td>
<td>1.0</td>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>D-</td>
<td>62-60</td>
<td></td>
<td>0.3</td>
<td>0.8</td>
<td>1.3</td>
</tr>
<tr>
<td>F</td>
<td>below 60</td>
<td>Unsatisfactory</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>I</td>
<td></td>
<td>Incomplete – work must be made up</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

Example:

88/B First Semester  
94/A Second Semester  
182  

\[ 182 \div 2 = 91/A- \text{ Final Grade} \]

### Class Ranking

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

Example:

Student No. 1  
3.988 Rank 1
The student with the next highest average would have the rank of five (5) in the class indicating that there are four (4) students who ranked higher. Students shall be ranked at the end of the first semester of their senior year. Only those high school credits earned through high school and middle school will be used in the ranking (i.e., a total of seven (7) semesters work and any high school credits earned in 7th or 8th grade).

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

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

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

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

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

### Testing

**Standards of Learning (SOL) Assessments**

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

### GRADUATION REQUIREMENTS

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

**Basic Competency** - Each student who receives a diploma shall have demonstrated basic skill competency in each of the following areas: (i) functional literacy in communication skills, including reading, writing, and speaking; (ii) basic skills in mathematical concepts and computations (at or above the level of Algebra I); (iii) proficiency in the use of computers and related technology and scientific concepts and processes; (iv) essential skills and concepts of citizenship, including knowledge of Virginia history and world and United States history, economics and personal finance, government, foreign languages, international cultures, health and physical education, environmental issues and geography necessary for responsible participation in American society and in the international community; (v) fine arts, which may include, but need not be limited to, music and art, and practical arts; (vi) knowledge and skills needed to qualify for further education and employment, or in the case of children with disabilities, to qualify for appropriate training; and (vii) service to the community, and (viii) development of the ability to apply such skills and knowledge in preparation for eventual employment and lifelong learning.

**Community Service Requirement**
Students enrolled in 9th grade 2013-14 and beyond will be required to complete 50 hours of pre-approved community service such as: volunteering for a charitable or religious organizations that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in political campaigns, government internships, and participating in school-sponsored extracurricular activities that have a civics focus.

**Recommended Number of Community Service Hours per Year**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>at least 16 hours</td>
</tr>
<tr>
<td>10</td>
<td>at least 17 hours</td>
</tr>
<tr>
<td>11</td>
<td>at least 17 hours</td>
</tr>
</tbody>
</table>

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

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

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

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

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

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

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

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

**Approved Courses**


**Additional Requirements**

Students entering 9th grade in 2013-2014 and beyond will be required by VDOE to complete a virtual course (standard and advanced diploma) and obtain an industry credential (standard diploma only). 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 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 2016-2017 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 must successfully complete one of the following diploma plans:

**STANDARD DIPLOMA**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics [Note 1]</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory Science [Notes 2 &amp; 6]</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>History &amp; Social Sciences [Notes 3 &amp; 6]</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fine Arts or Career &amp; Technical Education</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language, Fine Arts or Career &amp; Technical Education [Note 7]</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics and Personal Finance</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Electives [Note 4]</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Student Selected Test [ Note 5]</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>22</td>
<td>6</td>
</tr>
</tbody>
</table>

**NOTE 1:** For students entering the ninth grade for the first time in 2003-2004 through 2010-2011: Courses completed to satisfy this requirement shall be at or above the level of algebra and shall include at least two course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of algebra and geometry. The Board may approve additional courses to satisfy this requirement.
For students entering the ninth grade for the first time in 2011-2012 and beyond: Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I; Geometry; Algebra, Functions and Data Analysis; Algebra II, or other mathematics courses above the level of Algebra II. The Board shall approve courses to satisfy this requirement.

**NOTE 2:** For students entering the ninth grade for the first time in 2003-2004 through 2010-2011: Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: earth sciences, biology, chemistry or physics. The Board may approve additional courses to satisfy this requirement.

For students entering the ninth grade for the first time in 2011-2012 and beyond: Courses completed to satisfy this requirement shall include course selections from at least two different science disciplines: earth sciences, biology, chemistry or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

**NOTE 3:** For students entering the ninth grade for the first time in 2003-2004 through 2010-2011: Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either world history or geography or both. The Board may approve additional courses to satisfy this requirement.

For students entering the ninth grade for the first time in 2011-2012 and beyond: Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and one course in either world history or geography or both. The Board shall approve courses to satisfy this requirement.

**NOTE 4:** Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

**NOTE 5:** For students entering the ninth grade for the first time in 2003-2004 through 2010-2011: A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education or other areas as prescribed by the Board in 8 VAC 20-131-110.

For students entering the ninth grade for the first time in 2011-2012 and beyond: A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics or other areas as prescribed by the Board in 8 VAC 20-131-110.

**NOTE 6:** Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry, or trade or professional association or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification, competency credential or license for (1) the student selected verified credit and (2) either a science or history and social science verified credit when the certification, license or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board of Education as an additional test to verify student achievement.

**NOTE 7:** For students entering the ninth grade for the first time in 2011-2012 and beyond: Pursuant to Section 22.1-253.13:4, Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.

Sequential Electives – Effective with the graduating class of 2003, students who wish to receive a Standard or Modified Standard Diploma must successfully complete two sequential electives. On February 5, 2002, the Board of Education approved Guidelines for Sequential Electives for the Standard and Modified Standard Diploma (PDF).
Sequential electives may be in any discipline as long as the courses are not specifically required for graduation.

Courses used to satisfy the one unit of credit in a fine arts or career and technical education course may be used to partially satisfy this requirement.

An exploratory course followed by an introductory course may not be used to satisfy the requirement.

An introductory course followed by another level of the same course of study may be used.

Sequential electives do not have to be taken in consecutive years.

Fine Arts and Career and Technical Education – The Standard, Advanced Studies, and Modified Standard Diplomas each contain a requirement for one standard unit of credit in Fine Arts or Career and Technical Education. The Standards of Accreditation do not require that courses used to satisfy the requirement of Fine Arts or Career and Technical Education be approved by the Board. Therefore, local school officials should use their own judgment in determining which courses students take to satisfy this requirement.

**ADVANCED STUDIES DIPLOMA**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics [Note 1]</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Science [Note 2]</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>History &amp; Social Sciences [Note 3]</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Foreign Languages [Note 4]</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fine Arts or Career &amp; Technical Education</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Economics and Personal Finance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Student Selected Test [Note 5]</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>26</td>
<td>9</td>
</tr>
</tbody>
</table>

**NOTE 1:** For students entering the ninth grade for the first time in 2003-2004 through 2010-2011 and beyond: Courses completed to satisfy this requirement shall be at or above the level of algebra and shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board may approve additional courses to satisfy this requirement.
For students entering the ninth grade for the first time in 2011-2012 and beyond: Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board shall approve courses to satisfy this requirement.

NOTE 2: For students entering the ninth grade for the first time in 2003-2004 through 2010-2011: Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board may approve additional courses to satisfy this requirement.

For students entering the ninth grade for the first time in 2011-2012 and beyond: Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

NOTE 3: For students entering the ninth grade for the first time in 2003-2004 through 2010-2011: Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses in either world history or geography or both. The Board may approve additional courses to satisfy this requirement.

For students entering the ninth grade for the first time in 2011-2012 and beyond: Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and two courses in either world history or geography or both. The Board shall approve courses to satisfy this requirement.

NOTE 4: Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

NOTE 5: For students entering the ninth grade for the first time in 2003-2004 through 2010-2011: A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education or other areas as prescribed by the Board in 8 VAC 20-131-110.

For students entering the ninth grade for the first time in 2011-2012 and beyond: A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics or other areas as prescribed by the Board in 8 VAC 20-131-110.

Fine Arts and Career and Technical Education – The Standard, Advanced Studies, and Modified Standard Diplomas each contain a requirement for one standard unit of credit in Fine Arts or Career and Technical Education. The Standards of Accreditation do not require that courses used to satisfy the requirement of Fine Arts or Career and Technical Education be approved by the Board. Therefore, local school officials should use their own judgment in determining which courses students take to satisfy this requirement.

Foreign Language—The Advanced Studies Diploma contains a requirement for either three years of one foreign language or two years of two languages. In March 1998, the Board of Education approved the provision of three years of instruction in American Sign Language (ASL) for foreign language credit toward an Advanced Studies Diploma; other foreign languages will satisfy this requirement as well. Details of this action are available in: Superintendent's Memo, Interpretive, #1, June 12, 1998.

Awards for Exemplary Performance:
   a. Students who complete the requirements for a standard diploma with an average grade of B or better in the required courses will receive a Board of Education seal on the diploma.
b. Students who complete the requirements for an advanced studies diploma with an average grade of B or better and successfully complete at least 9 transferrable college credits will receive the Governor’s seal on the diploma.

c. Students may receive other seals or awards for exceptional academic, career and technical education, citizenship or other exemplary performance in accordance with criteria set by the School Board. (Adopted January 12, 1995)

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

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

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

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

### MODIFIED STANDARD DIPLOMA

The Modified Standard Diploma is intended for certain students at the secondary level who have a disability and are unlikely to meet the credit requirements for a Standard Diploma. Eligibility and participation in the program are determined by the student's IEP team and the student, when appropriate. Decisions of eligibility and participation may be made at any point after the student's eighth grade year. Written consent from parent/guardian must be obtained for a student to choose this diploma program.

**NOTE:** The Modified Standard Diploma will not be an option for students with disabilities who enter the ninth grade for the first time beginning in 2013-2014. Credit accommodations allow students with disabilities who previously would have pursued a Modified Standard Diploma to earn a Standard Diploma.

The student must:

- be allowed to pursue a Standard or Advanced Studies Diploma at any time throughout his or her high school career;
- not be excluded from courses and tests required to earn a Standard or Advanced Studies Diploma; and
- pass literacy and numeracy competency assessments as prescribed by the Board:
  - For students who entered the ninth grade prior to 2000-01, the literacy and numeracy competency assessments were the reading and mathematics subtests of the LPT.
  - For students who entered the ninth grade in 2000-01 and beyond, the literacy and numeracy competency assessments are the eighth-grade English Reading test and the eighth-grade Mathematics SOL test (Board action – November 30, 2000).
  - The Board also approved four additional substitute assessments to satisfy the literacy and numeracy requirements for students pursuing a Modified Standard Diploma.
    - [Substitute Numeracy and Literacy Tests for the Modified Standard Diploma](#)
    - Superintendent's Memo – Informational #53, March 5, 2004
    - [Cut Scores for Substitute Tests for the Modified Standard Diploma](#)
    - Superintendent's Memo – Informational #103, May 21, 2004

### Approved Courses:

- [Approved Courses – Effective for Students Who Entered Ninth Grade for the First Time in 2010-2011 and Beyond](#) (Word)
MODIFIED STANDARD DIPLOMA

Modified Standard Diploma Course Requirements (8 VAC 20-131-50.D)

<table>
<thead>
<tr>
<th>Discipline Area</th>
<th>Standard Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3 [Note 1]</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>2 [Note 2]</td>
</tr>
<tr>
<td>History &amp; Social Sciences</td>
<td>2 [Note 3]</td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Fine Arts or Career &amp; Technical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6 [Note 4]</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**NOTE 1:** Courses completed to satisfy this requirement shall include content from among applications of algebra, geometry, personal finance and statistics in courses that have been approved by the Board.

**NOTE 2:** Courses completed shall include content from at least two of the following: applications of earth science, biology, chemistry, or physics in courses approved by the Board.

**NOTE 3:** Courses completed to satisfy this requirement shall include one unit of credit in U.S. and Virginia History and one unit of credit in U.S. and Virginia Government in courses approved by the Board.

**NOTE 4:** Courses to satisfy this requirement shall include a least two sequential electives in the same manner required for the Standard Diploma.

**Sequential Electives** – Effective with the graduating class of 2003, students who wish to receive a Standard or Applied Studies Diploma must successfully complete two sequential electives. On February 5, 2002, the Board of Education approved Guidelines for Sequential Electives for the Standard and Modified Standard Diploma (PDF).

- Sequential electives may be in any discipline as long as the courses are not specifically required for graduation.
- Courses used to satisfy the one unit of credit in a fine arts or career and technical education course may be used to partially satisfy this requirement.
- For career and technical education electives, check with the Office of Career and Technical Education at (804) 225-2051.
- An exploratory course followed by an introductory course may not be used to satisfy the requirement.
- An introductory course followed by another level of the same course of study may be used.
- Sequential electives do not have to be taken in consecutive years.

**Fine Arts and Career and Technical Education** – The Standard, Advanced Studies, and Applied Studies Diplomas each contain a requirement for one standard unit of credit in Fine Arts or Career and Technical Education. The Standards of Accreditation do not require
that courses used to satisfy the requirement of Fine Arts or Career and Technical Education be approved by the Board. Therefore, local school officials should use their own judgment in determining which courses students take to satisfy this requirement.

**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**

**News & Announcements**

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 (804-225-3252) in the Division of Special Education and Student 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**

- [FAQ: Additional Guidance on Credit Accommodations for Students with Disabilities May 2014](#) (PDF)
- [Guidelines for Standard Diploma Credit Accommodations for Students with Disabilities](#) (Word)
- [Credit Accommodations at a Glance](#) (Word)
GRADUATION REQUIREMENTS (Verified Credits)

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entering 9th Grade 2003-04 and beyond</td>
<td>All Classes</td>
<td>Entered 9th Grade Prior to 2013-14</td>
<td>Entering 9th Grade in 2013 and beyond</td>
</tr>
<tr>
<td>English: Writing</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English: Reading</td>
<td>1</td>
<td>1</td>
<td>*1</td>
<td>Meets Standards-Based IEP Goals</td>
</tr>
<tr>
<td>History/Social Science</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>1</td>
<td>2</td>
<td>*1</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Selected</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td>6</td>
<td>9</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

*Verified credits may be earned by passing the 8th Grade Multiple Choice Test in English and Mathematics.

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 Advanced Mathematics & Technology Seal – Awarded to students who earn either a Standard or Advanced Studies Diploma and satisfy all of the mathematics requirements for the Advanced Studies Diploma (four units of credit including Algebra II; two verified units of credit) with a “B” average or better; and either

- pass an examination in a career and technical education field that confers certification from a recognized industry, or trade or professional association
- OR acquire a professional license in a career and technical education field from the Commonwealth of Virginia
- OR pass an examination approved by the board that confers college-level credit in a technology or computer science area.
- The Board of Education shall approve all professional licenses and examinations used to satisfy these requirements.

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

- Satisfy the requirement to earn a Modified Standard Diploma, Standard Diploma or an Advanced Studies Diploma
- Complete Virginia & United States History and Virginia & United States Government courses with a grade of “B” or higher
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; and participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.
- Have good attendance and no disciplinary infractions as determined by local school board policies.

Virginia Seal of Biliteracy – Awarded to students who meet each of the following criteria:
- Pass all required End-of-Course Assessments in English reading and writing at the proficient or higher level, and
- Be proficient in the intermediate-mid level or higher in one or more language other than English, as demonstrated through an assessment from a list to be approved by the Superintendent of Public Instruction.

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.

OTHER DIPLOMAS AND CERTIFICATES

International Baccalaureate Diploma

Students who complete honors, advanced placement college level, or courses required for an International Baccalaureate Diploma shall be deemed to have completed the requirements for graduation under these standards provided they have passed the end of course test required to earn verified credit for a Standard or an Advanced Studies diploma.
Special Recognition

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

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

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

To qualify for the Early College Scholars program, a student must:
- Have a "B" average or better;
- Be pursuing an Advanced Studies Diploma; and;
- Take and complete college-level course work (i.e., Advanced Placement, International Baccalaureate, Cambridge, or dual enrollment) that will earn at least 15 transferable college credits.

*Early College Scholar applications are available in the high school guidance office and at this website:* [http://www.doe.virginia.gov/instruction/graduation/early_college_scholars/early-college-agreement.pdf](http://www.doe.virginia.gov/instruction/graduation/early_college_scholars/early-college-agreement.pdf)

**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 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 second block, fourth block, sixth block, and seventh period classes. On odd days, students attend their first block, third block, fifth block, and seventh period classes. (Please note that the seventh 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.

DROP/ADD PROCEDURES

All students are required to be enrolled in at least five (5) classes unless authorized by the superintendent or his designee.

A class schedule change is strongly discouraged and no changes will be made after the drop/add date without prior approval by the principal.

To obtain a schedule change, a student must complete a request form from the Guidance Office which a parent/legal guardian and the principal must sign. After the drop/add date, students will not be allowed to add any courses, and courses may only be dropped with a failing grade for the year.
COURSE SEQUENCES AND DESCRIPTIONS
ACADEMIC COURSES
English
Course Sequences and Descriptions

1130  ENGLISH 9
Grade 9
Pre-requisite(s): Successful completion of English 8
Credit: One

Students will focus on a multi-phased program emphasizing the four areas of study covered by the Standards of Learning: communication (speaking, listening, media literacy), reading, writing and research. The student will be introduced to varied genres including short stories, poetry, nonfiction, drama, and novels. Composition skills will be applied to formal and informal writing assignments that correlate with literature and focus on research. Summer Reading: SUGGESTED.

1130H  HONORS ENGLISH 9
Grade 9
Pre-requisite(s): "B" or better in English 8
Credit: One (weighted +.5)

Students will focus on a multi-phased program emphasizing the four areas of study covered by the Standards of Learning: communication (speaking, listening, media literacy), reading, writing and research. Students will be introduced to varied genres including short stories, poetry, nonfiction, drama, and novels. Composition skills will be applied to formal and informal writing assignments that correlate with literature and focus on research. The student will be challenged to analyze by drawing conclusions, understanding cause and effect relationships, explaining a process sequentially, and exploring problem solving individually and in small and large groups. Summer Reading: REQUIRED.

1140  ENGLISH 10
Grade 10
Pre-requisite(s): Successful completion of English 9
Credit: One

Students will focus on a multi-phased program emphasizing the four areas of study covered by the Standards of Learning: communication (speaking, listening, media literacy), reading, writing and research. Students will focus on an in-depth study of the writing process plus a comprehensive review of usage and mechanics integrating the composition and grammar study. Critical thinking, research skills, and applied communication units prepare the student for further academics or vocational preparation. Summer Reading: SUGGESTED

1140H  HONORS ENGLISH 10
Grade 10
Pre-requisite(s): "B" or better in English 9
Credit: One (weighted +.5)

Students will focus on a multi-phased program emphasizing the four areas of study covered by the Standards of Learning: communication (speaking, listening, media literacy), reading, writing and research. Students will focus on an in-depth study of the writing process plus a comprehensive review of usage and mechanics integrating the composition and grammar study. The student will be challenged to analyze literature, use critical thinking skills, and higher order thought processes. Students will complete projects and research papers. Summer Reading: REQUIRED
ENGLISH 11
Grade 11
Pre-requisite(s): Successful completion of English 10
Credit: One
SOL: Reading and Writing End-of-Course Testing REQUIRED

Students will cover a wide range of activities demanded by the four strands of the Standards of Learning: communication (speaking, listening, media literacy), reading, writing and research. Emphasis is given to standard usage and correct grammar. Reading assignments stress comprehension and the ability to draw logical conclusions. Summer Reading: SUGGESTED

HONORS ENGLISH 11
Grade 11
Pre-requisite(s): "B" or better in English 10
Credit: One (weighted + .5)
SOL: Reading and Writing End-of-Course Testing REQUIRED

Students will cover a wide range of activities demanded by the four strands of the Standards of Learning: communication (speaking, listening, media literacy), reading, writing and research. Literary studies follow a historical sequence that parallels coverage in US History and relates to philosophical backgrounds of American literature. Emphasis is placed on critical thinking skills, analytical skills, college readiness, and independent reading. Summer Reading: REQUIRED

ENGLISH 12
Grade 12
Pre-requisite(s): Successful completion of English 11
Credit: One

Students will cover a wide range of activities demanded by the four strands of the Standards of Learning: communication (speaking, listening, media literacy), reading, writing and research. Emphasis is placed on correct usage, on reading for understanding, and on mastery of paragraph writing, and short compositions. Practical skills are taught through units in test-taking strategies, completion of employment and school applications, and writing of business correspondence. Basic research methods and the use of research materials are refined through completion of a research paper. Summer Reading: SUGGESTED

HONORS ENGLISH 12
Grade 12
Pre-requisite(s): "B" or better in English 11
Credit: One (weighted + .5)

Students will cover a wide range of activities demanded by the four strands of the Standards of Learning: communication (speaking, listening, media literacy), reading, writing and research. Students will follow a multi-phased program emphasizing reading, critical thinking, and development of ideas for both personal and analytical writing and speaking skills. Literary studies cover chronological and thematic study of British and Western literature. Group activities plus individual speaking assignments are intended to polish and refine oral performance. Summer Reading: REQUIRED
1195  ADVANCED PLACEMENT LITERATURE and COMPOSITION
Grade 12
Pre-requisite(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
Grade 11-12
Pre-requisite(s): “B” or better in English 10 or
Honors English 10 or English II or Honors English 11 or AP Language and Composition
Credit: One (weighted +1)
SOL: Reading and Writing End-of-Course Testing SUGGESTED
AP Exam: Optional

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

DE1600  DUAL CREDIT ENGLISH COMPOSITION
Grade 11-12
Pre-requisite(s): “B” or better in English 10 or
Honors English 10 or English II 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
Grades 9-12
Pre-requisite(s): English 8
Credit One

Students further their reading skills through comprehension and vocabulary study. Students will learn reading study skills, writing, and research skills. Students will use a variety of multimedia programs in the computer lab combined with direct instruction in the use of word recognition and context to build vocabulary, conventions of print and electronic understanding and comprehension of text, strategic reading to increase comprehension and enhance learning and retention, and writing in response to text. Independent reading will be incorporated to build fluency, expand vocabulary, provide practice, and increase the enjoyment of reading.
1200  JOURNALISM
Grades 11-12
Pre-requisite(s): "C" or better in previous English class.
Credit: One
Students will study print and/or broadcast media along with a beginning study of black and white and color photography. Students will learn to organize and write news, sports, features, and editorial articles. The class involves learning types of journalistic writing. The student is assumed to be competent in sentence and paragraph structure.

1300  FUNDAMENTALS OF PUBLIC SPEAKING
Grades 10-12
Pre-requisite(s): English 9
Credit: One
Students will present original speeches, study the communication process, critique speeches delivered by others, participate in group discussions, and learn to conduct and participate in meetings according to parliamentary procedures. Students will gather, evaluate, organize, and articulate information in an interesting and meaningful manner. In addition, students will learn to defend and refute issues and develop skills in research, critical thinking, and organization of ideas. Upon successfully completing the course, students will be able to speak effectively and confidently in formal, informal, and business communication situations.

1171  CREATIVE WRITING
Grades 10-12
Pre-requisite(s): English 9
Credit: One
This course is an introduction to the major genres of creative (imaginative) writing, including fiction, poetry, drama, and personal essay (creative nonfiction). The class will examine the creative process through experimentation with a variety of creative exercises. The types of experimental writing will examine the technical elements of fiction, poetry, and drama. In addition, the course will feature reading, analyzing, and critiquing a variety of literary examples, including the students’ writings. The course members will compose stories, poems, and dramatic scenes. Finally, this course will prepare the students for more advanced work in creative writing, including fiction and poetry writing.

1517  ADVANCED CREATIVE WRITING
Grades: 11-12
Pre-requisite(s): Creative Writing
Credit: One
Students will complete in-depth study and practice in fiction writing and poetry, including but not limited to: narrative voice and speaker, plotting and pacing, meter and rhyme, use of figurative language and allusions, developing characters, point of view, them, setting and description. Students will create and public a literary magazine/newspaper and explore the areas of self-publishing through examination of formatting, publishing, and marketing. Students will complete a long-term project and prepare for self-publication at the conclusion of the course.
Foreign Language
Course Sequences and Descriptions

5990  AMERICAN SIGN LANGUAGE I
Grades 9-12
Pre-requisite(s): none
Credit: One

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

5995  AMERICAN SIGN LANGUAGE II
Grades 10-12
Pre-requisite(s): “C” or better in Sign Language I recommended
Credit: One

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

5997  AMERICAN SIGN LANGUAGE III
Grades 11-12
Pre-requisite(s): “C” or better in Sign Lang. II recommended
Credit: One

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

5998  HONORS AMERICAN SIGN LANGUAGE IV
Grades 11-12
Pre-requisite(s): “B” or better in American Sign Language III.
Credit: One (weighted +.5)

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

5010
Grades 9-12
Pre-requisite(s):  “C” or better in English 8
Credit: One

The students will develop the ability to communicate through listening, speaking, reading and writing. Students will explore traditions, dress, foods, holidays and customs of Arabic countries. Additionally, the students will compare Arabic cultures with their own environment and create a language portfolio. (Virtual Virginia)

Chinese I - VV

5810
Grades 9-12
Pre-requisite(s):  “C” or better in English 8
Survey of World Language and Culture (recommended).
Credit: One

Students will develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication will be evident in all four language skills – listening, speaking, reading and writing – with emphasis on the ability to communicate orally and in writing. Students will begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. Student work will be required outside of class time. (Virtual Virginia)

FRENCH I

5110
Grades 8-12
Pre-requisite(s):  “C” or better in English 8
Credit: One

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

FRENCH II

5120
Grades 9-12
Pre-requisite(s):  “C” or better in French I recommended
Credit: One

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

FRENCH III

5130
Grades 10-12
Pre-requisite(s):  “C” or better in French II recommended
Credit: One

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

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

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

HONORS FRENCH V

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

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

LATIN I

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

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

LATIN II

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

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

LATIN III

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

Students will receive instructions on the subjective mood, deponent verbs, and other irregular verbs. The Latin III students will learn more vocabulary and more complicated grammatical constructions that enable them to translate selected passages by the text authors and classical authors. Students will learn more about the history and culture of the ancient Roman world through research on various topics of interest pertaining to the ancient Romans.
5340  HONORS LATIN IV
Grades 11-12  
Pre-requisite(s):  “B” or better in Latin III  
Credit:  One (weighted + .5)  

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

Summer Assignment: REQUIRED

5350  HONORS LATIN V
Grade 12  
Pre-requisite(s):  “B” or better in Latin V  
Credit:  One (weighted +.5)  

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

Summer assignment required.

5510  SPANISH I
Grades 8-12  
Pre-requisite(s):  “C” or better in English 8  
Credit:  One  

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

5520  SPANISH II
Grades 9-12  
Pre-requisite(s):  C” or better in Spanish I recommended  
Credit:  One  

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

5530  SPANISH III
Grades 10-12  
Pre-requisite(s):  “C” or better in Spanish II recommended  
Credit:  One  

Students will thoroughly review vocabulary and grammar studied in Spanish I and II while continuing to learn new vocabulary and grammar. The basic skills of listening, speaking, reading, and writing will continue to be stressed, as well as the culture of the Spanish-speaking countries. Teacher and students will communicate in the targeted language during at least 90% of the class.
5540 HONORS SPANISH IV
Grades 11-12
Pre-requisite(s): “B” or better in Spanish III
Credit: One (weighted + .5)

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

5550 HONORS SPANISH V
Grade 12
Pre-requisite(s): “B” or better in Spanish IV
Credit: One (weighted + .5)

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

5570 ADVANCED PLACEMENT SPANISH LANGUAGE
Grades 11-12
Pre-requisite(s): “B” or better in Spanish IV
Credit: One (weighted +1)
AP Exam: Optional

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

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

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

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

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

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

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

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

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

2215 WORLD HISTORY AND GEOGRAPHY TO 1500 A.D.
Grade 9
Pre-requisite(s): None
Credit: One
SOL: End-of-Course Testing REQUIRED

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

2215H HONORS WORLD HISTORY AND GEOGRAPHY to 1500 A. D.
Grade 9
Pre-requisite(s): “B” or better in Grade 8 – History
Credit: One (weighted + .5)
SOL: End-of-Course Testing REQUIRED

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

2215 WORLD HISTORY AND GEOGRAPHY 1500 A.D. TO PRESENT
Grade 10
Pre-requisite(s): World History and Geography to 1500 A.D.
Credit: One
SOL: End-of-Course Testing REQUIRED

Students will study the Western Civilization and its impact upon non-western civilizations. They will discuss geographic influences on history as well as political boundaries that developed with the scientific and technological revolutions that created economic, social, and political changes. The people and events of the 19th and 20th centuries will be emphasized for their connections to contemporary issues. Through the use of basic social studies skills and a variety of critical thinking skills, students will develop competence in chronological thinking, historical comprehension, and historical analysis.
2216H  HONORS WORLD HISTORY AND GEOGRAPHY FROM 1500 A.D. TO PRESENT
Grade 10
Pre-requisite(s): “B” or better in World History and Geography to 1500 A.D
Credit: One (weighted + .5)
SOL: End-of-Course Testing REQUIRED

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

2399  ADVANCED PLACEMENT EUROPEAN HISTORY
Grades 10-12
Pre-requisite(s): “B” or better in World History and Geography to 1500 A.D. or Honors World History and Geography to 1500 A.D.
Credit: One (weighted +1)
SOL: End-of-Course Testing and/or AP Exam (optional)

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

2360  VIRGINIA AND UNITED STATES HISTORY
Grade 11
Pre-requisite(s): World History and Geography to 1500 A.D.
Credit: One
SOL: End-of-Course Testing REQUIRED

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

2360H  HONORS VIRGINIA AND UNITED STATES HISTORY
Grade 11
Pre-requisite(s): “B” or better in World History and Geography 1500 A.D. to present or Honors World History Geography 1500 A. D. to present
Credit: One (weighted + .5)
SOL: End-of-Course Testing REQUIRED

Students will expand their study of the rise of the American nation and its development with international interests and influences through the 21st century. Major emphases include areas of ideas, thoughts, and philosophies which served as the backbone of the political, economic, and social contributions of various groups throughout the important stages of development. Summer Assignment: REQUIRED
2319  ADVANCED PLACEMENT UNITED STATES HISTORY
Grade 11
Pre-requisite(s):  “B” or better in World History and Geography 1500 A.D. to Present or Honors World History and Geography 1500 A.D. to Present
Credit:  One (weighted + 1)
AP Exam:  Optional
Students will use their analytical skills and factual knowledge to deal critically with the problems in United States history. The course includes extensive reading including summer assignments. Students will be prepared for intermediate and advanced college courses by meeting demands equivalent to those of full year introductory college courses.
Summer Assignment: REQUIRED

DE2950  DUAL CREDIT UNITED STATES HISTORY
Grade 11 (12th may take as elective)
College Code:  HIS 121 and HIS 122
SOL:  End-of-Course Testing REQUIRED
Pre-requisite(s):  “B” or better in World History and Geography 1500 A.D. to present, Honors World History and Geography 1500 A.D. to present, and students must meet the Virginia Placement Test (VPT) criteria for the PDCCC, or have taken the ACT, SAT or PSAT.
Credit:  One (1) high school (weighted +1); 6 hours of college credit (upon successful completion)
Students will study all aspects of American History with particular attention to the political, economic, social, military, intellectual, and cultural events. The first semester will survey prehistoric American through Post Civil War Reconstruction. The second semester will survey the rise of industry and cities in the 19th century through U.S. challenges and policies in the 20th century.

2440  VIRGINIA and UNITED STATES GOVERNMENT
Grade 12
Pre-requisite(s):  Virginia and United States History or Honors VA and US History
Credit:  One
Students will develop the skills and knowledge necessary for becoming an informed and responsible citizen. Students will develop a basic understanding of the U.S. Constitution and the three branches of government on the federal and state levels. The values and principles of America’s democratic system will be emphasized. This course will focus on the awareness of basic rights and responsibilities of a productive citizen in a democratic society.

2440H  HONORS VA and U.S. GOVERNMENT
Grade 12
Pre-requisite(s):  “B” average in VA & US History or Honors VA & US States History
Credit:  One (weighted + .5)
Students will expand their study of structure, function, and relationships of state, local, and national government within our federal system. Specific areas of study will allow students to analyze the process of policy making and its impact on economics, political parties, interest groups, and the media. Summer Assignment: REQUIRED
ADVANCED PLACEMENT U.S. GOVERNMENT AND POLITICS

Grade 12
Pre-requisite(s): “B” or better in VA & US History or Honors VA & U.S. States History
Credit: One (weighted +1)
AP Exam: Optional
Students will complete studies in high school equivalent to a one-semester college introductory course in United States Government and Politics. **Summer Assignment: REQUIRED**

DUAL CREDIT UNITED STATES GOVERNMENT

Grade 12
Pre-requisite(s): “B” or better in VA and US History, DC US History, or AP US History. Students must also meet the VPT criteria for PDCCC.
Credit: One (1) high school (weighted + 1); 6 hours of college credit (upon successful completion)
College Code: PLS 211 and PLS 212
Students will expand their study of structure, operation, and process of national, state, and local governments. Includes in-depth study of the three branches of the government and of public policy.

SOCIOMETRY

Grades 11-12
Pre-requisite(s): None
Credit: One
Students will examine the basic concepts, principles, and methods central to the scientific study of sociology - the science that studies human society and social behavior. It offers students an introduction to the use of the scientific method as it applies to sociology and provides an introduction to the methods sociologists use to describe and analyze social life.

ECONOMICS

Grades 11-12
Pre-requisite(s): None
Credit: One
Students will study the basic elements of the American economy: corporate business, labor unions, and the impact of the various levels of government on the traditional concept of the market economy. How prices are determined; the concept of money, banking, monetary, and fiscal policy; national income; and international trade are introduced. The social, political, and economic impact on decisions made by business, labor, government, and consumers are studied. Students will participate in an applied economics program and a stock market simulation.

HUMANITIES/ MULTICULTURAL STUDIES

Grades: 11-12
Pre-requisite(s): None
Credit: One
Students will explore the historical development of immigration in America from exploration to present. Students will examine the diversity of Americans and their impact on United States history. Students will identify the values, customs, culture, vocabulary, and diversity of different ethnic groups. Students will develop ways to reduce prejudice, foster tolerance, and build a commitment to the American ideals of pluralism and democracy. Students will explore the different cultural elements such as religion, language, historical traditions, and customs of our American society.

ADVANCED PLACEMENT PSYCHOLOGY

Grades: 11-12
Pre-requisite(s): “B” or better in the previous year Social Studies course
Credit: One (weighted +1)
Students will be introduced to the systemic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice.

DE2951  DUAL CREDIT INTRODUCTION TO PSYCHOLOGY
Grade 11 or 12
Pre-requisite(s): “B” or better in English 10 or Honors English 10, and students must meet the Virginia Placement Test (VPT).criteria for the PDCCC, or have taken the ACT, SAT or PSAT.
Credit: One (1) high school (weighted + 1); 6 hours of college credit (upon successful completion)
College Code: PSY 201 and PSY 202
Students will examine human and animal behavior, relating experimental studies to practical problems. Topics will include sensation/perception, learning, motivation, intelligence, psychopathology, and therapy and social – psychology.
Mathematics
Course Sequences and Descriptions

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

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

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

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

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

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

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

Students will be introduced to the fundamental theory and structure of algebra. Content of this course includes rational numbers, equations, inequalities, radical expressions, translations and applications, relations, functions, graphing, systems of equations and inequalities, polynomials, factoring, quadratics, statistics, and word problems. The topics require students to use algebra as a tool for representing and solving a variety of practical problems. Teachers and students will use graphing calculators.
3134 ALGEBRA, FUNCTIONS, AND DATA ANALYSIS
Grade 9-12
Pre-requisite(s): "C" or below in Algebra I OR "C" or below in Geometry
Credit: One

This course is designed for students who have completed the standards for Algebra I. Within the context of mathematical modeling and data analysis, students will study functions and their behaviors, systems of inequalities, probability, experimental design and implementation, and analysis of data. Data will be generated by practical applications arising from science, business, and finance. Students will solve problems that require the formulation of linear, quadratic, exponential, or logarithmic equations or a system of equations. Additionally, students will use a transformational approach to graphing functions and writing equations.

3143 GEOMETRY
Grades 8-12
Pre-requisite(s): "B" or better in Algebra I or Algebra I, part 2 (highly recommended) OR successful completion of AFDA
Credit: One
SOL: End-of-Course Testing REQUIRED

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

3143H HONORS GEOMETRY
Grade 9-12
Pre-requisite(s): "B" or better in Algebra I
A 435 scale score on Alg I SOL (Highly Recommended)
Credit: One (weighted + .5)
SOL: End-of-Course Testing REQUIRED

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

3143 GEOMETRY with LAB
Grades 9-12
Pre-requisite(s): Successful completion of Algebra I, Part 2 or Algebra I or AFDA
Credit: Two (one mathematics credit and one elective credit)
SOL: End-of-Course Testing REQUIRED

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 10-12  
Pre-requisite(s):  "C" or better in Geometry or Honors Geometry (highly recommended) OR successful completion of AFDA  
Credit: One  
SOL: End-of-Course Testing REQUIRED  

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 10-12  
Pre-requisite(s):  "B" or better in Honors Geometry or Geometry AND "B' or better in Algebra I  
Credit: One (weighted +.5)  
SOL: End-of-Course Testing REQUIRED  

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

3154  DISCRETE MATHEMATICS  
Grade 11 or 12  
Pre-requisite(s): Successful completion of Algebra II or Honors Algebra II  
Credit: One  

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

3162  MATHEMATICAL ANALYSIS/PRE-CALCULUS  
Grade 11 or 12  
Pre-requisite(s):  "B" or better in Algebra II or Honors Algebra II  
Credit: One (weighted +.5)  

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

3190  PROBABILITY AND STATISTICS  
Grade 11 or 12  
Pre-requisite(s): Successful completion of Algebra II or Honors Algebra II  
Credit: One  

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

3177 ADVANCED PLACEMENT CALCULUS AB
Grade 12
Pre-requisite(s): "B" or better in Mathematical Analysis or DC Pre-Calculus
Credit: One (weighted + 1)
AP Exam: Optional

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

3192 ADVANCED PLACEMENT STATISTICS
Grade 12
Pre-requisite(s): "B" or better in Algebra II or Honors Algebra II. Pre-Calculus/Mathematical Analysis and or Probability and Statistics recommended.
Credit: One (weighted + 1)
AP Exam: Optional

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

DE3230 DUAL CREDIT PRE-CALCULUS
Grade 11 or 12
Pre-requisite(s): "B" or better in Algebra II or Honors Algebra II and Trig. Students must score 50 or above on the mathematics placement test administered by Paul D. Camp Community College.
Credit: One (1) high school (weighted + 1); 6 hours of college credit (upon successful completion)
College Code: MATH 161 and MATH 162

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

DE3231 DUAL CREDIT CALCULUS
Grade 11 or 12
Pre-requisite(s): "B" or better in DC Pre-Calculus, or Mathematical Analysis. 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); 8 hours of college credit (upon successful completion)
College Code: MATH 263 & MATH 264

Students will study topics in differential calculus of one variable including the theory of limits, derivatives, differentials, definite and indefinite integrals and application to algebra and transcendental functions. Additionally, students will complete studies on vectors in three dimensions, definite integrals, methods of integration, indeterminate forms, partial differentiation, and multiple integrals.
3186  DUAL CREDIT MICRO-COMPUTERS (Introduction to Computer Applications)
Grade 11 or 12
Pre-requisite(s): Keyboarding (high school or middle school) and students must meet the Virginia Placement Test (VPT) criteria for the PDCCC Credit: One (1) high school (weighted + 1); 6 hours of college credit (upon successful completion)
College Code: ITE 115 and ITE 215 (to be taken on PDCCC campus)

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

4269
ENVIRONMENTAL SCIENCE
Grade 9-12
Pre-requisite(s): None
Credit: One

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

4210
EARTH SCIENCE
Grade 8-12
Pre-requisite(s): None
Credit: One
SOL: End-of-Course Testing REQUIRED

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.

4210H
HONORS EARTH SCIENCE
Grades 9-12
Pre-requisite(s): “B” or better in Physical Science
Credit: One (weighted +.5)
SOL: End-of-Course Testing REQUIRED

Students in this laboratory course will be involved in a detailed study of geology, astronomy, oceanography, meteorology, and conservation. Students will participate in studies, projects, and discussions comparing the processes that caused the development of the planet and the universe to its current state and how it is projected to evolve in the future. Students will develop and conduct experiments demonstrating Earth’s processes and how they interact with each other. As a result of these experiments, students will analyze their results, develop logical conclusions, and reconcile their failures. These laboratory exercises will allow students to relate Earth processes to themselves and their surroundings. This course is a detailed survey of Earth processes (with an emphasis on nomenclature, geology, meteorology, oceanography) and how they interrelate to produce the climates and conditions throughout the planet. Students will take the Earth Science End of Course Assessment near the end of the course. Students will be required to produce an Earth Science research-based project. Summer Assignment: REQUIRED

4310
BIOLOGY
Grade 9-12
Pre-requisite(s): Earth Science recommended
Credit: One
SOL: End-of-Course Testing REQUIRED
Students will investigate and understand the following topics: kingdoms of life with emphasis on nomenclature, life processes, anatomy, and the interdependence of the kingdoms of life and ecology, cell structure and function. Science investigations are required.

### 4310 H  
**HONORS BIOLOGY**

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

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

### 4370  
**ADVANCED PLACEMENT BIOLOGY**

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

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

### DE4700  
**DUAL CREDIT BIOLOGY**

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

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

### 4250  
**OCEANOGRAPHY**

**Grade 11 or 12**  
Pre-requisite(s): Algebra I or Algebra I Part 2, Biology, and Earth Science  
Credit: One

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

### 4340  
**ECOLOGY**
Grade 11 or 12
Pre-requisite(s): Algebra I or Algebra I Part 2, Biology, and Earth Science
Credit: One

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

4410 CHEMISTRY
Grades 10-12
Co/Pre-requisite(s): “C” or better in Algebra II or Honors Algebra II
Credit: One
SOL: End-of-Course Testing REQUIRED

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

4410H HONORS CHEMISTRY
Grade 10-12
Co/Pre-requisite(s): “B” or in Algebra II or Honors Algebra II
Credit: One (weighted + .5)
SOL: End-of-Course Testing REQUIRED

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

4330 ANATOMY and PHYSIOLOGY
Grade 11-12
Co/Pre-requisite(s): “C” or better in Biology or Honors Biology
Credit: One (weighted + .5)

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

4470 ADVANCED PLACEMENT CHEMISTRY
Grade 11-12
Pre-requisite(s): “B” or better in Chemistry or Honors Chemistry
Credit: Two (weighted + 1)
AP Exam: Optional

Students will attain a depth of understanding of fundamentals and reasonable competence in dealing with chemical calculations and the mathematical formulation of principles of chemistry. Topics include: atomic structure, stoichiometry, thermodynamics, gas laws, kinetics, reactions in solutions, acid/base reactions, molecular geometry dynamic equilibrium, and nuclear chemistry. Summer Assignment: REQUIRED
DE4701  DUAL CREDIT COLLEGE CHEMISTRY I/II
Grade 11 or 12
Pre-requisite(s): “B” or better in Chemistry; Honors Chemistry recommended
Credits: Two lab science units (weighted + 1); 6 hours of college credit (upon successful completion) - students must meet the Virginia Placement Test (VPT).criteria for the PDCCC, or have taken the ACT, SAT or PSAT.
College Code: CHM 111 and CHM 112 (to be taken on PDCCC campus)

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

4270  ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE
Grade 11 or 12
Pre-requisite(s): “B” or better in Biology or Honors Biology, and Chemistry or Honors Chemistry or currently enrolled in Chemistry or Honors Chemistry.
Credit: Two (weighted + 1)
AP Exam: Optional

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

4510  PHYSICS
Grade 11 or 12
Pre-requisite(s): “B” or better in Algebra II or Honors Algebra II
Credit: One (weighted + .5)

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

4570  ADVANCED PLACEMENT PHYSICS 1
Grade 11 or 12
Pre-requisite(s): “B” or better in Algebra II or Honors Algebra II
Credit: One (weighted + 1)

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

Art  
Course Sequences and Descriptions

ART: Courses fulfill the Fine Arts requirement for graduation.

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

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

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

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

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

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

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

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

Grade 11 or 12

Pre-requisite(s): Open to all students with interest in art history – students must meet Virginia Placement Test (VPT). criteria for the PDCCC, or have taken the ACT, SAT or PSAT.

Credit: One (weighted +1)

Course Code: ART 101 and ART 102 – meet PDCCC Compass criteria (to be taken on PDCCC campus)

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

MUSIC: Courses fulfill the Fine Arts requirement for graduation.

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

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

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

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

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

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

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

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

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

Students will explore instrumental music in depth. Emphasis is placed on advanced playing techniques and terminology. Performance is required.
9238  INTERMEDIATE ORCHESTRA
Grades 9-12
Pre-requisite(s): Middle school string class, private study, or audition
Credit: One

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

9239  ADVANCED ORCHESTRA
Grades 9-12
Pre-requisite(s): Intermediate orchestra, private study, or audition
Credit: One

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

9260  BEGINNER CHORUS
Grades 9-12
Pre-requisite(s): None
Credit: One

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

9285  INTERMEDIATE CHORUS (MIXED CHORUS - UNSELECTED)
Grades 9-12
Pre-requisite(s): Beginner Chorus or Audition
Credit: One

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

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

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

ADVANCED CHORUS (MIXED CHORUS--SELECTED)

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

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

THEATRE: Courses fulfill the Fine Arts requirement for graduation

1410 THEATRE I
Grades 10-12
Pre-requisite(s): None
Credit: One Fine Arts elective

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

1420 THEATRE II
Grades 11-12
Pre-requisite(s): Theatre I
Credit: One Fine Arts elective

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

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

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

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

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

MILITARY SCIENCE—AIR FORCE JUNIOR ROTC I (AF7913)

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

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

Concentration/Specialization Sequences
AFJROTC I and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
  • JROTC II (AF7916)
  • JROTC III (AF7918)
  • JROTC IV (AF7919)

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

MILITARY SCIENCE—AIR FORCE JUNIOR ROTC II (AF7916)

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

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

Concentration/Specialization Sequences
AFJROTC II and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
  • AFJROTC I (AF7913)
  • AFJROTC III (AF7918)
  • AFJROTC IV (AF7919)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
MILITARY SCIENCE—AIR FORCE JUNIOR ROTC III (7AF7918)

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

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

Concentration/Specialization Sequences  
AFJROTC III and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
- AFJROTC I (AF7913)  
- AFJROTC II (AF7916)  
- AFJROTC IV (AF7919)  

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

MILITARY SCIENCE—AIR FORCE JUNIOR ROTC IV (AF7919)

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

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

Concentration/Specialization Sequences  
AFJROTC IV and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
- AFJROTC I (AF7913)  
- AFJROTC II (AF7916)  
- AFJROTC III (AF7918)  

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
CAREER AND TECHNICAL EDUCATION COURSES
Career and Technical Education Program

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

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

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

CTE Sequences

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

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

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

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

Industry Credentialing

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

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 credits will be awarded for certification or licensure examinations that meet all of the following criteria:

- Industry certification or licensure examinations that are approved to satisfy the requirements for the Board of Education’s Career and Technical Education Seal or the Board of Education’s Seal of Advanced Mathematics and Technology.
- The teacher and/or the CTE program must be certified by the issuing organization relative to the industry certification or license.
- A standard credit may not be verified more than once.
Standards of Learning (SOL)
All career and technical education courses require strong academic skills. Virginia’s academic standards in English, mathematics, science, and history/social science are reinforced in career and technical education classes through real-world applications.

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

All students who entered the ninth grade for the first time in 2013-2014 and beyond must earn a Virginia Department of Education approved Career and Technical Education (CTE) credential to graduate from a Virginia high school with a standard diploma.
Agriculture, Food & Natural Resources

The Agriculture, Food & Natural Resources cluster is about the 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 Future Farmers of America (FFA) and/or Health Occupation 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

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related agribusiness systems and/or animal systems career pathway.

The Virginia Future Farmers of America (FFA) Organization
https://www.vaffa.org/
Leadership training is provided through The Virginia FFA student organization. The organization is an integral part of the agricultural education program and provides all agricultural education students opportunities to apply knowledge and skills learned in the classroom. Leadership activities enhance the experiences of the students.

The Virginia Health Occupations Students of America (HOSA)
http://www.vahosa.org/
Leadership training is provided through the HOSA student organization. HOSA is the recognized co-curricular student organization for approved Health Occupations Education programs and courses. HOSA activities reinforce the skills, knowledge, and behavior that contribute to successful employment.

Agricultural Business Fundamentals (8022)
Grades: 10-12
Prerequisite: Foundations of Agriculture, Food, and Natural Resources or Introduction to Animal Systems
Credit: One (1)
Industry Credential Available: Workplace Readiness for the Commonwealth

Students will develop the necessary knowledge, skills, habits, and attitudes for employment in off-farm agricultural businesses. Where training centers are available, cooperative arrangements with local agricultural businesses provide work-based learning experiences for students. When training centers are not available, simulated experiences may be provided. Leadership training is provided through the FFA. Completion of this course will contribute to the student’s preparation for the Workplace Readiness for the Commonwealth certification examination.

Students who have not earned the Workplace Readiness Skills for the Commonwealth credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit. Students who have previously passed this assessment will not be tested.
Concentration/Specialization Sequences
Agricultural Business Fundamentals (8022) and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
- Agricultural Business Operations (8024)

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

Agricultural Business Operations (8024)
Grades: 11-12
Prerequisite: Agricultural Business Fundamentals
Credit: One (1)
Industry Credential Available: Workplace Readiness for the Commonwealth

The course builds upon knowledge gained and skills developed in Agricultural Business Fundamentals and emphasizes agricultural occupations, business procedures, merchandising, marketing, agricultural business management, and emerging or niche markets. Instruction is provided in agricultural product knowledge, agricultural service industry knowledge, and leadership development. Completion of this course will contribute to the student's preparation for the Workplace Readiness for the Commonwealth certification examination.

Students who have not earned the Workplace Readiness Skills for the Commonwealth credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit. Students who have previously passed this assessment will not be tested.

Concentration/Specialization Sequences
Agricultural Business Operations (8024) and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
- Agricultural Business Fundamentals (8022)

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

Foundations of Agriculture, Food and Natural Resources (8006)
Grades: 09-10
Prerequisites: None
Credit: One (1)

Students will develop competencies in each of the career pathways as they pertain to agricultural education, including the areas of Virginia’s agriculture industry; the global scope of agriculture; scientific research concepts in plant, animal, and food science; principles of leadership and opportunities within student organizations; agribusiness and Supervised Agricultural Experience program opportunities; agricultural skills and safety in power, structural, and technical systems; and natural resources and environmental systems.

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

Concentration/Specialization Sequences
None
Introduction to Animal Systems (8008)

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

Students develop competencies in each of the major areas of the Animal Systems career pathways 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 opportunities within student organizations, and along with supervised agricultural work-based learning experiences.

Concentration/Specialization Sequences
None

Veterinary Science (8088/8089)
(Classes Held at The College & Career Academy At Pruden)

Grades: 11-12
Prerequisites: Introduction to Health and Medical Sciences recommended
Credits: Three per course

Industry Credential Available: Small Animal Science & Technology Assessment

Students will learn animal science and the care of animals, including animal structure and function, principles of health, and microbes and disease. They develop basic skills and techniques of assisting the veterinarian in the following areas: receptionist duties; animal examinations; examining room and laboratory work; the handling, caring, and feeding of animals; first aid and surgery; and maintenance of equipment and facilities. On-the-job clinical instruction may occur in veterinary offices or animal clinics and is coordinated by the health occupations teacher. In Year II, the student may incorporate a cooperative work experience that combines classroom instruction with two or three hours of school released time for on-the-job training in a healthcare facility such as a veterinarian’s office or clinic.

Successful completion of this course, in conjunctions with a passing score on the National Occupational Competency Testing Institute (NOCTI), Small Animal Science & Technology Assessment, enables student completers the opportunity to earn an industry certification within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
Veterinary Assistant I (8310) and the following 36-week course, equivalent to a total of two 36-week courses:
  - Veterinary Assistant II (8311)

Veterinary Assistant II (8311) and the following 36-week course, equivalent to a total of two 36-week courses:
  - Veterinary Assistant I (8310)

*Students wishing to complete a specialization may take additional courses appropriate to their career pathways.*
Architecture and Construction

The Architecture and Construction cluster is about careers in designing, planning, managing, building, and maintaining the built environment. Think about your home, school, or local retail center. Careers in this cluster are responsible for the details of designing, constructing, and equipping these buildings.

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

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related construction and/or design/pre-construction career pathway.

Technology Student Association (TSA)
http://virginiatsa.org/
Leadership training is provided through the TSA student organization. The TSA prepares students for the challenges of a dynamic world by promoting technological literacy, leadership, and problem solving, resulting in personal growth and opportunities. “Learning to live in a Technical World” is the motto of TSA.

SkillsUSA
http://www.skillsusa.org/
SkillsUSA Virginia is the student organization for students who are enrolled in career and technical trade and industrial occupations in Virginia’s high schools and community colleges.

Architectural Drawing and Design (8437)
Grades: 10-12
Prerequisite: Technical Drawing and Design (8435)
Credit: One (1)
Industry Credential Available: AutoCAD 2014 (or newer version) Certification

Students will explore architectural design foundations and increase understanding of working drawings, construction techniques, and codes regulating building design. They learn the design process and apply the elements and principles of design to architectural projects. Through producing models and illustrations of all aspects of a building, students create architectural design solutions using CADD (computer aided drafting and design). Completion of this course will contribute to a student’s preparation for the AutoCAD certification examination.

Students who have not earned the AutoCAD Certification will be administered the assessment. This assessment validates the student’s knowledge and skills in using the design/drafting AutoCAD software program. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.
Concentration/Specialization Sequences
Architectural Drawing and Design (8437) and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
- Digital Visualization (8459)
- Engineering Drawing and Design (8436)
- Technical Drawing and Design (8435)

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

Building Trades I & II (8515/8516)
(Classes Held at The College & Career Academy At Pruden)

Grades: 11-12
Credits: Three per course

Industry Credential Available: National Center for Construction Education & Research

Students will learn four basic trades of the construction industry: plumbing, electricity, masonry, and carpentry. Residential construction will be the major thrust with limited exposure to commercial and industrial construction. The first year will introduce the student to the fundamentals of the building trades, including job safety, measurement, practical math, materials, and basic training in electricity, plumbing, masonry and carpentry. The second year will consist of a real job experience as the students build structures to demonstrate learned skills. Students will have an opportunity to gain hands-on experience in all four areas as they participate in the house construction project.

Successful completion of this course, in conjunctions with a passing score on the National Center for Construction Education and Research industry certification, enables student completers the opportunity to earn an industry certification within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
Building Trades I (8515) and the following 36-week course, equivalent to a total of two 36-week courses:
- Building Trades II (8516)

Building Trades II (8516) and the following 36-week course, equivalent to a total of two 36-week courses:
- Building Trades I (8515)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Utility/Heavy Construction I (8616)
(Classes Held at The College & Career Academy At Pruden)

Grades: 11-12
Credits Three

Industry Credential Available: Heavy Equipment Operations, Level One

Students will gain both knowledge and hands-on skills needed to secure a job as a construction equipment operator in this one-year program. Students will learn about site grading and development, excavation, pipe laying, road building, surveying, reading blueprints, construction safety, and more. They will have the opportunity to gain experience in operating excavators, bulldozers, loaders, and backhoes. This program is certified by the National Center for Construction Education and Research (NCCER). Students must be at least sixteen years of age.

Successful completion of this course, in conjunction with a passing score on the National Center for Construction Education and Research industry certification, enables student completers the opportunity to earn an industry credential within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
None
Arts, Audio/Video Technology and Communications

The Arts, A/V Technology and Communications cluster is about designing, producing, exhibiting, 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 Option

- Printing Technology
- Visual Arts

Completer Options

A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related printing technology and/or visual arts career pathway.

Technology Student Association (TSA)
http://virginiatsa.org/

Leadership training is provided through the TSA student organization. The TSA prepares students for the challenges of a dynamic world by promoting technological literacy, leadership, and problem solving, resulting in personal growth and opportunities. “Learning to Live in a Technical World” is the motto of TSA.

Communication Systems (8415)

Grades: 09-10
Pre-requisite: None
Credit: One (1)

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

Concentration/Specialization Sequences

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

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

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Digital Visualization (8459)

Grades: 10-12
Prerequisite: Technical Drawing and Design
Credit: One (1)

Industry Credential Available: Workplace Readiness Skills for the Commonwealth Examination

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. Completion of this course will contribute to the student’s preparation for the Workplace Readiness Skills for the Commonwealth Examination credential.

Students who have not earned the Workplace Readiness Skills for the Commonwealth Examination credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a "value-added" component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences
Digital Visualization (8459) and a combination of one or more 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)

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

Graphic Communications Systems (8458)

Grades: 10-12
Prerequisite: Communication Systems
Credit: One (1)

Industry Credential Available: Adobe Photoshop Certified Associate

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 design and layout, composition and assembly, film conversion, image applications, message transfer, and print production. Completion of this course will contribute to the student’s preparation for the Adobe Photoshop Certified Associate credential.

Students who have not earned the Adobe Photoshop Certified Associate credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a "value-added" component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.
Concentration/Specialization Sequences
Graphic Communication Systems (8458) and the following 36-week course, equivalent to a total of two 36-week courses:

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

*Students wishing to complete a specialization may take additional courses appropriate to their career pathways.*
Business Management and Administration

Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Industry and government are beginning to rely more on outside expertise to provide improvements for their organizations. As technology becomes more advanced and businesses begin to expand globally, international expertise will be a valuable skill for individuals in this field. Business Management and Administration career opportunities are available in every sector of the economy.

Through participation in the Future Business Leaders of America (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

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related administrative support, business information management, and/or general management career pathway.

Future Business Leaders of America, Inc. (FBLA)
http://www.vafbla-pbl.org/
Leadership training is provided through the FBLA student organization. The FBLA is the Career and Technical Education student organization designed to develop personal employability and leadership skills for all individuals enrolled in business and information technology courses. Through participation in the organization, business and information technology students learn to engage in individual and group business enterprises, to hold office and direct the affairs of a group, to work with representatives of other student organizations and to compete honorably with their colleagues.

Business Law (6131)

Grades: 11-12
Prerequisites: None
Credit: One (1); two 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 law 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. Completion of this course will contribute to the student’s preparation for the Workplace Readiness Skills for the Commonwealth Examination.

Students who have not earned the Workplace Readiness Skills for the Commonwealth credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “valued-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.
Concentration/Specialization Sequences

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

- Accounting (6320)
- Advanced Accounting (6321)
- Business Management (6135)
- Computer Information Systems (6612)
- Medical Systems Administration (6730)
- Word Processing (6625)

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

Business Management (6135)

Grades: 10-12
Prerequisites: None
Credit: One (1)

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. Student leadership skills may be enhanced by participation in work-based learning opportunities, and/or the Future Business Leaders of America (FBLA).

Students will be administered the NOCTI Business Financial Management Assessment. This assessment validates the student’s knowledge and skills related to the general financial technical skills; business financial management technical skills; academic foundations; systems; ethics and legal responsibilities; communications; information technology applications, problem solving, critical thinking, and decision making; leadership and teamwork; safety, health, and environmental, and employability and career development. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences

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

- Accounting (6320)
- Advanced Accounting (6321)
- Business Law (6131)
- Computer Information Systems (6612)
- Entrepreneurship Education (9093)
- Marketing (8120)
- Medical Systems Administration (6730)
- Word Processing (6625)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
**Computer Information Systems (6612)**

Grades: 10-12  
Prerequisite: Word Processing recommended  
Credit: One (1); two with Cooperative Education  

**Industry Credential Available:** Microsoft Office Specialist Excel and PowerPoint

Students will 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. Completion of this course will contribute to the student's preparation for the Microsoft Office Specialist Excel and PowerPoint credentials.

Students who have not earned the Microsoft Office Specialist Excel and/or PowerPoint credentials will be administered the assessment. This assessment validates the student's skills in a globally recognized standard for demonstrating desktop skills with the Microsoft Office Specialist suite of business productivity applications. Students who earn this industry credential will have a “value-added” component when competing in today's job market, as well as the option of using the credential as a high school student-selected verified credit.

**Concentration/Specialization Sequences**  
Computer Information Systems (6612) and a combination of one or more 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)
- Entrepreneurship Education (9093)
- Keyboarding Applications (6152)
- Medical Systems Administration (6730)
- Word Processing (6625)

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

**Cooperative Education**

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

Cooperative Education is a career preparation method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student’s career objectives and employability. Students may earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve the required minimum of 396 hours to receive one credit. Students should discuss the availability of this program with their high school counselor.
**Keyboarding Applications (6152)**

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

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

This course is designed for students who earned a grade below "C" in the middle school semester keyboarding course or have not completed the middle school keyboarding course. Students will develop and enhance touch skills for entering alphabetic, numeric, and symbol information on a keyboard. Students compose and produce a variety of personal, educational, and professional documents. Completion of this course will contribute to the student’s preparation for the Workplace Readiness Skills for the Commonwealth Examination.

Students who have not earned the Workplace Readiness Skills for the Commonwealth credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “value-added component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

**Concentration/Specialization Sequences**  
**Keyboarding Applications (6152)** and a combination of one or more of the following 36-week courses, equivalent to total of two 36-week courses:
- Accounting (6320)
- Advanced Accounting (6321)
- Computer Information Systems (6612)
- Medical Systems Administration (6730)
- Word Processing (6625)

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

**Medical Systems Administration (6730)**

Grades: 10-12  
Prerequisites: Keyboarding or equivalent course recommended  
Credit: One (1)  

**Industry Credential Available: To Be Determined**

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

Students who have not earned the selected industry credential will be administered the assessment. The assessment will validate the student's skills and abilities that are recognized in the medical workplace as essential for entry-level employees. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

**Concentration/Specialization Sequence**  
**Medical Systems Administration (6730)** and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
- Accounting (6320)
- Advanced Accounting (6321)
Students wishing to complete a specialization may take additional courses appropriate to their career pathways.

Word Processing (6625)

Grades: 9-10
Prerequisite: Keyboarding Applications or Grade "C" or higher in a semester Keyboarding course
Credit: One (1); two with Cooperative Education
Industry Credential Available: Microsoft Office Specialist Word

This course is designed for students who earned a grade above “C” in the middle school semester keyboarding course or students who passed Keyboarding Applications (6152). Students will develop intermediate to advanced levels of word processing skills using a variety of software functions, including graphics, desktop publishing, and telecommunications. Students will gain competence in integrating other applications such as database and spreadsheet into word processing activities. Classroom experiences also provide for skill development in communication. Completion of this course will contribute to the student’s preparation for the Microsoft Office Specialist Word.

Students who have not earned the Microsoft Office Specialist Word credential will be administered the assessment. This assessment validates the student’s skills in a globally recognized standard for demonstrating desktop skills with the Microsoft Office Specialist suite of business productivity applications. Students who earn this industry credential will have a “valued-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequence

Word Processing (6625) and a combination of one or more 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)
- Keyboarding Applications (6152)
- Medical Systems Administration (6730)

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

The Education and Training cluster is about planning, managing and providing education and training services and related learning support services. With an emphasis on improving education services, this cluster holds many career opportunities.

**Academic and Career Pathway Option**
- Teaching and Training

**Completer Options**
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related teaching and training career pathway.

**Educators Rising** *(formerly known as Future Educators Association--FEA)*
https://www.educatorsrising.org/
The mission of Educators Rising cultivates highly skilled educators by guiding young people on a path to becoming accomplished teachers, beginning in high school and extending through college and into the profession

**Cooperative Education**

- Grades: 9-12
- Requirement: Current enrollment in Education for Employment Level I or Level II--Preparation
- 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 396 hours to receive one credit. Students should discuss the availability of this program with their high school counselor.

**Early Childhood Education I & II (8285/8286)**
*(Classes Held at The College & Career Academy At Pruden)*
*(Dual Enrollment - Offered jointly with Paul D. Camp Community College)*

- Grades: 11-12
- Credits: Three per course (Dual Credit - 3 credits per semester)

**Industry Credential Available: (NOCTI) - Early Childhood Education & Care - Basic**

Students will develop the knowledge and skills needed for careers working with young children in this two-year program. Students will learn about child development; nutrition; safety and dealing with emergencies; caring for infants, toddlers, preschoolers, and children with special needs; planning experiences for learning; and creating learning environments. Students are provided with hands-on experience working in preschool classrooms located at The College & Career Academy At Pruden.

Successful completion of this course, in conjunctions with a passing score on the National Occupational Competency Testing Institute (NOCTI), Early Childhood Education & Care – Basic, enables student completers the opportunity to earn an industry certification within that field of study, and/or continue training through post-secondary education.
programs at the associates or baccalaureate levels. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences

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

- Early Childhood Education II (8286)
- Nutrition and Wellness (8229)
- Virginia Teachers for Tomorrow II (9072)

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

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

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

Education for Employment I--Preparation (9078)

Grades: 9-10
Prerequisite: None
Credit: One (1); two 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 includes the Cooperative Education option.

Concentration/Specialization Sequences

None
**Education for Employment II – Preparation (9080)**

Grades: 10-12  
Prerequisite: Education for Employment Level I – Preparation  
Credits: One (1); two with Cooperative Education  
**Industry Credential Available: Workplace Readiness Skills for the Commonwealth Examination**

This course continues to teach students to make informed career and continuing education choices as they transition from school, gain technical skills, and adapt to the workplace. Students are taught to apply ethical behaviors and career-research, job-acquisition, workplace communication, self-awareness, self-advocacy, customer service, and life skills. This course includes the Cooperative Education option. Completion of this course will contribute to the student’s preparation for the Workplace Readiness Skills for the Commonwealth Examination.

Students who have not earned the Workplace Readiness Skills for the Commonwealth credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

**Concentration/Specialization Sequences**

None

---

**Virginia Teachers for Tomorrow I-11th Edition (9062-11/SDV110/EDU100/EDU190)**  
(Dual Enrollment - Offered jointly with Paul D. Camp Community College)

Grades: 11-12  
Prerequisite: 3.0 GPA derived from predominate college preparatory classes, strong interest in teaching and education, five (5) written teacher recommendations  
Credit: One (weighted +1); 6 hours of college credits upon successful completion

This dual credit course introduces high school juniors/seniors to a career in teaching and education. This course will foster students’ interests, understanding, an 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 classroom; and reflect on their teaching experiences. Additional educational leadership opportunities are offered through the student organization, Educators Rising. In addition to the fundamental curriculum components, all students are required to observe and participate in an internship outside the Virginia Teachers for Tomorrow classroom. The internship may be done from the pre-school level through Grade 12.

**Concentration/Specialization Sequences**

*Virginia Teachers for Tomorrow I - 10th Edition (9062-10)* and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
- Early Childhood Education I (8285)
- Early Childhood Education II (8286)
- Virginia Teachers for Tomorrow II (9072)

*Students wishing to complete a specialization may take additional courses appropriate to their career pathways.*
Virginia Teachers for Tomorrow II (9072/EDU198/EDU199)  
(Dual Enrollment - Offered jointly with Paul D. Camp Community College)

Grade: 12  
Prerequisite: Virginia Teachers for Tomorrow I  
Credit: One (weighted +1); 6 hours of college credits upon successful completion

Students continue to explore careers in the Education and Training Cluster and pathway. 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. Pathways may include paid or volunteer employment experiences while the student is still in high school; continuing education opportunities such as college degree programs, apprenticeships, or any combination that will enhance progress toward a career goal. This dual credit course is offered jointly with Paul D. Camp Community College.

Concentration/Specialization Sequences
Virginia Teachers for Tomorrow II (9072) and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:
- Early Childhood Education I (8285)
- Early Childhood Education II (8286)
- Virginia Teachers for Tomorrow I (9062)
- Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Finance

The Finance cluster is about planning, services for financial and investment planning, banking, insurance and business financial management.

Academic and Career Pathway Options
- Business Finance

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related business finance career pathway.

Future Business Leaders of America, Inc. (FBLA)
http://www.vafbla-pbl.org/
Leadership training is provided through the FBLA student organization. The FBLA is the Career and Technical Education student organization designed to develop personal employability and leadership skills for all individuals enrolled in business and information technology courses. Through participation in the organization, business and information technology students learn to engage in individual and group business enterprises, to hold office and direct the affairs of a group, to work with representatives of other student organizations and to compete honorably with their colleagues.

Accounting (6320)

<table>
<thead>
<tr>
<th>Grades:</th>
<th>10-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisites:</td>
<td>None</td>
</tr>
<tr>
<td>Credit:</td>
<td>One (1); two with Cooperative Education</td>
</tr>
</tbody>
</table>

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

Students study the basic principles, concepts, and practices of the accounting cycle for a service business and a merchandising business. Topics covered include analyzing transactions, journalizing and posting entries, preparing payroll records and financial statements, and managing cash systems. Ethics and professional conduct are emphasized. Students learn fundamental accounting procedures using both manual and electronic systems. Computers will be used to automate, analyze, and interpret business applications. Completion of this course will contribute to the student’s preparation for the Workplace Readiness Skills for the Commonwealth Examination.

Students who have not earned the Workplace Readiness Skills for the Commonwealth credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences
Accounting (6320) and a combination of one or more 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)
- Entrepreneurship Education (9093)
Students wishing to complete a specialization may take additional courses appropriate to their career pathways.

Advanced Accounting (6321)

Grades: 11-12
Prerequisites: Accounting
Credits: (One) 1
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.

Students who have not earned the Intuit QuickBooks Certified User credential will be administered the assessment. This assessment validates the student’s skills and abilities in managerial accounting software for small business, providing easy to understand accounting concepts while enhancing skills in the most established bookkeeping application in small business. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences
Advanced Accounting (6321) and a combination of one or more 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)
- Entrepreneurship Education (9093)
- Keyboarding Applications (6152)
- Medical Systems Administration (6730)
- Word Processing (6625)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Economics and Personal Finance (6120)

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


Students learn how economies and markets operate and how the United States economy is interconnected with the global economy. Additionally, they learn how to navigate the financial decisions they must face and to make informed decisions relating to career exploration, budgeting, banking, credit, insurance, spending, financing postsecondary education, taxes, saving and investing, buying/leasing a vehicle, and living independently. They also learn the importance of investing in themselves in order to gain the knowledge and skills valued in the marketplace. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship, more effective participation in the workforce, and career success. Completion of this course will contribute to the student’s preparation for the WISE Financial Literacy Certification.

Students who have not earned the WISE Financial Literacy credential will be administered the assessment. This assessment certifies students as financially literate. Students who earn this industry credential will have a “value-added” component when competing in today’s job market.

Concentration/Sequences
None
Health Science

The Health Science cluster is about planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services and biotechnology research and development.

Academic and Career Pathway Options
Therapeutic Services

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a **specialization** may take additional courses appropriate to their related therapeutic services career pathway.

The Virginia Health Occupations Students of America (HOSA)
http://www.vahosa.org/
Leadership training is provided through the HOSA student organization. HOSA is the recognized co-curricular student organization for approved Health Occupations Education programs and courses. HOSA activities reinforce the skills, knowledge, and behavior that contribute to successful employment.

**Emergency Medical Technician (8333)**
(Classes Held at The College & Career Academy At Pruden)

Grades: 11-12
Prerequisite: Introduction to Health and Medical Sciences recommended
Credits: Three (Dual Credit - 9 credits total)

**Industry Credential Available:** Emergency Medical Technician

Students will become skilled in identifying and dealing with emergencies such as bleeding, fractures, airway obstruction, and cardiac arrest in this one-year program. Instruction emphasizes proper care and use of common emergency equipment and safe methods for lifting, moving, and transporting injured persons. Supervised on-the-job training and patient care experiences are part of the instructional program. Program completers may take the state certification examination administered by the State Department of Health. **Students must be at least 16 years old by the first day of the course offering.**

Successful completion of this course, in conjunctions with a passing score on the Emergency Medical Technician industry certification, enables student completers the opportunity to earn an industry certification within that field of study, and/or continue training through post-secondary education programs. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

**Concentration/Specialization Sequences**
None
Introduction to Health and Medical Sciences (8302)

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

Industry Credential Available: Workplace Readiness Skills for the Commonwealth

This course introduces the student to a variety of healthcare careers and develops basic skills required in all health and medical sciences. It is designed to help students understand the key elements of the U.S. healthcare system and to learn basic healthcare terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of traumatic and medical emergency care. Throughout the course, instruction emphasizes safety, cleanliness, asepsis, professionalism, accountability, and efficiency within the healthcare environment. Students also begin gaining job-seeking skills for entry into the health and medical sciences field. In addition, instruction may include the basics of medical laboratory procedures, pharmacology fundamentals, biotechnology concepts, and communication skills essential for providing quality patient care. This course is recommended to students planning to pursue training for a health occupation after high school and for students considering enrollment in any health occupations course at The College and Career Academy at Pruden, including Emergency Medical Technology, Nurse Aide, and Veterinary Assistant. Completion of this course will contribute to the student’s preparation for the Workplace Readiness Skills for the Commonwealth Examination.

Students who have not earned the Workplace Readiness Skills for the Commonwealth credential will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “value-added component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

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 (8360)

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

Nurse Aide (8360/62)

(Classes Held at The College & Career Academy At Pruden)

Grades: 11-12
Prerequisite: Introduction to Health and Medical Sciences
Credits: Three

Industry Credential Available: National Nurse Aide Assessment Program

Students will study nursing occupations as related to the healthcare system in this one-year program. Students study normal growth and development, simple body structure and function, and medical terminology. They are introduced to microbes and diseases. Students receive elementary training in patient/nurse aide relationships; taking and recording vital signs; cardiopulmonary resuscitation; bathing, feeding and dressing the patient; and transporting the patient in the hospital or nursing home. Limited on-the-job instruction in the hospital and/or nursing home is a required part of the class.

Successful completion of this course, in conjunctions with a passing score on the National Nurse Aide Assessment Program industry certification, enables student completers the opportunity to earn an industry certification within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.
Concentration/Specialization Sequences
Nurse Aide (8360) and the following 36-week course, equivalent to a total of two-36 week courses:
- Introduction to Health and Medical Sciences (8302)

Students wishing to complete a specialization may take additional course appropriate to their career pathways.
Hospitality and Tourism

Hospitality & Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.

Academic and Career Pathway Option

- Restaurant and Food/Beverage Services

Completer Options

A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related personal care services, and restaurants and food/beverage services career pathway.

Family, Career and Community Leaders of America, Inc. (FCCLA)

http://www.virginiafccla.org/

Leadership training is provided through the FCCLA student organization. The FCCLA is the student organization designed to promote personal growth and leadership development through character development, creative and critical thinking, interpersonal communication, practical knowledge, and career and technical education preparation.

Culinary Arts I & II (8275/8276)

(Classes Held at The College & Career Academy At Pruden)

Grades: 11-12
Credits: Three per course
Industry Credential Available: ProStart Program End-of-Course (Level 2) and ServSafe

Students will learn various aspects of a commercial kitchen, including large and small kitchen equipment, sanitation, safety, food preparation, culinary math, nutrition, and baking in this two-year program. Students are provided real life experiences in planning, preparing and serving catered events at The College & Career Academy At Pruden and often have the opportunity to compete in food competition for awards and/or scholarships.

Successful completion of this course, in conjunctions with a passing score on the ProStart and ServSafe industry certification, enables student completers the opportunity to earn an industry certification within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds

Concentration/Specialization Sequences

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

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

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

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

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Hospitality, Tourism, and Recreation I (8202)

Grade: 10-11
Prerequisite: None
Credit: Two (Double-block classes)

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

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

Concentration/Specialization Sequences

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

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

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

The Human Services cluster is about preparing individuals for employment in career pathways that relate to families and human needs such as counseling, personal care, and consumer services.

Academic and Career Pathway Options
- Consumer Services
- Family and Community Services
- Personal Care Services

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related consumer services, family and community services, and/or personal care services career pathway.

Family, Career and Community Leaders of America, Inc. (FCCLA)
http://www.virginiafccla.org/
Leadership training is provided through the FCCLA student organization. The FCCLA is the student organization designed to promote personal growth and leadership development through character development, creative and critical thinking, interpersonal communication, practical knowledge, and career and technical education preparation.

Cosmetology I & II (8745/8746)
(Classes Held at The College & Career Academy At Pruden)
Grades: 11-12
Credits: Three per course

Industry Credential Available: Cosmetology Examination

Students will study personal development, manicuring, sanitation and bacteriology, shampooing, hair and scalp treatment, facials, hair styling, hair cutting, and textbook theory in this two-year program. Students will learn how to thermally straighten and Marcel hair and to perform chemical services such as permanent waving, chemical hair relaxing, hair coloring, frosting, foiling, and virgin hair lightening. Students will experience practical demonstrations, videos, and supervised hands-on applications with mannequins and live models.

Successful completion of this course, in conjunctions with a passing score on the Cosmetology Examination industry certification, enables student completers the opportunity to earn an industry certification within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
Cosmetology I (8745) and the following 36-week courses, equivalent to a total of two 36-week courses:
- Cosmetology II (8746)
Cosmetology II (8746) and the following 36-week courses, equivalent to total of two 36-week courses:
- Cosmetology I (8745)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Independent Living (8219)

Grades: 09-10
Prerequisite: None
Credits: One (1)

This course allows students to 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 a combination of one or more 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)
- Nutrition and Wellness (8229)

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

Introduction to Fashion Careers (8248)

Grades: 09-11
Prerequisite: None
Credit: One (1)

This course focuses 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 the following 36-week course, equivalent to a total of two 36-week courses:

- Advanced Marketing (8130)
- Entrepreneurship Education (9093)
- Fashion Marketing (8140)
- Independent Living (8219)
- Internet Marketing (8125)
- Marketing (8120)

**Students wishing to complete a specialization may take additional courses appropriate to their career pathways.**
Nutrition and Wellness (8229)

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

Industry Credential Available: Workplace Readiness Skills for the Commonwealth Examination

Students enrolled in Nutrition and Wellness focus on understanding wellness, investigating principles of nutrition, using science and technology in food management, ensuring food safety, planning menus, preparing food, and exploring careers in the field of nutrition and wellness. Critical thinking and practical problem solving are emphasized. Completion of this course will contribute to the student’s preparation for the Workplace Readiness Skills for the Commonwealth Examination credential.

Students who have not earned the Workplace Readiness Skills for the Commonwealth Examination will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences

Nutrition and Wellness (8229) and a combination of one or more 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)

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

The Information Technology cluster is about 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
- Web and Digital Communications
- Information Support and Services

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related web and digital communications and/or information support and services career pathway.

Computer Systems Technology with Cyber Security Infusion I & II (8622/8623)
(Classes Held at The College & Career Academy At Pruden)
(Dual Enrollment - Offered jointly with Paul D. Camp Community College)

Grades: 11-12
Credits: Three (Dual Credit - 3 credits per semester)
Industry Credential Available: CompTIA A+ Certification

This course allows students to the opportunity to be creative, organized, likely to approach problems logically, and gain in understanding and knowledge in the areas of hardware and/or software, should Students will prepare to the A+ Certification examination sponsored by the Computing Technology Industry Association (Comp-TIA), in this two-year program. Instruction includes assembling a computer system, install, configure, and secure various operating systems. Additionally, students will develop skills in computer networking and resource sharing.

Successful completion of this course, in conjunctions with a passing score on the CompTIA industry certification, enables student completers the opportunity to earn an industry certification within that field of study, and/or continue training through post-secondary education programs at the associates or baccalaureate levels. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
Computer Systems Technology with Cyber Security Infusion I (8622) and the following 36-week courses, equivalent to a total of two 36-week courses:
- Computer Systems Technology with Cyber Security Infusion II (8623)

Computer Systems Technology with Cyber Security Infusion II (8623) and the following 36-week courses, equivalent to total of two 36-week courses:
- Computer Systems Technology Cyber Security Infusion I (8622)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Network Administration with Cyber Security Infusion (6650)
(Classes Held at The College & Career Academy At Pruden)

Grades: 11-12
Prerequisite: None
Credits: Three
Industry Credential Available: CompTIA Network + Certification/Security + Certification

This course introduces students to the basic desktop systems concepts, basic server concepts, network design essentials, network media, network standards and models, installation or network administration functions, and performing network management and security functions. Students will learn networking concepts, from usage to components, and create peer-to-peer network systems and client server networks. Students will install and configure network cards and connect them to networks. They will learn how to install the operating systems, set-up and manage accounts, load software, and establish and implement security plans. Students will prepare for the certification examinations sponsored by CompTIA (Security + and Network + Certification examinations at the end of the course.

Successful completion of this course, in conjunctions with a passing score on the CompTIA Network +/Security + industry certification, enables student completers the opportunity to earn an industry certification within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
Network Administration with Cyber Security Infusion (6650) and the following 36-week courses, equivalent to total of two 36-week courses:
- Computer Information Systems (6612)

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

The Manufacturing cluster is about planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities.

Academic and Career Pathway Option
- Production

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related production career pathway.

Technology Student Association (TSA)
http://virginiatsa.org/
Leadership training is provided through the TSA student organization. The TSA prepares students for the challenges of a dynamic world by promoting technological literacy, leadership, and problem solving, resulting in personal growth and opportunities. “Learning to live in a technical world” is the motto of TSA.

SkillsUSA
http://www.skillsusa.org/
SkillsUSA Virginia is the student organization for students enrolled in career and technical trade and industrial occupations in Virginia’s high schools and community colleges.

Technology Foundations (8403)

<table>
<thead>
<tr>
<th>Grades:</th>
<th>09-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerequisites:</td>
<td>None</td>
</tr>
<tr>
<td>Credit:</td>
<td>One (1)</td>
</tr>
</tbody>
</table>

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

Concentration/Specialization Sequences
Technology Foundations (8403) and the following 36-week course, equivalent to a total of two 36-week courses:
- Technical Drawing and Design (8435)
- Technology Transfer (8405)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Technology Transfer (8405)
Grades: 10-12
Prerequisite: Technology Foundations
Credit: One (1)
Industry Credential Available: Workplace Readiness Skills for the Commonwealth Examination

Students learn that technology transfer occurs when a new user applies an existing technology developed for one purpose to a different function. Groups work together, applying mathematics, science, and engineering concepts to projects that combine systems such as energy and power, agriculture and biotechnology, information and communication, manufacturing, construction, transportation, and medical technologies. Students engage in thematic activities to learn that the transfer of a technology from one society to another can cause cultural, social, economic, and political changes that affect both societies to varying degrees. Completion of this course will contribute to the student's preparation for the Workplace Readiness Skills for the Commonwealth Examination credential.

Students who have not earned the Workplace Readiness Skills for the Commonwealth Examination will be administered the assessment. This assessment validates the student’s skills and abilities that Virginia employers have identified as essential for entry-level employees. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences
Technology Transfer (8405) and the following 36-week course, equivalent to a total of two 36-week courses:
- Technology Foundations (8403)

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

Welding I & II (8672/8673)
(Classes Held at The College & Career Academy At Pruden)
(Dual Enrollment - Offered jointly with Paul D. Camp Community College)

Grades: 11-12
Credits: Three per course (Dual Credit - 3 credits)
Industry Credential Available: SENSE Training Program Certification Examination (Level 1, Entry-Level Welder)

Students will learn about welding and metals in this two-year program. They learn to read blueprints, set up equipment, and to weld in various positions, including flat, vertical, horizontal, and overhead.

Successful completion of this course, in conjunctions with a passing score on the SENSE Training Program industry certification, enables student completers the opportunity to earn an industry certification within that field of study, and/or continue training through post-secondary education. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
Welding I (8672) and the following 36-week course, equivalent to a total of two 36-week courses:
- Welding II (8673)
Welding II (8673) and the following 36-week course, equivalent to a total of two 36-week courses:
- Welding I (8672)

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

The Marketing cluster is about planning, managing, and performing marketing activities to reach organizational objectives. Marketing-related jobs are vital for companies, nonprofit groups, and organizations.

Academic and Career Pathway Option

- Marketing Management

Completer Options

A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related marketing management career pathway.

DECA: An Association of Marketing Students

https://www.vadeca.org/

Leadership training is provided through the DECA student organization. DECA: An Association of Marketing Students, is the co-curricular marketing student organization designed to provide students with opportunities to develop a better understanding of the business world, increase awareness of civic responsibilities, and develop social poise and leadership skills.

Advanced Marketing (8130)

Grade: 11-12
Prerequisite: Marketing
Credits: One (1); two with Cooperative Education

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

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. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL). Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Completion of this course will contribute to the student’s preparation for the National Professional Certification in Customer Service and Sales credentials.

Students who have not earned the National Professional Certification in Customer Service and Sales will be administered the assessment. This assessment validates the student’s knowledge and skills in industry Customer Service Skill Standards. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences

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

- Entrepreneurship Education (9093)
- Fashion Marketing (8140)
- Internet Marketing (8125)
- Introduction to Fashion Careers (8248)
- Marketing (8120)
Students wishing to complete a specialization may take additional courses appropriate to their career pathways.

**Cooperative Education**

Grades: 10-12  
Prerequisite: Current Enrollment in Selected Marketing Courses  
Credit: One (1)

Cooperative Education is a career preparation method that combines CTE classroom instruction with paid employment that is directly related to the student's plan of study. The school and the employer plan, coordinate, and supervise the instruction and employment so that each contributes directly to the student's career objectives and employability. Students may earn credit toward graduation for cooperative education experiences, and they normally work between 11 and 15 hours per week to achieve the required minimum of 396 hours to receive one credit. Students should discuss the availability of this program with their high school counselor.

**Entrepreneurship Education (9093)**

Grades: 10-12  
Prerequisite: None  
Credit: One (1); two with Cooperative Education  
Industry Credential Available: National Professional Certification in Customer Service and Sales

This course introduces students to the exciting world of creating, owning, and launching their own business. Students will learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle. Completion of this course will contribute to the student's preparation for the National Professional Certification in Customer Service and Sales credential.

Students who have not earned the National Professional Certification in Customer Service and Sales will be administered the assessment. This assessment validates the student's knowledge and skills in industry Customer Service Skill Standards. Students who earn this industry credential will have a “value-added” component when competing in today's job market, as well as the option of using the credential as a high school student-selected verified credit.

**Concentration/Specialization Sequences**

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

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

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Fashion Marketing (8140)

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

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

This specialized course, students gain basic knowledge of the apparel and accessories industry and skills necessary for successful employment in apparel businesses. Students develop general marketing skills necessary for successful employment in fashion marketing, general marketing skills applicable to the apparel and accessories industry, and specialized skills unique to fashion marketing. Personal selling, sales promotion, purchasing, physical distribution, market planning, and product/service technology as well as academic skills (mathematics, science, English, and history/social science) related to the content are part of the course. Computer/technology applications supporting this course are studied. Completion of this course will contribute to the student’s preparation for the National Professional Certification in Customer Service and Sales credential.

Students who have not earned the National Professional Certification in Customer Service and Sales will be administered the assessment. This assessment validates the student’s knowledge and skills in industry Customer Service Skill Standards. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences
Fashion Marketing (8140) and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:

- Advanced Marketing (8130)
- Entrepreneurship Education (9093)
- Internet Marketing (8125)
- Introduction to Fashion Careers (8248)
- Marketing (8120)

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

Digital Marketing (8125)

Grade: 10-12
Prerequisite: Basic computer skills recommended
Credit: One (1)

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

Students receive an introduction to marketing functions and the business plan and study Internet marketing’s role in the global economy. Students gain knowledge of the tools and techniques used in Internet marketing and learn how to design a website. They explore ethical, legal, and security aspects and prepare for a career in Internet Marketing. Academic skills (mathematics, science, English, and history/social science) related to the content are part of this course. Computer/technology applications supporting this course are studied. Completion of this course will contribute to the student’s preparation for the National Professional Certification in Customer Service and Sales credential.

Students who have not earned the National Professional Certification in Customer Service and Sales will be administered the assessment. This assessment validates the student’s knowledge and skills in industry Customer Service Skill Standards. Students who earn this industry credential will have a “valued-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences
Internet Marketing (8125) and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:

- Advanced Marketing (8130)
- Entrepreneurship Education (9093)
- Fashion Marketing (8140)
- Introduction to Fashion Careers (8248)
Students wishing to complete a specialization may take additional courses appropriate to their career pathways.

**Marketing (8120)**

Grades: 10-12  
Prerequisite: None  
Credits: One (1), two with Cooperative Education  
**Industry Credential Available: National Professional Certification in Customer Service and Sales**

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, economic issues, selling, promotion, pricing, and the impact of technology on the marketplace. This course reinforces mathematics, science, English, and history/social science Standards of Learning (SOL). Computer/technology applications and DECA activities enhance the course. DECA, the co-curricular student organization, offers opportunities in leadership, community, and competitive events. Completion of this course will contribute to the student’s preparation for the National Professional Certification in Customer Service and Sales credential.

Students who have not earned the National Professional Certification in Customer Service and Sales will be administered the assessment. This assessment validates the student’s knowledge and skills in industry Customer Service Skill Standards. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

**Concentration/Specialization Sequences**  
Marketing (8120) and a combination of one or more of the following 36-week courses, equivalent to a total of two 36-week courses:

- Advanced Marketing (8130)  
- Business Management (6135)  
- Entrepreneurship Education (9093)  
- Fashion Marketing (8140)  
- Introduction to Fashion Careers (8248)  
- Internet Marketing (8125)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Science, Technology, Engineering and Mathematics (STEM)

The Science, Technology, Engineering and Mathematics (STEM) cluster is about planning, managing, and providing scientific research and professional technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

Academic and Career Pathway Option

- Engineering and Technology

Completer Options

A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related engineering and technology career pathway.

Technology Student Association (TSA)

http://virginiatsa.org/

Leadership training is provided through the TSA student organization. The TSA prepares students for the challenges of a dynamic world by promoting technological literacy, leadership, and problem solving, resulting in personal growth and opportunities. “Learning to live in a Technical World” is the motto of TSA.

SkillsUSA

http://www.skillsusava.org/

SkillsUSA Virginia is the student organization for students enrolled in career and technical trade and industrial occupations in Virginia’s high schools and community colleges.

Engineering Drawing and Design (8436)

Grades: 10-12
Prerequisite: Technical Drawing and Design
Credit: One (1)

Industry Credential Available: AutoCAD 2014 (or newer version) Certification

Students explore the engineering design process and use a graphic language for product design, technical illustration, assembly, patent, and structural drawings. They increase their understanding of drawing and the design process and 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. Completion of this will contribute to a student’s preparation for the AutoCAD certification examination.

Students who have not earned the AutoCAD Certification will be administered the assessment. This assessment validates the student’s knowledge and skills in using the design/drafting AutoCAD software program. Students who earn this industry credential will have a “value-added” component when competing in today’s job market, as well as the option of using the credential as a high school student-selected verified credit.

Concentration/Specialization Sequences

Engineering Drawing and Design (8436) and a combination of one or more 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)

Students wishing to complete a specialization may take additional courses appropriate to their career pathways.
Geospatial Technology I (8423)
(Clases Held at The College & Career Academy At Pruden)
(Dual Enrollment - Offered jointly with Paul D. Camp Community College)

Grades: 11-12
Credits: Four (Dual Credit)

Industry Credential Available: Microsoft Office Specialist/Workplace Readiness Skills for the Commonwealth

The Geospatial Technology program provides experiences pertaining to the study of geographic information systems (GIS), global positioning systems (GPS), remote sensing (RS), digital image processing simulator (DIPS), Geodesy, automated cartography (Auto-Carto), land surveying (LS), and navigation. Fundamentally, these technologies allow students to explore and analyze the natural and human-made world, from local to global and beyond. Students will use various tools, processes, and techniques to create, store, access, manipulate, and revise data to solve human challenges. These experiences will employ real-world spatial analysis models and guidelines for integrating, interpreting, analyzing, and synthesizing data, with a focus on both the implications and the limitations of such technologies. These experiences also include the interfacing to telecommunications and automated database management systems.

The GIS curriculum will be enhanced by the addition of a contextual workplace project, thus enabling the course to address a student's career goal.

Successful completion of this course, in conjunctions with a passing score on the Microsoft Office Specialist/Workplace Readiness Skills industry certification, enables student completers the opportunity to earn an industry certification, and/or continue training through post-secondary education programs at the associates or baccalaureate levels. These credentials are beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
None

Modeling & Simulation Support Specialist I & II (8498P I & II)
(Clases Held at The College & Career Academy At Pruden)
(Dual Enrollment - Offered jointly with Paul D. Camp Community College)

Grades: 11-12
Credits: Three per course
Dual Credit (15 Semester Hours)

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

The curriculum outlines tasks and competencies over two instructional years: Modeling & Simulation Support Specialist I & II. Year one of the proposed Modeling & Simulation Support Specialist course will include the following competencies/tasks: Computer skills/EXCEL applications, digital visualization techniques and applications, data collection, presentation and analysis, career studies, communication skills, basic programming, problem-solving and design solutions.

Competencies/tasks for the proposed year two curriculum will include: Operating system instruction, networking and troubleshooting with hardware/software applications. In addition, a semester-long project-based learning opportunity contextual to the student’s career goals will be required. The contextual project will pair students with mentors in workplaces related to their respective career goals. Thus, this program will enable students to identify a concern and address a problem/issue related to their career goals.

Successful completion of this course, in conjunctions with a passing score on the Autodesk Certified User Examination and Microsoft Technology Associate industry certifications, enables student completers the opportunity to earn an industry certification within that field of study, and/or continue training through post-secondary education programs at the associates or baccalaureate
levels. These credentials are beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
None

**Project Lead the Way (PLTW)**

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

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

This program is located at Nansemond River High School beginning in the 9th grade and is open to all Suffolk Public Schools students. Students must apply for this program during their eighth grade year.

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

This program is located at Lakeland High School beginning in the 9th grade and is open to all Suffolk Public Schools students. Students must apply for this program during their eighth grade year.

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

(Class held at Tidewater Community College)

Grades: 11-12  
Prerequisite: Algebra II  
Credit: One (weighted +1)

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

Concentration/Specialization Sequences
None
Technical Drawing and Design (8435)

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

In this foundation course, students will learn the basic language of technical design, while they design, sketch, and make technical drawings, illustrations, models, or prototypes of real design problems. Students develop spatial ability as they apply mathematical concepts to visual representations. The course is especially recommended for future engineering and architecture students.

Concentration/Specialization Sequences
Technical Drawing and Design (8435) and a combination of one or more 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)
- Technology Foundations (8403)

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

Transportation, Distribution and Logistics

The Transportation, Distribution and Logistics cluster is about 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. Highly skilled automotive mechanics should have an easy time finding a job since people are driving their cars longer than they used to. The need for truck drivers will increase as the demand for goods increases.

Academic and Career Pathway Option
Facility and Mobile Equipment Maintenance

Completer Options
A career and technical education completer is a student who has met the requirements for a career and technical concentration or specialization and all requirements for high school graduation or an approved alternative education program. Students wishing to complete a specialization may take additional courses appropriate to their related facility and mobile equipment maintenance career pathway.

Automotive Technology I & II (8506/8507)
(Classes Held at The College & Career Academy At Pruden)

Grades: 11-12
Credits: Three per course
Industry Credential Available: Automotive Technician - Automotive Service Excellence

Students will learn to make minor repairs, tune engines and practice routine maintenance procedures. Electrical systems and components of the cooling system are included in the course of study. In this course, students will work in a fast-paced environment where problem-solving is an essential skill, allowing them to be well prepared to work within the automotive industry.

Successful completion of this course, in conjunctions with a passing score on the Automotive Service Excellence industry certification, enables student completers the opportunity to earn an industry certification within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.
Concentration/Specialization Sequences
Automotive Technology I (8506) and the following 36-week course, equivalent to a total of two 36-week courses:
  ● Automotive Technology II (8507)
Automotive Technology II (8507) and the following 36-week course, equivalent to a total of two 36-week courses:
  ● Automotive Technology I (8506)

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

**Auto Body Technology I & II (8676/8677)**
(Class Held at The College & Career Academy At Pruden)

Grades: 11-12  
Credits: Three per course  
**Industry Credential Available:** Collision Repair and Refinishing Technician - Automotive Service Excellence

Students will gain the knowledge and hands-on experience needed to perform basic body repairs on automobiles and to apply paint and other types of finishes to the repaired vehicle body. This program will also provide students with skills that require attention to detail, while working with machinery and a variety of tools.

Successful completion of this course, in conjunction with a passing score on the Automotive Service Excellence industry certification, enables student completers the opportunity to earn an industry certification within that field of study. This credential is beneficial (and sometimes essential) to students seeking employment in a career field or occupational specialty. In addition, students who obtain this credential earn verified credits toward graduation. Industry credentialing is available pending the availability of funds.

Concentration/Specialization Sequences
Auto Body Repair Technology I (8676) and the following 36-week course, equivalent to a total of two 36-week courses
  ● Auto Body Repair Technology II (8677)

Auto Body Repair Technology II (8677) and the following 36-week course, equivalent to a total of two 36-week courses
  ● Auto Body Repair Technology I (8676)

*Students wishing to complete a specialization may take additional courses appropriate to their career pathways.*
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 end of the 1st semester. Payment of the examination(s) may be required and is the responsibility of the student and his/her parents. Students enrolled in an AP and IB courses may not be required by the division to take the state end of course SOL assessment for that corresponding course if the student took the AP or IB equivalent assessment. Please see each academic content area or specialty program description for a full course description.

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

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

AP Language and Composition
AP Literature and Composition
AP Calculus AB
AP Statistics
AP European History
AP Chemistry
AP Biology
AP Psychology
AP United States History
AP United States Government and Politics
AP Physics
AP Spanish Language
Virtual Virginia Courses
(http://www.virtualvirginia.org/courses/catalog/index.html)

Students have the option of enrolling in virtual AP courses through the Virginia Department of Education Virtual Virginia program. Students enrolled in these courses will be assigned a block for completing the course virtually. Courses approved through the Virtual Virginia program may vary):

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

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

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

Dual-Enrollment Courses
(All courses pending enrollment. Students may request in writing to attend DC courses at another Suffolk High School.)
DC English Composition
DC Pre-Calculus
DC Calculus
DC Micro Computers
DC History & Appreciation of Art
DC Chemistry
DC Biology
DC Government
DC History
DC Introduction to Psychology
DC Virginia Teachers for Tomorrow I (1 face-to-face section)
DC Virginia Teachers for Tomorrow II (1 face-to-face section)
SPECIAL PROGRAMS
International Baccalaureate (IB) Diploma Program

KING’S FORK HIGH SCHOOL, AN IB WORLD SCHOOL

The International Baccalaureate Diploma Program is an advanced, comprehensive program of study, offering an integrated approach to learning across the disciplines. Many colleges and universities view the IB Diploma program 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 Program’s in-depth approach to academic disciplines fosters skills that will remain with students for their lifetime.

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

The six subject areas of the International Baccalaureate Program are written below.

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

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

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

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

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

**Group 6 – The Arts and other Electives**
Students will have the opportunity to experience creativity in the context of disciplined, practical research into the relevant genres. There will also be a strong emphasis placed on the different cultural contexts. Students may select Visual Arts or Music or an additional course from group 3 or 4.
Admission to the program is through application only. Information can be found on the IB blog (http://blogs.spsk12.net/internationalbaccalaureate/).

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 each of the six subject groups. 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 well advised to take their HL exams in areas of their greatest strengths.

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

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

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

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

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

Grade 10
- Pre-Dip English 10
- Pre-Dip Algebra II/Trigonometry
- Pre-Dip Chemistry
- Pre-Dip Advanced Placement U. S. Government and Politics
- Pre-Dip Foreign Language (French III or Spanish III)
- Health/PE 10
- One elective
Grade 11
IB English HL 11
IB Mathematics 11 or Math Studies 11
IB Biology 11, IB Chemistry 11, or IB Physics 11
IB History 11 HL
IB Foreign Language IV (French or Spanish)
IB Theory of Knowledge 11
IB Elective (IB Visual Arts 11, IB Psychology 11, IB Music 12, or an additional science)

Grade 12
IB English 12 HL
IB Mathematics 12 or Math Studies 12 SL
IB Biology 12, IB Chemistry 12, or IB Physics 12
IB History HL 12,
IB Foreign Language V (French or Spanish)
IB Theory of Knowledge 12
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

IB1130  PRE-DIP ENGLISH
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

IB1140  PRE-DIP ENGLISH
Grade 10
Prerequisite(s): Successful completion of Pre-Dip English 9
Credit: One (weighted +0.5)

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 Assignment: REQUIRED

End of Course Testing REQUIRED
IB1150  IB ENGLISH 11, HIGHER LEVEL
Grade 11
Pre-requisite:  Pre-Dip English 10 (B average recommended) and an overall GPA of 3.0
Credit:  One (weighted +1)

This is the first year of a two-year intensive program 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

IB1160  IB ENGLISH 12, HIGHER LEVEL
Grade 12
Prerequisite(s): IB English 11, Higher Level (B average recommended) and an overall GPA of 3.0
Credit:  One (weighted +1)

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

Group 2
LANGUAGE B, FOREIGN LANGUAGE

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  
Pre-requisite: Pre-Dip French 3 (B average recommended) and an overall GPA of 3.0  
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): IB French IV (B average recommended) and an overall GPA of 3.0  
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 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**

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  
Pre-requisite: Pre-Dip Spanish III (B average recommended) and an overall GPA of 3.0  
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**

IB5552I  
**IB SPANISH V, STANDARD LEVEL**

Grade 12  
Prerequisite(s): IB Spanish IV, (B average recommended) and an overall GPA of 3.0  
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**

IB5320  
**PRE-DIP LATIN II**

Grade: 9  
Prerequisite(s): “B” or better in Latin I  
Credit: One  
In Pre-Dip Latin II students develop skills in understanding and translating 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 was originated. **Summer Assignment: REQUIRED.**

IB5330  
**PRE-DIP LATIN III**

Grade: 10  
Prerequisite(s): Successful completion of Pre-Dip Latin II  
Credit: One  
In Pre-Dip Latin III, students continue to develop competency in the skills of translating, 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 was originated continues to be stressed. **Summer Assignment: REQUIRED**

IB5340  
**IB LATIN IV, STANDARD LEVEL**

Grade 11  
Pre-requisite: Pre-Dip Latin 3 (B average recommended) and an overall GPA of 3.0  
Credit: One (weighted +1)  
IB Latin 4 is the first part of a two-year course in which students continue to develop proficiency in translating, 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.**
IB5350  
**IB LATIN V, STANDARD LEVEL**

Grade 12  
Prerequisite(s): IB Latin 4, Standard Level (B average recommended) and an overall GPA of 3.0  
Credit: One (weighted +1)

IB Latin 5 is the second part of a two-year course in which students continue to develop proficiency in translating, 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 20th 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-20th century. This course is a chronologically organized study of world history and geography through the modern era. Topics will consist of the ancient world through the middle ages, as well as the geography and history of Europe, Africa, Asia and Latin America. **Summer Assignment: REQUIRED**  
**End of Course Testing REQUIRED**

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  
Pre-requisite: Pre-Dip /AP US Government and Politics (B average recommended) and an overall GPA of 3.0  
Credit: One (weighted +1)

IB History 11, Higher Level, is the first part of a two-year course. IB History is an in-depth study of twentieth century world history with emphasis on the history of the Americas from 1840 to 1990. This course is designed to develop historical research skills, analytical thinking skills, and skills for interpreting political, military, social, and economic events of the twentieth century. Students engage in extensive reading, independent research, and analysis of primary and secondary source documents. Students take the Virginia end-of-course Standards of Learning test in United States History. The course requires college-level performance and work habits. **Summer Assignment: REQUIRED**  
**End of Course Testing: REQUIRED**
IB2361

IB HISTORY 12, HIGHER LEVEL
Grade 12
Prerequisite(s): IB History 11, Higher Level (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

IB History 12, Higher Level is the second part of a two-year course. IB History of the Americas is an in-depth study of twentieth century world history with emphasis on the history of the Americas from 1840 to 1990. This course is designed to develop historical research skills, analytical thinking skills, and skills for interpreting political, military, social, and economic events of the twentieth century. Students engage in extensive reading, independent research, and analysis of primary and secondary source documents. The course requires college-level performances and work habits. Summer Assignment: REQUIRED

IB2903

IB PSYCHOLOGY 11
Grade 11
Pre-requisite: Overall 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

IB2904

IB PSYCHOLOGY 12
Grade 11
Prerequisite(s): IB Psychology 11 (B average recommended) and an overall GPA of 3.0
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
IB4310  
PRE-DIP BIOLOGY  
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*

IB4380  
IB BIOLOGY 11  
Grade 11  
Pre-requisite: overall GPA of 3.0  
Credit: One (weighted +1)

This is the first part of a two-year course that provides an in-depth study of 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*

IB4390  
IB BIOLOGY 12  
Grade 12  
Prerequisite(s): IB Biology 11 (B average recommended) and an overall GPA of 3.0  
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*
IB4410  PRE-DIP CHEMISTRY
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*

IB4480  IB CHEMISTRY 11
Grade 11
Pre-requisite: overall GPA of 3.0
Credit: One (weighted +1)

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

IB4490  IB CHEMISTRY 12, STANDARD LEVEL
Grade 12
Prerequisite(s): IB Chemistry 11 (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

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

IB4280  IB ENVIRONMENTAL SYSTEMS AND SOCIETIES 11, STANDARD LEVEL
Grade 11
Pre-requisite: Pre-Dip Chemistry or Pre-Dip Biology (B average recommended) and an 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 environmental systems and societies. IB Environmental Systems and Societies 11 provides students with a perspective on the complex interrelationships between ecosystems and societies. 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*
IB4281  IB ENVIRONMENTAL SYSTEMS AND SOCIETIES 12, STANDARD LEVEL
Grade 12
Prerequisite(s): IB Environmental Systems and Societies 11, Standard Level (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

This is the second part of a two-year course that provides an in-depth study of environmental systems and societies. IB Environmental Systems and Societies 12 provides students with a perspective on the complex interrelationships between ecosystems and societies. 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

IB4580  IB PHYSICS 11
Grade 11
Pre-requisite: overall GPA of 3.0
Credit: One (weighted +1)

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

IB4590  IB PHYSICS 12
Grade 12
Prerequisite(s): IB Physics 11 (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

This is the second part of a two-year course that provides an in-depth study topics in physical measurement, mechanics, thermal physics, oscillations and waves, electric currents, fields and forces, atomic and nuclear physics, and energy, power and climate change. Sustainability is the integrative theme of the course. Students participate in structured labs, write research papers, design original research projects, and participate in a required IB interdisciplinary group project. The course requires college-level performance and work habits. Summer Assignment: REQUIRED.

Group 5
MATHEMATICS AND COMPUTER SCIENCE

IB3143  PRE-DIP GEOMETRY
Grade 9
Prerequisite(s): “B” or better in Algebra I
Credit: One (weighted + .5)

Students learn the principles of geometry and are rigorously required to demonstrate logical, step-by-step problem-solving techniques. Topics are studied in the context of local, national and international perspectives. Additional topics include introduction to truth tables, negation, quantifiers, the laws of sines and cosines, three-dimensional coordinates, and vectors. Emphasis is also placed on symbolic logic and geometric probability. Summer Assignment: REQUIRED

End of Course Testing REQUIRED
IB3137  PRE-DIP ALGEBRA II/TRIGONOMETRY
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**

IB3196  IB MATH STUDIES 11, STANDARD LEVEL
Grade 11
Pre-requisite: Pre-Dip Algebra 2/Trigonometry (B average recommended) and an 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 mathematics. IB Math Studies begins with practical investigations followed by analyses of results leading to the understanding of mathematical principles and their formulation into mathematical language. Before entering the course, students should have a good understanding of arithmetic, algebra, geometry, trigonometry, and statistics. The course requires college-level performance and work habits. **Summer Assignment: REQUIRED**

IB3198  IB MATHEMATICS 11
Grade 11
Pre-requisite: Pre-Dip Algebra 2/Trigonometry (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

IB Mathematics 11 is the first part of a rigorous, two-year course of study designed to provide a foundation for students who will continue to study mathematics in college. The first year encompasses pre-calculus, which establishes a foundation for the study of calculus in the second year of the course. Students develop the ability to solve problems using algebraic, logarithmic, and additional trigonometric methods and to critically analyze a function and its graph. Also, students learn how these concepts relate to real-world situations. The course requires college-level performance and work habits. **Summer Assignment: REQUIRED**

IB3197  IB MATH STUDIES 12, STANDARD LEVEL
Grade 12
Prerequisite(s): IB Math Studies 11, Standard Level (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

This is the second part of a two-year course that provides an in-depth study of mathematics. IB Math Studies begins with practical investigations followed by analyses of results leading to the understanding of mathematical principles and their formulation into mathematical language. Before entering the course, students should have a good understanding of arithmetic, algebra, geometry, trigonometry, and statistics. The course requires college-level performance and work habits. **Summer Assignment: REQUIRED**
IB MATHEMATICS 12
Grade 12
Prerequisite(s): IB Mathematics 11, (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

IB Mathematics 12 is the second part of a rigorous two-year course of study designed to provide a foundation for students who will continue to study mathematics in college. The second year encompasses pre-calculus, which establishes a foundation for the study of calculus in the second year of the course. Students develop the ability to solve problems using algebraic, logarithmic, and additional trigonometric methods and to critically analyze a function and its graph. Also, students learn how these concepts relate to real-world situations. The course requires college-level performance and work habits. Summer Assignment: REQUIRED

Group 6
THE ARTS AND OTHER ELECTIVES
Students may select Visual Arts or Music or Additional Courses from Group 3 or Group 4

IB VISUAL ARTS 11
Grade 11
Pre-requisite: Overall GPA of 3.0
Credit: One (weighted +1)

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

IB VISUAL ARTS 12
Grade 12
Prerequisite(s): IB Visual Arts 11, Standard Level (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

IB Visual Arts 12 is the second part of a two-year course of study designed to stimulate and train the student’s visual awareness, increase the student’s perceptive and critical responses to the art of various cultures, and to enable the student to discover, develop, and enjoy different means of creative visual expression. The student is encouraged to develop an intensely personal view of the human condition and of nature through the study of visual arts and to develop an informed attitude towards art and design in all its forms, both in history and in the contemporary world. The student may pursue one of two options at the standard level depending on interest and on level of artistic ability. The course requires college-level performance and work habits. Summer Assignment: REQUIRED
IB9294  IB MUSIC 11

Grade 11
Pre-requisite: Overall GPA of 3.0
Credit: One (weighted +1)

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

IB9295  IB MUSIC 12

Grade 12
Prerequisite(s): IB Music 12 (B average recommended) and an overall GPA of 3.0
Credit: One (weighted +1)

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

IB1197  IB THEORY OF KNOWLEDGE 11

Grade 11
Pre-requisite: Overall GPA of 3.0
Credit: One (weighted +0.5)

Students who are candidates for the International Baccalaureate Diploma are required to complete Theory of Knowledge. Part 1 is taken in the spring of the junior year and part 2 in the fall of the senior year. Students learn to better understand themselves as “knowers” by exploring the various methods they use to “know” the truth of a given thought, feeling, or belief. This exploration also involves how various “ways of knowing” are applied to all of the areas of knowledge in the IB curriculum: mathematics, natural science, human science, history, art, and ethics. Through the study of eastern and western philosophies, logic and reason, intuition, and faith, students explore various belief systems, both personal and global, in an attempt to determine their “truth.” To accomplish this, students read selected texts, write about their findings, and discuss, in great detail, their own thoughts on course topics. Students must complete an internal assessment in the form of a presentation and an external assessment in the form of a 1,200-1,600 word essay that addresses one often 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)

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 ten prescribed titles. The course requires college-level performance and work habits. Summer Assignment: 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.

Introduction to Engineering Design (8439)—Grade 9
Students dig deep into the engineering design process, applying math, science, and engineering standards to hands-on projects. They work both individually and in teams to design solutions to a variety of problems using 3-D modeling software, and use an engineering notebook to document their work.

Principles of Engineering (8441)—Grade 10
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.

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

Civil Engineering and Architecture (8430)—Grade 11
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.

Engineering Design & Development (8443)—Grade 12
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.
# Sample Portion of the Engineering Academic and Career Plan

<table>
<thead>
<tr>
<th>EDUCATION LEVELS</th>
<th>GRADE</th>
<th>English/Language Arts</th>
<th>Mathematics</th>
<th>Science</th>
<th>Social Studies/Science</th>
<th>Recommended Electives</th>
<th>Recommended Career and Technical Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MIDDLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>English 7 (1110)</td>
<td>Math 7 (3111) OR Algebra I (3130)</td>
<td>Life Science (4115)</td>
<td>Civics &amp; Economics (2357)</td>
<td>Intro to Foreign Language (5700)</td>
<td>Technological Systems (8463) or Keyboarding 7/8 (8153)</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>English 8 (1120)</td>
<td>Algebra I (3130) OR Geometry (3143)</td>
<td>Physical Science (4125)</td>
<td>World Geography 8 (2359)</td>
<td>French I (5110) or Spanish I (5510)</td>
<td>Technological Systems (8463) or Keyboarding 7/8 (8153)</td>
</tr>
<tr>
<td></td>
<td>SECONDARY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>English 9 (1130) OR Higher Level English</td>
<td>Geometry (3143) OR Algebra II (3135) OR Higher Level Math</td>
<td>Honors Earth Science (4210) OR Honors Biology (4310) OR Higher Level Science</td>
<td>World History/ Geography I (2215) OR Honors World History and Geography I (2215H)</td>
<td>Required Courses</td>
<td>PLTW Introduction to Engineering Design (8439)</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>English 10 (1140) OR Higher Level English</td>
<td>Algebra II (3135) OR Mathematical Analysis/Pre-Calculus (3162) OR Higher Level Math</td>
<td>Honors Biology (4310) OR Honors Chemistry (4410) OR Higher Level Science</td>
<td>World History/ Geography II (2216) OR Honors World History and Geography II (2216H)</td>
<td>Required Courses</td>
<td>PLTW Principles of Engineering (8411)</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>English 11 (1150) OR AP Language &amp; Composition (1195) OR Higher Level English</td>
<td>Mathematical Analysis/Pre Calculus (3162) OR AP Calculus (3177) OR AP Statistics (3192) OR Higher Level Math</td>
<td>Honors Chemistry (4410) OR Physics (4510) OR Higher Level Science</td>
<td>VA &amp; US History (2360) OR Honors VA &amp; US History (2360H) OR AP US History (2315) OR DC US History (DE2950)</td>
<td>Recommended Core Academics and/or Fine Arts Electives</td>
<td>PLTW Digital Electronics (8440) AND Civil Engineering and Architecture (8430)</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>English 12 (1160) OR AP Literature &amp; Composition (1196) OR DC English (DE1600) OR Higher Level English</td>
<td>AP Statistics (3192) OR AP Calculus (3177) OR DC Pre-Calculus (DE3230)</td>
<td>Physics (4570) OR AP Environmental Science (4270) OR Higher Level Science</td>
<td>VA &amp; US Government (2440) OR Honors VA &amp; US Government (2440H) OR AP Government &amp; Politics (2445) OR DC Government (DE2952)</td>
<td>Required Courses</td>
<td>PLTW Engineering Design and Development (8443)</td>
</tr>
</tbody>
</table>
Project Lead the Way (PLTW)

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

Principles of the Biomedical Sciences—Grade 9
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.

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

Medical Interventions—Grade 11
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.

Biomedical Innovation—Grade 12
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.
## Sample of the Biomedical Science Academic and Career Plan

<table>
<thead>
<tr>
<th>EDUCATION LEVELS</th>
<th>GRADE</th>
<th>English/Language Arts</th>
<th>Mathematics</th>
<th>Science</th>
<th>Social Studies/ Science</th>
<th>Recommended Electives</th>
<th>Recommended Career and Technical Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIDDLE</td>
<td>7</td>
<td>English 7 (1110)</td>
<td>Math 7 (3111) or Algebra I (3130)</td>
<td>Life Science (4115)</td>
<td>Civics &amp; Economics (2357)</td>
<td>Intro to Foreign Language (5700)</td>
<td>Technological Systems (8463) or Keyboarding 7/8 (6153)</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>English 8 (1120)</td>
<td>Algebra I (3130) or Geometry (3143)</td>
<td>Physical Science (4125)</td>
<td>World Geography 8 (2359)</td>
<td>French I (5110) or Spanish I (5510)</td>
<td>Technological Systems (8463) or Keyboarding 7/8 (6153)</td>
</tr>
<tr>
<td>SECONDARY</td>
<td>9</td>
<td>Honors English 9 (1130)</td>
<td>Geometry (3143) OR Algebra II (3135)</td>
<td>Honors Biology (4310)</td>
<td>World History/ Geography I (2215) or Honors World History and Geography I (2215H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Honors English 10 (1140)</td>
<td>Algebra II (3135) OR Mathematical Analysis/ Pre-Calculus (3162)</td>
<td>Honors Chemistry (4410)</td>
<td>World History/ Geography II (2216) or Honors World History and Geography II (2216H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Honors English 11 (1150) or AP Language &amp; Composition (1195)</td>
<td>Mathematical Analysis/ Pre Calculus (3162) OR AP Calculus (3177)</td>
<td>Physics (4510) OR AP Biology (4370) OR AP Chemistry (4470) or DC Biology</td>
<td>VA &amp; US History (2360) or Honors VA &amp; US History (2360H) OR AP US History (2319) or DC US History (DE2950)</td>
<td></td>
<td>PLTW Principles of Biomedical Sciences (8379)</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Honors English 12 (1160) or AP Literature &amp; Composition (1196) or DC English (DE1600)</td>
<td>AP Statistics (3192) OR AP Calculus (3177) OR DC Pre-Calculus (DE3230)</td>
<td>AP Biology (4370) OR AP Chemistry (4470) OR AP Physics (4570) OR DC Biology (DE4700) OR Anatomy and Physiology</td>
<td>VA &amp; US Government (2440) or Honors VA &amp; US Government (2440H) OR AP Government &amp; Politics (2445) OR DC Government (DE2952)</td>
<td></td>
<td>PLTW Biomedical Innovation (8382)</td>
</tr>
</tbody>
</table>
Governor’s School for the Arts

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

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

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

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

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

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

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

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

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

Musical Theatre students are provided a challenging, intensive program of study designed to develop performance skills in voice, dance and acting to the advanced level necessary to compete in today's complex and ever-changing entertainment industry.
DANCE
Grades 9-12
Pre-requisite(s): Audition
Credits: Three (+.5 weighted per credit)

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

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

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

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

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

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

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

Paul D. Camp Community College Certificate
PDCCC General Education Certificate

Paul D. Camp Community College in collaboration with Suffolk Public Schools offers a General Education Certificate and Diploma Program. This program is composed of high school credits required for an Advanced Studies Diploma and thirty-three (33) college credits needed for the General Education Certificate or sixty-one (61) college credits needed for the General Studies Associate Degree. Students 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 pre-requisites listed in the course descriptions in the academic section of this document.

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

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

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

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

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

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

Parents and students planning to 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 for Guaranteed Admission students with completed associate degrees while in high school. Since the student will have multiple college credits prior to graduation, some colleges/universities will classify the student as an upperclassman; therefore, the student may not be eligible for some freshmen level scholarships.
## HIGH SCHOOL COURSE OFFERINGS AT A GLANCE
### 2018-2019

### 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/ Literacy Strategies for High School
- 1195/01006 AP Literature and Composition *
- 1196/01005 AP Language & Composition *
- 1200/11101 Journalism
- 1300/01151 Fundamentals of Public Speaking
- 1515/01999 Foundations of English
- 1517/01999 Advanced Creative Writing
- 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
- 3134/02056 Algebra II
- 3137/02106 Honors Algebra II & Trigonometry*
- 3143/02072 **Geometry or Geometry Lab**
  - 3143H/02072 Honors Geometry*
- 3154/02102 Discrete Mathematics
- 3162/02104 Mathematical Analysis *
- 3177/02124 AP Calculus* AB
- 3178/02122 AP Calculus* BC (VV)
- 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*

### SCIENCE
- 4210/03001 **Earth Science**
  - 4210H/03001 Honors Earth Science*
- 4250/03005 Oceanography
- 4269/03003 **Environmental Science**
  - 4270/03207 AP Environmental Science (VV)*
- 4310/03051 Biology
- 4310H/03051 Honors Biology *
- 4330/03053 **Anatomy and Physiology** *
- 4340/03063 Ecology
- 4370/03056 AP Biology *
- 4410/03101 Chemistry
- 4410H/03101 Honors Chemistry *
- 4470/03106 AP Chemistry *
Physics*
AP Physics I*
DC Biology*
DC Chemistry*

MILITARY SCIENCE (Aerospace Science)
Air Force Junior ROTC I
Air Force Junior ROTC II
Air Force Junior ROTC III
Air Force Junior ROTC IV

SOCIAL STUDIES
World History & Geography to 1500 A.D.
Honors World History & Geography to 1500 A.D.*
World History & Geography 1500 A.D. to present
Honors World History & Geography from 1500 A.D. to present*
Humanities/Multicultural Studies
AP U.S. History*
VA & U.S. History
Honors VA & U.S. History*
AP European History
AP Psychology*
VA & U.S. Government
Honors VA & U.S. Government*
AP Government & Politics*
AP Government and Politics: Comparative* (VV)
Sociology
Economics
DC Government*
DC U.S. History*
DC Introduction to Psychology*

FINE ARTS
Art I
Art II
Art III
Art IV
AP Art History (VV)
DC History & Appreciation of Art
Theatre I
Theatre II
Theatre III
Music Appreciation/History/Theory
Beginning Band
Intermediate Band
Advanced Band
Intermediate Orchestra
Advanced Orchestra
Small Instrumental Ensemble
Beginner Chorus
Small Vocal Ensemble
Intermediate Chorus – (Mixed Chorus Unselected)
Advanced Chorus—(Mixed Chorus Select)

SERVICE LEARNING
Service Learning
<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>7700/08049</td>
<td>Adapted Physical Education</td>
</tr>
<tr>
<td>7300/08052</td>
<td>Health &amp; P.E. 9</td>
</tr>
<tr>
<td>7405/08201</td>
<td>Health &amp; P.E. 10</td>
</tr>
<tr>
<td>7638</td>
<td>Sports, Exercise, and Health Science</td>
</tr>
<tr>
<td>7640/08005</td>
<td>Advanced Physical Education</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>5010/06721</td>
<td>Arabic I (VV)</td>
</tr>
<tr>
<td>5110/06121</td>
<td>French I</td>
</tr>
<tr>
<td>5120/06122</td>
<td>French II</td>
</tr>
<tr>
<td>5130/06123</td>
<td>French III</td>
</tr>
<tr>
<td>5140/06124</td>
<td>Honors French IV*</td>
</tr>
<tr>
<td>5150/06125</td>
<td>Honors French V*</td>
</tr>
<tr>
<td>5170/06132</td>
<td>AP French Language*</td>
</tr>
<tr>
<td>5310/06301</td>
<td>Latin I</td>
</tr>
<tr>
<td>5320/06302</td>
<td>Latin II</td>
</tr>
<tr>
<td>5330/06303</td>
<td>Latin III</td>
</tr>
<tr>
<td>5340/06304</td>
<td>Honors Latin IV*</td>
</tr>
<tr>
<td>5350/06305</td>
<td>Honors Latin V*</td>
</tr>
<tr>
<td>5370/06313</td>
<td>AP Latin: Vergil* (VV)</td>
</tr>
<tr>
<td>5510/06101</td>
<td>Spanish I</td>
</tr>
<tr>
<td>5520/06102</td>
<td>Spanish II</td>
</tr>
<tr>
<td>5530/06103</td>
<td>Spanish III</td>
</tr>
<tr>
<td>5540/06104</td>
<td>Honors Spanish IV*</td>
</tr>
<tr>
<td>5550/06105</td>
<td>Honors Spanish V*</td>
</tr>
<tr>
<td>5570/06112</td>
<td>AP Spanish Language*</td>
</tr>
<tr>
<td>5810/06721</td>
<td>Chinese I (VV)</td>
</tr>
<tr>
<td>5990/06801</td>
<td>Sign Language I</td>
</tr>
<tr>
<td>5995/06802</td>
<td>Sign Language II</td>
</tr>
<tr>
<td>5997/06803</td>
<td>Sign Language III</td>
</tr>
<tr>
<td>5998/06804</td>
<td>Honors Sign Language IV*</td>
</tr>
</tbody>
</table>

**GOVERNOR’S SCHOOL FOR THE ARTS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>9600</td>
<td>Dance – MS*</td>
</tr>
<tr>
<td>9601</td>
<td>Visual Arts – MS*</td>
</tr>
<tr>
<td>9602</td>
<td>Instrumental Music – MS*</td>
</tr>
<tr>
<td>9603</td>
<td>Vocal Music – MS*</td>
</tr>
<tr>
<td>9604</td>
<td>Theatre – MS*</td>
</tr>
</tbody>
</table>

**INTERNATIONAL BACCALAUREATE**

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB1130/01001</td>
<td>Pre-Dip English 9*</td>
</tr>
<tr>
<td>IB1195/01002</td>
<td>Pre-Dip English 10*</td>
</tr>
<tr>
<td>IB1150/01007</td>
<td>IB English 11, Higher Level +</td>
</tr>
<tr>
<td>IB1160/01007</td>
<td>IB English 12, Higher Level +</td>
</tr>
<tr>
<td>IB5122/06122</td>
<td>Pre-Dip French II</td>
</tr>
<tr>
<td>IB5132/06123</td>
<td>Pre-Dip French III</td>
</tr>
<tr>
<td>IB 5142/06124</td>
<td>IB French 4+</td>
</tr>
<tr>
<td>IB 5152/06131</td>
<td>IB French 5+</td>
</tr>
<tr>
<td>IB5522/06102</td>
<td>Pre-Dip Spanish II</td>
</tr>
<tr>
<td>IB5532/06103</td>
<td>Pre-Dip Spanish III</td>
</tr>
<tr>
<td>IB 5542/06104</td>
<td>IB Spanish 4+</td>
</tr>
<tr>
<td>IB 5552/06111</td>
<td>IB Spanish 5+</td>
</tr>
<tr>
<td>IB 5320/06302</td>
<td>Pre-Dip Latin 2</td>
</tr>
</tbody>
</table>
IB 5330/06303  Pre-Dip Latin 3
IB 5340/06304  IB Latin 4+
IB 5350  IB Latin 5+
IB2351/04052  Pre-Dip World History to the 20th Century*
IB2445/04157  Pre-Dip/AP U.S. Government and Politics+
IB 2360/04054  IB History 11 HL+
IB 2361/04054  IB History 12 HL+
IB 2903/04257  IB Psychology 11 +
IB 2904/04257  IB Psychology 12 +
IB4310/03051  Pre-Dip Biology*
IB 4380/03057  IB Biology 11 +
IB 4390/03057  IB Biology 12 +
IB4410/03101  Pre-Dip Chemistry*
IB 4480/03107  IB Chemistry 11 +
IB 4490/03107  IB Chemistry 12 +
IB 4280/03208  IB Environmental Systems and Societies 11 +
IB 4281/03208  IB Environmental Systems and Societies 12 +
IB 4580/03157  IB Physics 11 +
IB 4590/03157  IB Physics 12 +
IB3143/03073  Pre-Dip Geometry*
IB3137/02106  Pre-Dip Algebra II/Trigonometry*
IB3196/02131  IB Math Studies 11, Standard Level+
IB3197/02132  IB Math Studies 12, Standard Level+
IB319802132  IB Mathematics 11 +
IB3195/02134  IB Mathematics 12 +
IB 9194/05173  IB Visual Arts 11 +
IB 9195/05173  IB Visual Arts 12 +
IB9294/05115  IB Music 11+
IB9295/05115  IB Music 12+
IB1197/04304  IB Theory of Knowledge 11*
IB1198/04304  IB Theory of Knowledge 12*

PROJECT LEAD THE WAY®
8379/14254  Principles of the Biomedical Sciences+
8380/14251  Human Body Systems+
8381/14063  Medical Interventions+
8382/14255  Biomedical Innovation+
8430/21021  Civil Engineering and Architecture+
8439/21017  Introduction to Engineering Design+
8440/21023  Digital Electronics+
8441/21018  Principals of Engineering+
8443/21047  Engineering Design and Development+

CAREER AND TECHNICAL EDUCATION
6120/22210  Economics and Personal Finance
6131/12054  Business Law
6135/12052  Business Management
6152/12005  Keyboarding Applications
6320/12104  Accounting
6321/12104  Advanced Accounting
6612/10005  Computer Information Systems
6625/12006  Word Processing
6730/14153  Medical Systems Administration
8006/18001  Foundations of Agriculture, Food, and Natural Resources
8008/18101  Introduction to Animal Systems
8022/18201  Agricultural Business Fundamentals
Agricultural Business Operations
Marketing
Internet Marketing
Advanced Marketing
Fashion Marketing
Introduction to Fashion Careers
Hospitality, Tourism, and Recreation I
Independent Living
Nutrition and Wellness
Introduction to Health and Medical Sciences
Technology Foundations
Technology Transfer
Communication Systems
Technical Drawing and Design
Engineering Drawing and Design
Architectural Drawing and Design
Graphic Communication Systems
Digital Visualization
DC Virginia Teachers for Tomorrow I+
DC Virginia Teachers for Tomorrow II+
Education for Employment I
Education for Employment II
Entrepreneurship Education

Auto Service Technology (ASE Certified) I
Auto Service Technology (ASE Certified) II
Building Trades I
Building Trades II
Certified Internet Webmaster
Collision Repair Technology I
Collision Repair Technology II
Cosmetology I
Cosmetology II
Computer Systems Technology I with Cybersecurity Infusion
Computer Systems Technology II with Cybersecurity Infusion
Culinary Arts I
Culinary Arts II
DC Modeling and Simulation Support Specialist I
DC Modeling and Simulation Support Specialist II
Early Childhood Education I
Early Childhood Education II
Emergency Medical Technician
Geospatial Technology I
Nurse Aide
Network Administration with Cybersecurity Infusion
Oracle Internet Academy
Utility / Heavy Construction
Veterinary Assistant I
Veterinary Assistant II
Welding I
Welding II

AP - Advanced Placement
DC - Dual Credit (High School & College Credit Awarded)
SCHOOL BOARD MEMBERS

Michael J. Debranski, Ed.D, Chairman

Enoch Copeland, Vice-Chairman

Linda Bouchard

Phyllis C. Byrum

Judith Brooks-Buck, Ph.D.

David P. Mitnick

Lorraine B. Skeeter

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.

Suzanne M. Rice, Ed.D., Assistant Superintendent of Student Services
100 N. Main Street
P.O. Box 1549
Suffolk, VA 23434

Phone: (757) 925-6750
Email: suzannerice@spsk12.net