THE MISSION OF CHESAPEAKE PUBLIC SCHOOLS

The mission of the Chesapeake Public Schools is to ensure that all students attain the knowledge, skills, and attitudes to become lifelong learners and productive citizens by combining the efforts of students, parents, community, and staff to provide a quality education in a safe, orderly environment in which human dignity is valued. The strategic goals are to:

- Optimize School Safety
- Ensure Rigorous Educational Standards
- Evaluate Effectiveness and Efficiency
- Optimize the Management of Human Resources and Ensure Effective Staff Development
- Optimize the Use of Technology
- Enhance Parental and Community Involvement
- Provide Optimal School Facilities

The Mission of Professional School Counselors

Our mission as professional school counselors is to provide a comprehensive, standard-based counseling program designed to promote the formation of productive and responsible citizens by assisting all students to develop academic, career, and personal/social competencies. Effective school counseling programs are a collaborative effort between the professional school counselor, parents, teachers, administrators, and the greater community to create an environment that promotes student achievement, as well as develop initiatives to close the achievement gap. A comprehensive school counseling program connects school counseling with current educational reform initiatives that emphasize student achievement and success. Professional school counselors value and respond to the diversity and individual differences in our societies and communities. Comprehensive school counseling programs ensure equitable access for all students to participate fully in the educational process and to be productive members in a global economy and diverse society.

Contact Information for Specific Academies

Science and Medicine Academy
Deep Creek High School
2900 Margaret Booker Dr.
Chesapeake, VA 23323
Phone: 757.558.5302
Fax: 757.558.5305
Coordinator: Heather Ott

Governor’s STEM Academy
Grassfield High School
2007 Grizzly Trail
Chesapeake, VA 23323
Phone: 757.558.4749
Fax: 757-558-9240
Coordinator: Meredith Strahan

International Baccalaureate
Oscar Smith High School
1994 Tiger Drive
Chesapeake, VA 23320
Phone: 757.548.0696
Fax: 757.548.0531
Coordinator: Kerri Lancaster

The most current revision to this publication is located on the Chesapeake Public Schools website www.cpschools.com. The copy may be found under the Departments tab F – N; Guidance/School Counseling; Program of Study.
## Table of Contents

- Graduation Requirements ................................................................. 3
- Advanced Studies Diploma: Minimum Course & Credit Requirements ................................................................. 4
- Standard Diploma: Minimum Course & Credit Requirements ................................................................................. 6
- Standard Diploma Credit Accommodations ................................................................................................................. 8
- Diploma Seals......................................................................................... 8
- Honor Graduates................................................................................... 9
- Valedictorian and Salutatorian................................................................. 9
- Standards of Learning End of Course Tests ................................................ 9
- Block Scheduling.................................................................................. 10
- Criteria for Accelerated and Honors Courses .................................................. 10
- Advanced Placement (AP) Course Opportunities ........................................ 10
- Grading Scale......................................................................................... 10
- Grade Point Average Determination........................................................ 11
- Weighted Credits................................................................................... 11
- Examination Exemption Incentives .......................................................... 13
- Repeat Courses....................................................................................... 13
- Changing and Dropping Courses............................................................ 13
- Honor Roll............................................................................................. 13
- Promotion/Retention.............................................................................. 14
- College and Career Pathways................................................................. 14
- Senior Year Plus Initiatives..................................................................... 14
- CPS Virtual Instruction Program (VIP) ..................................................... 14
- Virtual Virginia..................................................................................... 15
- Non CPS Virtual Course Procedure ......................................................... 15
- Academic and Career Program of Studies .................................................. 15

### Science and Medicine Academy

- English.................................................................................................. 16
- Social Studies......................................................................................... 16
- Math........................................................................................................ 16
- Science................................................................................................... 17

### Governor's STEM Academy

- Engineering and Technology Pathway .................................................... 20
- Programming and Software Development Pathway .................................. 21
- Global Entrepreneurship and Technology Pathway ........................................ 22

### International Baccaulaureate

- Languages............................................................................................... 23
- Individuals and Societies........................................................................ 24
- Experimental Sciences............................................................................ 25
- Mathematics............................................................................................ 26
- Arts and Electives.................................................................................... 27
- Required Interdisciplinary Seminar Course ................................................ 28
PREPARATION FOR COLLEGE, CAREER AND TECHNICAL EDUCATION

Each middle and secondary school shall provide for the early identification and enrollment of students in a program with a range of educational and academic experiences related to college and career readiness in and outside the classroom, including an emphasis on experiences that will motivate students to prepare for a career or postsecondary education.

8 VAC 20-131-140 C: College and career readiness; career exposure, exploration, and planning; and opportunities for postsecondary credit.

Each student will continue to update a personal Academic and Career Plan (ACP) in high school. The Academic and Career Plan shall be developed in accordance with guidelines established by the Board of Education and signed by the student, student’s parent or guardian, and school official(s) designated by the principal. The components of the ACP shall include the student’s program of study for high school graduation and a postsecondary career pathway based on the student’s academic and career interests. In high school, a career-related learning experience shall be chosen by the student and documented in the ACP. The Plan shall be included in the student’s record and shall be reviewed and updated annually. Students should work closely with their school counselors and their families as they plan their programs and make course selections. The academic planning process involves the selection of courses, which ensures that a student is prepared for the transition from high school to further education and/or the workplace.

GRADUATION REQUIREMENTS

The Virginia Board of Education of the Commonwealth of Virginia establishes graduation requirements for all Virginia public schools. The Board of Education of the Chesapeake Public Schools maintains its graduation requirements based on regulations set by the Virginia Board of Education (8 VAC 20-131-51-et.seq.)

To receive a high school diploma, students must meet the requirements for the Advanced Studies Diploma or the Standard Diploma, which became effective when the student enters ninth grade for the first time. An Applied Studies Diploma is awarded to students with disabilities who complete the requirements of their individualized education plan (IEP). A Certificate of Program Completion is awarded to students who successfully complete all academic coursework (standard units of credit) required for either the advanced studies or standard diploma, but who need to continue earning the required verified credits. Through elective choices, students have the opportunity to design a course of study that best prepares them for different goals. Students are encouraged to consider both educational and career goals in selecting courses. An unofficial transcript will be made available to all students during the scheduling process each year. With the help of this record, students, parents or guardians, and counselors can provide assistance in the course selections process to ensure specific graduation requirements are met.

Students must fulfill the following requirements in order to receive a diploma and graduate from a Chesapeake City Public School:

- Earn the required units of credit by passing required course work.
- Earn verified units of credits based on SOL tests or other board criteria and guidelines.
- Successfully complete one virtual course, which may be non-credit bearing.
- Earn a board-approved career and technical education credential (Standard Diploma) Beginning with the first-time ninth grade students in the 2018-2019 school year (Class of 2022), all students must either earn a career and technical education credential or complete an Advanced Placement, International Baccalaureate or honors course to graduate.
- Receive training 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. (Beginning with first-time ninth grade students in the 2016-2017 school year)

DEFINITIONS

- Standard Unit of Credit
  The standard unit of credit for graduation is based on a minimum of 140 clock hours of instruction and successful completion of the requirements of the course. An academic term in high school is one semester; unless the student is on an A/B schedule and then a term is defined as a year. An academic term on the middle school level is defined as one year.

- Verified Unit of Credit
  A verified unit of credit for graduation is based on a minimum of 140 clock hours of instruction, successful completion of the requirements of the course, and a passing score on the end-of-course Standards of Learning (SOL). A state-approved substitute test may be used for specified SOL tests. For further clarification, visit the Virginia Department of Education website. Locally awarded verified credits may be awarded in some disciplines. For students entering ninth grade for the first time in 2018-2019 (Class of 2022), students have additional flexibility in how they can earn verified credits under the new graduation requirements. Students may verify course achievement in the following ways: passing the end-of-course SOL test corresponding with the course or a Board of Education-approved substitute assessment; earning a locally awarded verified credit in English, mathematics, science or history/social science in accordance with criteria established by the Board of Education (a student may earn no more than one locally awarded verified credit); and passing a performance-based assessment in history/social science or English writing in lieu of an end-of-course SOL test in these content areas.

- Student-Selected Test (Beginning with the ninth-grade class of 2013-2014 and through the ninth-grade class of 2017-2018)
  A student-selected test for verified credit may come from any end-of-course SOL test that is not already satisfying a required verified credit or tests in computer science, technology, or other areas as prescribed by the Virginia Board of Education. A detailed listing may be located on the Virginia Department of Education website.

- Sequential Electives
  Sequential electives are defined as two years of study in a focused sequence of elective courses leading to further education or preparation for employment. Examples of sequential electives are Art I and Art II, Journalism I and Journalism II, Basic Technical Drawing and Engineering Drawing, Physical Education 11th grade and Physical Education 12th grade, Physics for Technology I and Physics for Technology II, and ROTC. Sequential courses in Business and Information Technology, Marketing Education, Technology Education, Family and Consumer Science, Education for Employment and Fine Arts also qualify.
ADVANCED STUDIES DIPLOMA: MINIMUM COURSE & CREDIT REQUIREMENTS

(Beginning with students who enter the ninth grade for the first time in the 2018-2019 school year)

To graduate with an Advanced Diploma, a student must earn at least 26 standard units of credit by passing required courses and electives, and earn at least five verified credits by passing end-of-course SOL tests, authentic performance assessments, or other assessments approved by the Board of Education or meeting the criteria for the receipt of a locally awarded verified credit.

Beginning with students entering ninth grade for the first time in 2018-2019, a student must also:

- Successfully (i) complete an Advanced Placement, honors, or International Baccalaureate course, OR (ii) earn a board-approved career and technical education credential; and
- Successfully complete one virtual course, which may be non-credit bearing or a required or elective credit-bearing course that is offered online; and
- Successfully complete training in emergency first aid, CPR, and the use of AED, including hands-on practice of the skills necessary to perform cardiopulmonary resuscitation; and
- Successfully acquire and demonstrate foundational skills in critical thinking, creative thinking, collaboration, communication, and citizenship in accordance with the Profile of a Virginia Graduate.

Credit accommodations are not available for the Advanced Studies Diploma.

Please note: Your school counselor can tell you which courses are offered by your school to fulfill the requirements for an Advanced Studies Diploma.

---

Advanced Studies Diploma Course Requirements (8 VAC 20-131-51.C) Class of 2022 and Beyond

<table>
<thead>
<tr>
<th>Discipline Area</th>
<th>Standard Units of Credit Required</th>
<th>Verified Credits Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>History &amp; Social Sciences</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>World Languages</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fine Arts or Career &amp; Technical Education</td>
<td>1</td>
<td>A computer science course may be considered a career and technical course credit.</td>
</tr>
<tr>
<td>Economics and Personal Finance</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>5*</td>
</tr>
</tbody>
</table>

* No more than one locally awarded verified may be used to satisfy these requirements.

NOTE 1

Electives

- Fine Arts and Career and Technical Education – The Standard, Advanced Studies, and Standard Diploma with accommodations 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.

- World Language – The Advanced Studies Diploma contains a requirement for three years of one world 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 world language credit toward an Advanced Studies Diploma; other world languages will satisfy this requirement as well. Details of this action are available in: Superintendent's Memo, Interpretive, #1, June 12, 1998.
To graduate with an Advanced Studies Diploma, a student must earn at least 26 standard units of credit, depending on when he or she entered ninth grade, and at least nine verified units of credit: Students who entered ninth grade for the first time during and after 2011-2012 must earn at least 26 standard units of credit. Students who entered ninth grade before 2011-2012 must earn at least 24 standard units of credit. Beginning with students entering ninth grade for the first time in 2013-2014, a student must successfully complete one virtual course, which may be non-credit bearing, to graduate with an Advanced Studies Diploma. Beginning with first-time ninth grade students in the 2016-2017 school year, requirements for the standard and advanced diplomas shall include a requirement 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.

Credit accommodations are not available for the Advanced Studies Diploma.

Please note: Your school counselor can tell you which courses are offered by your school to fulfill the requirements for an Advanced Studies Diploma.

<table>
<thead>
<tr>
<th>Discipline Area</th>
<th>Standard Credits: effective with first-time ninth graders in 2011-2012 and beyond</th>
<th>Verified Credits - effective with ninth graders in 2000-2001 and beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 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.</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>4 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.</td>
<td>2</td>
</tr>
<tr>
<td>History &amp; Social Sciences</td>
<td>4 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.</td>
<td>2</td>
</tr>
<tr>
<td>World Languages</td>
<td>3 Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fine Arts or Career &amp; Technical Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics and Personal Finance</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Electives (Note 1)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Student Selected Test</td>
<td>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.</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>9</td>
</tr>
</tbody>
</table>

The Board shall approve courses to satisfy these requirements

**NOTE 1**

Electives

- **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.
- **World Language** – The Advanced Studies Diploma contains a requirement for either three years of one world 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 world language credit toward an Advanced Studies Diploma; other world languages will satisfy this requirement as well. Details of this action are available in: Superintendent's Memo, Interpretive, #1, June 12, 1998.
Therefore, local school officials should use their own judgment in determining which courses students take to satisfy this requirement.

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.

Fine Arts and Career and Technical Education

Sequential Electives

Electives

additional test to verify student achievement.

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 
education field from the Commonwealth of Virginia may substitute the certification, competency credential or license for either a laboratory science or history and social science verified credit 
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 
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 
NOTE 1
* No more than one locally awarded verified may be used to satisfy these requirements, except as provided for the Standard Diploma with Accommodations.

NOTE 1
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 either a laboratory 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.

Electives
Sequential Electives – Effective with the graduating class of 2003, students who wish to receive a Standard 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 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.
• 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 and Advanced 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.
To graduate with a Standard Diploma, a student must earn at least 22 standard units of credit by passing required courses and electives, and earn at least six verified credits by passing end-of-course SOL tests or other assessments approved by the Board of Education. Beginning with students entering ninth grade for the first time in 2013-2014, a student must also:

- Earn a board-approved career and technical education credential to graduate with a Standard Diploma; and
- Successfully complete one virtual course, which may be non-credit bearing. The school counselor can advise on available courses to fulfill the requirements for a Standard Diploma.

Beginning with first-time ninth grade students in the 2016-2017 school year, requirements for the standard and advanced diplomas shall include a requirement 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.

### Standard Diploma Course Requirements (8 VAC 20-131-50.B)

<table>
<thead>
<tr>
<th>Discipline Area</th>
<th>Standard Credits: effective with first-time ninth graders in 2011-2012 and beyond</th>
<th>Verified Credits: effective for first-time ninth graders in 2003-2004 and beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>History &amp; Social Sciences</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>World Language, Fine Arts or Career &amp; Technical Education</td>
<td>2 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.</td>
<td></td>
</tr>
<tr>
<td>Economics and Personal Finance</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Student Selected Test</td>
<td>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.</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>6</td>
</tr>
</tbody>
</table>

**NOTE 1**: The Board shall approve courses to satisfy these requirements

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.

**Electives**

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 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.
- 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.
STANDARD DIPLOMA CREDIT ACCOMMODATIONS

Beginning with students entering ninth grade for the first time in 2013-2014 and through the ninth grade class of 2017-2018, credit accommodations will be provided to allow students with disabilities who previously would have pursued a Modified Standard Diploma to earn a Standard Diploma. 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

While credit accommodations provide alternate pathways and flexibility, students receiving accommodations must earn the 22 standard credits and six verified credits required to graduate with a Standard Diploma. For students who enter the ninth grade in the 2018-2019 school year, refer to the requirements for the Standard Diploma requiring 22 standard credits and five verified credits. Credit accommodations are not available for the Advanced Studies Diploma.

CERTIFICATE OF PROGRAM COMPLETION

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

DIPLOMA SEALS

Diploma Seal Options (8 VAC 20-131-50.1)

The standards stipulate that the requirements for graduation shall be those in effect the first time a student enters the ninth grade. The requirements for diploma seals are included as part of the standards that outline the requirements for graduation. Thus, they become effective at the same time as the graduation requirements. 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. For additional information on this seal, go to: http://www.doe.virginia.gov/administrators/superintendents_memos/2011/060-11.shtml.

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 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. For additional information on this seal, go to: http://www.doe.virginia.gov/administrators/superintendents_memos/2011/060-11.shtml.

Board of Education’s Excellence in Civics Education Seal – Awarded to students who meet each of the following four criteria:
- Satisfy the requirement to earn a Standard Diploma or an Advanced Studies Diploma
- Complete Virginia & United States History and Virginia & United States Government courses with a grade of “B” or higher
- Complete 50 hours of voluntary participation in community service or extracurricular activities, such as volunteering for a charitable or religious organization that provides services to the poor, sick or less fortunate; participating in Boy Scouts, Girl Scouts or similar youth organizations; participating in Junior Reserve Officer Training Corps (JROTC); participating in political campaigns, government internships, Boys State, Girls State or Model General Assembly; and participating in school-sponsored extracurricular activities that have a civics focus. Any student who enlists in the United States military prior to graduation will be deemed to have met this community service requirement.
- Accumulation of community service activities begins in high school. No community service activities are counted toward the Civic Seal in middle school.
- Have good attendance and no disciplinary infractions as determined by local school board policies. (8 VAC 20-131-50)

Board of Education’s Seal of Biliteracy – Awarded to students who have demonstrated proficiency in languages other than English by using the following criteria:
- Pass a world language Advanced Placement examination with a score of 3 or higher or an International Baccalaureate examination with a score of 4 or higher; or
- Score 600 or higher on a Latin SAT II test (SAT Subject Test); or
- Receive a rating of Intermediate Mid or higher on a nationally or internationally available assessment of proficiency across language skills based on The American Council on the Teaching of Foreign Languages (ACTFL) Proficiency Guidelines; or
- Pass a foreign government’s approved language exam, or a nation’s high school level standardized exam in a language from a country in which the language is taught in school at a level comparable to Intermediate-Mid or higher on the ACTFL proficiency scale; or
- Provide evidence of success at the B1 level or higher on an assessment authorized through the Common European Framework of Reference for Languages; or
- Provide evidence of attaining Level 3.0 or higher on the American Sign Language Proficiency Interview (ASLPI); or
- Provide evidence of attaining an Intermediate level of higher rating on the Sign Language Proficiency Interview (SLPI/ASL)

For additional information on this seal, go to: http://www.doe.virginia.gov/instruction/graduation/diploma_seals/seal_of_biliteracy/acceptable_evidence_of_proficiency.pdf
Board of Education’s Seal for Excellence in Science and the Environment – Awarded to students who earn either a Standard Diploma or Advanced Studies Diploma AND

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

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

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

In addition, the student shall not have been enrolled in the last four years of high school for a period of more than eight consecutive semesters, beginning with the semester in which he/she was enrolled for the first time in the ninth grade.

The eight consecutive semesters shall be counted continuously from that point, regardless of whether or not he/she remains continuously enrolled in school. On the student’s final transcript, final class rank including valedictorian (number one in class) and salutatorian (number two in class) is calculated following graduation.

Determination of student involvement in graduation exercises are decisions made by the school principal.

STANDARDS OF LEARNING END OF COURSE TESTS
Students must take all applicable end-of-course Standards of Learning (SOL) tests following course instruction. Students who successfully complete a course and who achieve a passing score on an end-of-course SOL test or a substitute test for that course shall be awarded a verified credit. End-of-course tests that are available are listed in the following chart. A score of 400 is considered passing/proficient.

### Standards of Learning End-of-Course Tests Available for Verified Credit

<table>
<thead>
<tr>
<th>ENGLISH</th>
<th>MATHEMATICS</th>
<th>SCIENCE</th>
<th>HISTORY AND SOCIAL SCIENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• English 11: Reading</td>
<td>• Algebra I</td>
<td>• Earth Science</td>
<td>• World History I *</td>
</tr>
<tr>
<td>• English 11: Writing or Authentic Performance Assessment (when available)</td>
<td>• Geometry</td>
<td>• Biology</td>
<td>• World History II *</td>
</tr>
<tr>
<td></td>
<td>• Algebra II</td>
<td>• Chemistry</td>
<td>• VA and U.S. History *</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*or Authentic Performance Assessment (when available)</td>
</tr>
</tbody>
</table>

*Students entering the ninth grade prior to the 2018-2019 school year must earn a minimum of six verified credits for a Standard Diploma or a minimum of nine verified credits for an Advanced Studies Diploma. Refer to the table of Diploma Options for specific verified credit requirements for the Standard and Advanced Studies Diplomas. Students entering the ninth grade in the fall of 2018 (Class of 2022) must earn a minimum of five verified credits. Please refer to the Diploma Options for specific verified credit requirements.

### SOL Requirements For Transfer (Effective for the Students Entering Ninth Grade Prior to the 2018-2019 School Year)
Beginning = First 20 hours of instruction
During = After the first 20 hours of instruction

<table>
<thead>
<tr>
<th>Students Entering</th>
<th>Advanced Studies Diploma</th>
<th>Standard Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the 10th grade, or the beginning of 11th grade</td>
<td>6 verified units of credit:</td>
<td>4 verified units of credit:</td>
</tr>
<tr>
<td></td>
<td>2 English</td>
<td>1 history</td>
</tr>
<tr>
<td></td>
<td>1 mathematics</td>
<td>1 science</td>
</tr>
<tr>
<td>During the 11th grade, or the beginning of the 12th grade</td>
<td>4 verified units of credit</td>
<td>2 verified units of credit</td>
</tr>
<tr>
<td></td>
<td>1 English</td>
<td>1 of the student’s choosing</td>
</tr>
<tr>
<td></td>
<td>3 of the student’s choosing</td>
<td></td>
</tr>
</tbody>
</table>

### SOL Requirements For Transfer (Effective for the Students Entering Ninth Grade in the 2018-2019 School Year and Beyond)
Beginning = First 20 hours of instruction
During = After the first 20 hours of instruction

<table>
<thead>
<tr>
<th>Students Entering</th>
<th>Advanced Studies Diploma</th>
<th>Standard Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the 10th grade, or the beginning of 11th grade</td>
<td>5 verified units of credit:</td>
<td>5 verified units of credit:</td>
</tr>
<tr>
<td></td>
<td>2 English</td>
<td>1 history</td>
</tr>
<tr>
<td></td>
<td>1 mathematics</td>
<td>1 science</td>
</tr>
<tr>
<td>During the 11th grade, or the beginning of the 12th grade</td>
<td>2 verified units of credit</td>
<td>2 verified units of credit</td>
</tr>
<tr>
<td></td>
<td>1 English</td>
<td>1 of the student’s choosing unless Math participation is required</td>
</tr>
</tbody>
</table>

### Testing Accommodations
Testing accommodations may be available to students with disabilities, students with 504 plans, or students with limited English proficiency.
**BLOCK SCHEDULING**

High schools are using the 4 x 4 semester plan. In the 4 x 4 semester plan, the school day is divided into four instructional blocks approximately 90 minutes each and the school year is divided into two semesters.

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

**ATTENDANCE AND THE 4 X 4 BLOCK SCHEDULE**

Students need to report to classes on time. Regular school attendance is important in the academic development of the student. Excessive and unexcused absences from school are harmful to such development. On days when it is necessary for students to be absent, parents are requested to call the school that morning. Parents will be notified of the exact procedure for reporting absences.

On the 4 x 4 block schedule, a high school student shall not be granted credit if absences total more than nine class periods per course per semester. The principal shall be the judge of extenuating circumstances. The personal illness of a student, severe illness or death in the immediate family, exposure to contagious disease, and religious holidays shall be considered the only legitimate excuses for absences or tardiness. In all cases of absences or tardiness, parents/guardians shall provide a written excuse in writing, stating the reason for the absence or tardy.

**MAKE-UP WORK**

Students shall be permitted to make up work because of excused or unexcused absences, including in-school or out-of-school suspensions (6-44 R).

1. When a student is absent for more than three (3) school days, the school work should be sent home upon request of the parent. Twenty-four hours’ notice for the request must be given. Students that miss one (1) to three (3) days should make up the work in a reasonable amount of time after the student is well enough to return to school.
2. When a student is absent due to personal reasons and has received prior approval from the principal, schoolwork should be sent home with the student upon request after a twenty-four hour notice has been given. Completed assignments are due upon the student’s return to school.
3. When a student is absent the day of a test, but was in school the day before the test, the student will be expected to take the test upon return to school.
4. It is the student’s responsibility to complete all work missed when absent. The student has three (3) school days to complete the work for full credit. Exceptions may be made for extended absences. Penalties for work turned in after the three-day make-up period may be imposed.
5. In the case of an intentional absence (e.g., skipping class or school), students shall not be permitted to make-up work for credit and should receive a zero for any work assigned on the day/class period of the absence.

**CRITERIA FOR ACCELERATED AND HONORS COURSES**

When deciding whether or not a certain course or sequence is appropriate, students should be aware that these courses have been designed for students who meet the following criteria:

1. have consistently received grades of “B” or better in that subject area in the past;
2. have the recommendation of their present teacher(s) in the appropriate subject; and
3. have the approval of their parents.

**ADVANCED PLACEMENT (AP) COURSE OPPORTUNITIES**

Advanced Placement (AP) is a College Board program that offers students the opportunity to take college-level courses while they are enrolled in high school. Their pace is more rapid than accelerated or honors courses and, likewise, they cover material in much greater depth.

Students have the opportunity to learn a subject in greater depth, develop analytical reasoning skills, and develop study skills necessary for success at the college level.

All high schools in Chesapeake City Public Schools participate in the Advanced Placement Program. Parents are strongly encouraged to assist their child with AP course selections. Students and parents may contact the school and counseling office of the respective high school to obtain additional information and a list of the AP courses offered. AP teachers are also available to answer course content and requirement questions. In addition, the College Board publishes a booklet Advanced Placement Course Descriptions for each course. This booklet describes the content of the AP course and provides sample examination questions. Additional information is available at [www.collegeboard.com](http://www.collegeboard.com).

Students may gain advanced standing and/or earn college credit through their performance on the Advanced Placement examinations that are given each year in May. If the score received on the AP exam is high enough, the student can receive college credit in that discipline, depending on the requirement of the college or university. However, most students who take AP courses do so to prepare themselves better for college. All AP examinations (except Studio Art) contain both multiple choice and free response questions that require essay writing, problem solving, and other skills. In Studio Art, students submit portfolios of their work instead of taking the exam.

**GRADING SCALE**

Teachers will use the numerical grade earned by the student when recording grades. Each marking period letter grade on the report card will reflect the numerical average of the grades earned.

**NUMERICAL SCALE**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93 – 100</td>
<td>A-</td>
<td>90 – 92</td>
<td>B</td>
<td>83 – 86</td>
<td>C</td>
<td>73 – 76</td>
</tr>
<tr>
<td>B+</td>
<td>87 – 89</td>
<td>B-</td>
<td>80 – 82</td>
<td>C+</td>
<td>77 – 79</td>
<td>D+</td>
<td>67 – 69</td>
</tr>
</tbody>
</table>

Academy Catalog - 10
AVERAGING CREDIT GRADES ON A 4 X 4 BLOCK SCHEDULE

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

1. The school year is divided into two semesters.
2. Each semester consists of four marking periods. The four marking period grades and the exam grade will be used to determine the final grade with a weight of twenty percent each.
3. For those AP courses scheduled for two credits, a semester exam will be given in January and in June. The eight marking period grades and the two exam grades will be used to determine the final grade with a weight of ten percent each.
4. The midterm exam has been eliminated; however, the teacher has the option of giving a midterm test to count no more than any other test or major assignment during the grading period.
5. Grades for courses on an A/B alternating block or at the Governor’s School for the Arts will be considered interim grades at the 01, 03, 05, and 07 reporting periods. These grades will not be used to determine the final grade.
6. CCS&T classes that are 1.5 credits each semester will have four marking periods and the exam grade to determine the final grade for the semester. CCS&T classes that are 3.0 credits and are full year classes will use all eight marking periods and two exams to determine the final grades.
7. As required by School Board Policy (6-44), all grades are subject to improvement based upon the timely completion of make-up work.

DUAL ENROLLMENT

Beginning September 2014 all Dual Enrollment courses will use the community college grading scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
<td>4.0</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
<td>3.0</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
<td>2.0</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
<td>1.0</td>
</tr>
<tr>
<td>E</td>
<td>0-59</td>
<td>0.0</td>
</tr>
</tbody>
</table>

GRADE POINT AVERAGE DETERMINATION

Once final letter grades have been determined for all courses taken, the letter grades are changed to the corresponding quality points on the modified ten point scale shown below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Quality Points</th>
<th>Grade</th>
<th>Quality Points</th>
<th>Grade</th>
<th>Quality Points</th>
<th>Grade</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>A-</td>
<td>3.7</td>
<td>B</td>
<td>3.0</td>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>B+</td>
<td>3.3</td>
<td>C+</td>
<td>2.3</td>
<td>C+</td>
<td>1.7</td>
</tr>
</tbody>
</table>

The “assigned” quality point is now multiplied by the credit value of the course and the total number of quality points is divided by the total number of attempted credits. The result will be the unweighted grade point average. At this time, the weighted value of specific classes will be added to the unweighted grade point average. Please see the more detailed explanation of weighted credits.

WEIGHTED CREDITS

Certain courses have been approved for additional quality point weight, which is added to the grade point average of students. These courses are approved because they are academically demanding. The courses are identified as honors or advanced placement classes. Students will earn the following quality points: A=4.0, A-=3.7, B+=3.3, B=3.0, B-=2.7, C+=2.3, C=2.0, C-=1.7, D+=1.3, D=1.0, and E=0.0. After the students' grade point averages have been calculated with the above-stated quality points, a weight of 0.025 is added to the grade point average for each honors class completed successfully, and a weight of 0.05 is added to the grade point average for each advanced placement course/credit completed successfully. Because some advanced placement courses have a credit value of 2 credits, then 0.10 will be added for these classes. Some Dual Enrollment courses are also weighted.

Students who transfer into Chesapeake Public Schools will be given weighted credit for courses passed successfully in other school divisions only if the specific courses are weighted in Chesapeake Public Schools.

WEIGHTED ACCELERATED/HONORS CLASSES (.025 PER CREDIT)

Art IV
Honors Music
Honors Biology
Honors Chemistry
Honors Earth Science
Math Analysis
Calculus

Honors Geometry (Algebra 1 in MS)
World Language 3, 4, 5
World Language Advanced Conversation
Honors English 9, 10, 11, 12
Honors Social Studies 9, 10
Honors US History
Honors US Government
Digital Visualization (Advanced Drafting)

WEIGHTED ACCELERATED/AP CLASSES (.05 PER CREDIT)

AP English Language and Composition
AP English Literature and Composition
AP World Language
AP Art History
AP Art Studio/ Drawing
AP Music Theory
AP Comparative Government & Politics
AP European History
AP Human Geography
AP US Government and Politics

WEIGHTED ACCELERATED/DUAL ENROLLMENT CLASSES (.05 PER CR.)

College Composition 1 & 2
US History 1 & 2

Academy Catalog - 11
### INTERNATIONAL BACCALAUREATE (IB) COURSES
(Chesapeake Public Schools offers this program at Oscar Smith High School)

**WEIGHTED (.025 PER CREDIT)**
- IB Theory of Knowledge
- Pre-IB English 9
- Pre-IB English 10
- Pre-IB Spanish 3
- Pre-IB French 3
- Pre-IB Biology
- Pre-IB Chemistry
- Pre-IB Algebra II/Trigonometry
- Pre-IB Geometry
- Pre-IB Math Analysis

**WEIGHTED (.05 PER CREDIT)**
- IB English HL 1
- IB English HL 2
- IB French SL/HL 4
- IB French SL/HL 5
- IB Spanish SL/HL 4
- IB Spanish SL/HL 5
- IB History of the Americas HL
- IB History, Twentieth Century Topics HL
- IB Psychology SL/HL 1
- IB Psychology SL/HL 2
- IB Biology SL/HL 1
- IB Biology SL/HL 2
- IB Chemistry SL/HL 1
- IB Chemistry SL/HL 2
- IB Physics SL/HL 1
- IB Physics SL/HL 2
- IB Math SL/HL 1
- IB Math SL/HL 2
- IB Math Studies SL 1
- IB Math Studies SL 2
- IB Visual Arts SL/HL 1
- IB Visual Arts SL/HL 2
- Pre-IB World History 1
- Pre-IB World History 2
- Pre-IB US Government and Politics
- IB World Religions SL 1
- IB World Religions SL 2

### STEM ACADEMY COURSES
(Chesapeake Public Schools offers this program at Grassfield High School)

**WEIGHTED (.025 PRE CREDIT)**
- STEM Advanced Database Design and Management
- STEM Advanced Programming
- STEM Advanced Sports, Entertainment and Marketing
- STEM Advanced Global Marketing and Commerce
- STEM Principles of Engineering
- STEM Introduction to Engineering Design

**WEIGHTED (.05 PER CREDIT)**
- STEM Digital Electronics
- STEM Engineering Design and Development
- STEM Aerospace Engineering
- STEM Civil Engineering and Architecture

### SCIENCE AND MEDICINE ACADEMY COURSES
(Chesapeake Public Schools offers this program at Deep Creek High School)

**WEIGHTED (.025 PER CREDIT)**
- SMA Honors English 9
- SMA Honors English 10
- SMA Honors Social Studies 9
- SMA Honors Social Studies 10
- SMA Geometry
- SMA Algebra II/Trigonometry
- SMA Mathematical Analysis
- SMA Calculus
- SMA Principles of Earth Systems
- SMA Contemporary Science Investigations in Biology
- SMA Honors Medicinal Chemistry
- SMA Astronomy
- SMA Forensic Science
- SMA PLTW Principles of Biomedical Science (Anatomy 1)
- SMA PLTW Human Body Systems (Anatomy 2)
- SMA Advanced Senior Seminar

**WEIGHTED (.05 PER CREDIT)**
- SMA Animal Science
- SMA PLTW Medical Interventions
- SMA Human Movement Science
- SMA Molecular Genetics and Biotechnology
- SMA Advanced Placement Biology
- SMA Advanced Placement Chemistry
- SMA Advanced Placement Environmental Science
EXAMINATION EXEMPTION INCENTIVES

SENIOR EXAMINATION EXEMPTION
Graduating seniors who have an “A” average (93 – 100) in a course are exempt from taking the final examination in the course. The exam grade to be entered in the teacher gradebook will be the numerical average of the four quarters.

SOL EXAMINATION EXEMPTION
Beginning with the 2013-2014 school year, an SOL incentive process was established for SOL credit bearing classes. If a student passes the SOL on the first attempt or in an expedited retake attempt for the enrolled course, he/she will have the option of taking the following grade in place of the exam grade:

<table>
<thead>
<tr>
<th>SOL SCORE</th>
<th>Exam Grade</th>
<th>Numeric Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>400-428</td>
<td>C</td>
<td>75</td>
</tr>
<tr>
<td>429-457</td>
<td>C+</td>
<td>78</td>
</tr>
<tr>
<td>458-486</td>
<td>B</td>
<td>81</td>
</tr>
<tr>
<td>487-515</td>
<td>B+</td>
<td>85</td>
</tr>
<tr>
<td>516-544</td>
<td>A</td>
<td>91</td>
</tr>
<tr>
<td>545-572</td>
<td>A-</td>
<td>97</td>
</tr>
<tr>
<td>573-599</td>
<td>A</td>
<td>100</td>
</tr>
<tr>
<td>600</td>
<td>A</td>
<td>100</td>
</tr>
</tbody>
</table>

All students meeting this requirement have two options:
1) take the numeric grade designated above for the SOL score earned
2) take the final exam

This incentive is not available during summer school or an equating year. If a student qualifying for the exam option takes the final exam, they will be awarded whichever grade is higher.

WISE INCENTIVE EXAM EXEMPTION
A WISE Exam Exemption Incentive was established for students when passing their WISE Financial Literacy Industry Credential Test for the Economic and Personal Finance course.

<table>
<thead>
<tr>
<th>WISE SCORE</th>
<th>Exam Grade</th>
<th>Numeric Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>66-70</td>
<td>C</td>
<td>75</td>
</tr>
<tr>
<td>72-74</td>
<td>C+</td>
<td>78</td>
</tr>
<tr>
<td>76-80</td>
<td>B-</td>
<td>81</td>
</tr>
<tr>
<td>82-84</td>
<td>B</td>
<td>85</td>
</tr>
<tr>
<td>86-88</td>
<td>B+</td>
<td>88</td>
</tr>
<tr>
<td>90-92</td>
<td>A-</td>
<td>92</td>
</tr>
<tr>
<td>94-98</td>
<td>A</td>
<td>98</td>
</tr>
<tr>
<td>100</td>
<td>A</td>
<td>100</td>
</tr>
</tbody>
</table>

All students meeting this requirement have two options:
1) take the numeric grade designated above for the WISE score earned
2) take the final exam

This incentive is not available during summer school or an equating year. If a student qualifying for the exam option takes the final exam, they will be awarded whichever grade is higher.

REPEAT COURSES
If a student passes a course and elects to repeat the course, the student will receive credit for the higher grade. The lower grade will remain on the student’s cumulative record (transcript), but will not be calculated in the grade point average. (Exception: If the student fails the previously passed course, then the “E” will remain on the transcript and the “E” will be used in the calculation of the grade point average.) If a student fails a class and elects to repeat the course, the original grade of “E” will remain on the transcript and the “E” will be used in the calculation of the grade point average.

CHANGING AND DROPPING COURSES
Students are expected to follow the schedule of courses for which they register. However, circumstances may arise which give valid reasons for changing a schedule or dropping a course. Adjustments will be made only when, in the judgment of the principal, the reason for change is valid. Note: If a student requests to drop a course during the drop/add period, written notice must be received by the school’s counseling department within the first five days of that class. A student may not drop a course and add a new course after the first five days of a class. If a student requests to drop a course after this official drop/add period, the student will receive an “E” as a final grade for the course dropped unless extenuating circumstances are established. The principal shall determine if the circumstances are extenuating.

HONOR ROLL
Honor roll is determined at the end of each marking period. All students who have a 3.0 or greater grade point average in all courses (credit bearing or non-credit bearing classes)

<table>
<thead>
<tr>
<th>Superintendent’s Honor Roll Award</th>
<th>Principal’s Honor Roll Award</th>
<th>Honor Roll Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.85 – 4.00 GPA (with no grade lower than A-)</td>
<td>3.50 – 3.84 GPA (with no grade lower than B-)</td>
<td>3.00 – 3.49 GPA (with no grade lower than C)</td>
</tr>
</tbody>
</table>
PROMOTION/RETENTION

SENIOR HIGH SCHOOL PROMOTION REGULATIONS
Please note that any changes for the students beginning ninth-grade in 2018-2019, the information will be updated in this manual on the website.

Promotion in the senior high school in grades ten through twelve shall be based upon the number of standard and verified credits earned, and the successful completion of certain prerequisites in English. Designation of students by class (i.e., sophomore, junior, senior) shall be based upon the criteria that follow for five verified credits:

9th grade (freshman) to 10th grade – The successful completion of 4 standard subject-area credits including an English credit and 1 verified credit in EITHER science, social science OR mathematics.

10th grade (sophomore) to 11th grade – The successful completion of 10 standard subject-area credits including 2 English credits and 3 verified credits INCLUDING at least 1 in mathematics, 1 in science AND 1 in social science.

11th grade (junior) to 12th grade – The successful completion of 15 standard subject-area credits including 3 English credits and 4 verified credits INCLUDING at least 1 in English, 1 in mathematics, 1 in science AND 1 in social science.

12th grade (senior) to graduation (Standard Diploma) – The successful completion of 22 standard subject-area credits in state prescribed areas of study and 5 verified credits INCLUDING at least 2 in English, 1 in mathematics, 1 in science, 1 in social science.

OR

12th grade (senior) to graduation (Advanced Studies) – The successful completion of 26 standard subject-area credits in state prescribed areas of study and 5 verified credits INCLUDING at least 2 in English, 1 in mathematics, 1 in science, 1 in social science.

Note: In order for students to participate in senior activities, they shall have met all credit requirements for that class by September of the school year they intend to graduate. Exceptions for accelerated students and for students with unusual circumstances may be made by the principal for activities only. Exceptions for handicapped students may be made on the basis of their individualized education programs. (R 9-27. Promotion/Retention: Beginning with 9th grade entering 2004)

COLLEGE AND CAREER PATHWAYS

Beginning with students enrolled in the 9th grade in 2014-2015, students may earn a Certificate of General Studies or a Social Science Associates Transfer Degree through TCC while earning a high school diploma. These pathways are extremely demanding; they require course work using Dual Enrollment, Advanced Placement, and/or TCC college classes. The Social Science Transfer Degree requires students to complete high school credit in mathematics while in middle school. Beginning with 9th grade students in 2015-2016, students will have the opportunity to earn a Career Studies Certificate in Mechatronics. Students interested in these options should meet with a school counselor to see if any pathway is available in the academy setting.

SENIOR YEAR PLUS INITIATIVES

Senior Year Plus initiative offers two options to better prepare students for life after high school, while reducing the cost of college tuition and technical training. These options are called Early College Scholars and Path to Industry Certification.

EARLY COLLEGE SCHOLARS

The Early College Scholars program allows eligible high school seniors to complete their high school diploma while earning at least 15 hours of transferable credits toward a college degree, resulting in a more productive senior year and reducing the expense of college tuition for families. Students earn these credits through dual-enrollment programs and by taking Advanced Placement courses at their home high schools or through the Virginia Virtual Advanced Placement School.

The Early College Scholars program allows eligible high school students to earn at least 15 hours of transferable college credit while completing the requirements for an Advanced Studies Diploma. The result is a more productive senior year and a substantial reduction in college tuition. Students earning a college degree in seven semesters instead of eight can save an average of $5,000 in expenses.

To qualify for the Early College Scholars program, a student must:
- Have a “B” average or better;
- Be pursuing an Advanced Studies Diploma;
- 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; and
- Sign the "Governor's Early College Scholars Agreement."

The Virginia Virtual Advanced Placement School and the Commonwealth College Course Collaborative support early College Scholars. The Virginia Virtual Advanced Placement School provides statewide access to college-level courses while the Commonwealth College Course Collaborative defines the subjects high school students can complete and receive college degree credit from participating public and private colleges and universities.

PATH TO INDUSTRY CERTIFICATION: HIGH SCHOOL INDUSTRY CREDENTIALING

The Path to Industry Certification: High School Industry Credentialing encourages students to work toward a selected industry credential or state license while pursuing a high school diploma. Talk with your school counselor or career and technical education instructor for more information. Further details may be found at www.pen.k12.va.us/VDOE/senioryearplus/.

CPS VIRTUAL INSTRUCTION PROGRAM (VIP)

Chesapeake Public Schools provides several online courses for students through its Virtual Instruction Program (VIP). Desire2Learn (D2L) is an online tool that functions as a virtual classroom. All online courses are asynchronous; students can take the course anytime/anyplace they have a computer and Internet access. D2L provides instructional delivery, the ability to assess student knowledge, and the ability to communicate with the teacher and classmates. Exposure to online learning will prepare
students for the future, whether they are entering the workforce or headed to college. Students and parents should understand that online courses are not abbreviated courses. Most students will find they must invest more time to complete course work in an online class. Students should expect to spend at minimum the same amount of time required in a traditional course. Students must be self-motivated, able to manage time wisely, meet deadlines, and ask for assistance when needed. Students should possess basic computer skills to be successful in the online environment and should be comfortable using the Internet, email, and word-processing applications. Students should talk with their school counselors to see if the online environment is suitable.

Guidelines for Students
- Students must have reliable computer and Internet access. A cell phone and/or a tablet will not suffice. Chesapeake Public Schools is not responsible for providing computers, Internet access, or troubleshooting students’ personal devices.
- Students must complete the online course application (see your school counselor).
- Students must successfully complete the online orientation.
- Students must take an online course as a part of their normal course load.
- Students must complete all required Virginia Department of Education tests at their zoned school.

CPS Online Courses*
- Economics and Personal Finance (Fall & Spring)
- English 12 (Spring)
- Honors English 11 (Fall)
- Honors US/VA History (Spring)
- VA & US Government (Fall & Spring)

*Typical course offerings (see your school counselor for the most current list of course offerings).

VIRTUAL VIRGINIA
Virtual Virginia is a program of the Virginia Department of Education serving students in Virginia middle and high schools by providing flexible options for the diverse educational needs of students and their families. The program offers equal access to online courses for students who would like to enroll in Advanced Placement, world language, core academic courses, and elective courses. Advanced placement courses follow the College Board curriculum. In order to take AP courses, students must be Early College Scholars and have an application on file at their home school.

Scheduling Flexibility
Virtual Virginia courses are offered on a full-year or 4x4 block schedule. Individual classes can be scheduled at any time during the school day. All Virtual Virginia courses are first come, first served. An application is required for enrollment and can be obtained from students’ school counselors.

Individual Attention
Individual attention is emphasized in all courses; instruction is personalized as much as possible. Online teachers are available to students online, via telephone, e-mail, and fax for consultations and one-on-one instruction.

Comprehensive
Virtual Virginia instructors are responsible for the total education of students from the initial class introduction to the final exam. Local schools must have a mentor on hand to provide support to the online students, proctor tests, ensure students are on task, and act as a liaison between the student and the instructor when needed.

For more information and frequently asked questions, course offerings, and course descriptions visit the Virtual Virginia website at: www.virtualvirginia.org. To enroll, please contact your school counselor.

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

1. The student’s school counselor prior to requesting permission to enroll in another accredited secondary schools or programs of study, if credit for these courses is desired, must review the student’s academic plan and discuss all viable methods for receiving credit for courses offered by Chesapeake Public Schools.
2. A parent/guardian must submit in writing, at least 30 calendar days prior to enrollment each semester, a request to the principal to enroll in another secondary school or program of study outside of Chesapeake Public Schools for which an alternative method for receiving credit is desired.
3. In the letter, the parent/guardian must include (1) the reason(s) for enrolling in this school or program of study, (2) course description including time allotment and (3) provide copies of the course or program of study objectives and table of contents of textbook or other resources to be used for instruction. https://p1pe.doe.virginia.gov/amap_public/
4. The course must follow the graduation guidelines.
5. The principal will respond in writing to the parent/guardian as to whether or not approval will be given for the student to enroll in the school or program of study.
6. The cost of the virtual course would not be covered by Chesapeake Public Schools.
7. The parent/guardian must submit to the counselor an official grade document from the online provider once the course has been completed. High school credit will be recorded as pass/fail.

ACADEMIC AND CAREER PROGRAM OF STUDIES
The required instructional program for Chesapeake Public Schools is defined in the Program of Studies which contains (1) curriculum content and essential knowledge and skills for each grade level and course; (2) approved instructional resources; (3) testing and assessment programs; and (4) curriculum alignment with the Virginia Standards of Learning. The Program of Studies overview and other academic programs may be reviewed at any secondary school and at the Chesapeake Public Schools web site www.cpschools.com.

Special Note: Information in this Academic and Career Program of Studies Guide reflects Standards of Accreditation adopted by the Virginia Board of Education in July 2006. Action by the General Assembly or the State Board may necessitate changes in Chesapeake City Public Schools Board policies and regulations. If changes occur, they will be communicated as soon as possible.
DIRECTORY OF COURSE OFFERINGS AND DESCRIPTIONS FOR EACH ACADEMY

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

In addition to this academy edition catalog the high school catalog contains

the required courses and a complete list of electives offered in the Chesapeake City Public Schools. For all courses listed in the school's offerings, however, this guide contains the course descriptions and the listing of prerequisites.

Periodically, courses will be modified, added, or deleted. Sufficient student enrollment is necessary for a course to be taught.

SCIENCE AND MEDICINE ACADEMY AT DEEP CREEK HIGH SCHOOL

ENGLISH

SMA Honors English 9 (10071) State Code 1130
Grade Level: 9
Level of Difficulty: Honors
Credit: 1 unit
Weight: 0.025
Prerequisite: English 8, Honors English 8, or Gifted English 8
Standard of Learning End-of-Course Test: No
Course Description: Students present and critique dramatic reading and make planned oral presentations. The course emphasizes precision in the use of language, both orally and in writing, and the use of standard grammar, usage, and mechanics. Students develop a variety of writing samples using technology to access and organize information. Students utilize technical writing components with a focus on writing for the science and medical industries.

SMA Honors English 10 (11071) State Code 1140
Grade Level: 10
Level of Difficulty: Honors
Credit: 1 Unit
Weight: 0.025
Prerequisite: SMA Honors English 9
Standard of Learning End-of-Course Test: No
Course Description: Students study American literature and analyze the relationship of American history, literature, and culture. Students use the writing process to develop expository and persuasive essays by locating, evaluating, synthesizing, and citing applicable information with careful attention to organization and accuracy. Students participate in small-group learning activities and analyze informational materials. In addition, students review standard grammar and usage. Utilizing a variety of sources and a prescribed format, students compose a documented paper and deliver a persuasive presentation.

SOCIAL STUDIES

SMA Honors World History I: World History and Geography I to 1500 C.E. (40071) State Code 2215
Grade Level: 9
Level of Difficulty: Honors
Credit: 1 unit
Weight: 0.025
Prerequisite: Accelerate/Honors Placement requirements
Standard of Learning End-of-Course Test: Yes
Course Description: This course is an in-depth study of the backgrounds and development of world civilizations. Students develop critical thinking skills through analysis and research, essay writing, and discussion. Selected knowledge areas include the role of physical geography as it has influenced and hindered the development of cultures from man's prehistory through the Renaissance. The course introduces the industrialization of key figures, key discoveries, key inventions and innovations in both the fields of science and medicine.

SMA Honors World History 2: World History and Geography 2-1500 C.E. to the Present (41071) State Code 2216
Grade Level: 10
Level of Difficulty: Honors
Credit: 1 Unit
Weight: 0.025
Prerequisite: SMA Honors World History I: World History and Geography I to 1500 C.E. and Accelerated/Honors Placement Requirements
Standard of Learning End-of-Course Test: Yes
Course Description: This course is an in-depth study of the events of world history from the Renaissance through modern times. Selected knowledge areas include the coverage of the role of physical geography as it has influenced and hindered the development of world cultures. Specific attention concentrates on the emergence of strong national states, the age of revolutions, and the problems that exist today in modern nations. Various components of culture are addressed for comparison of similarities and differences of modern nations.

MATH

SMA Honors Geometry (22071) State Code 3143
Grade Level: 9
Level of Difficulty: Honors
Credit: 1 Unit
Weight: 0.025
Prerequisite: Algebra 1 in middle school

Academy Catalog - 16
Standard of Learning End-of-Course Test: Yes  
Course Description: Students learn the principles of geometry and are required to demonstrate logical problem-solving techniques. Topics include introductions to truth tables, negations, quantifiers, vectors and matrices, and three-dimensional coordinates. Students analyze real-world applications and problem-solving techniques of mathematical principles as they relate to science and medicine.

**SMA Honors Algebra 2/Trigonometry (23271) State Code 3137**
- **Grade Level:** 9 or 10  
- **Level of Difficulty:** Honors  
- **Credit:** 1 Unit  
- **Weight:** 0.025  
- **Prerequisite:** Geometry or SMA Honors Geometry (22071)  
- **Standard of Learning End-of-Course Test:** Yes  
- **Course Description:** 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 and trigonometry. Students demonstrate proficiency in solving problems using algebraic and graphing methods and a graphing calculator. Students use real-world applications and problem-solving of mathematical principles as they relate to science and medicine.

**SMA Mathematical Analysis (25071) State Code 3162**
- **Grade Level:** 10 or 11  
- **Level of Difficulty:** Honors  
- **Credit:** 1 Unit  
- **Weight:** 0.025  
- **Prerequisite:** Trigonometry/Probability and Statistics (24011) or SMA Honors Alg. 2/Trig (23271)  
- **Standard of Learning End-of-Course Test:** No  
- **Course Description:** This comprehensive course is intended to develop student understanding and application of algebraic and transcendental functions, parametric and polar equations, sequences and series, and vectors. The content of this course will help prepare the student for Calculus. Graphing calculators will be used as a tool to verify and investigate mathematical concepts and ideas.

**SMA Calculus (25171) State Code 3178**
- **Grade Level:** 11 or 12  
- **Level of Difficulty:** Honors  
- **Credit:** 1 Unit  
- **Weight:** 0.025  
- **Standard of Learning End-of-Course Test:** No  
- **Prerequisite:** SMA Honors Mathematical Analysis (25071)  
- **Course Description:** This course is intended for students who have a thorough knowledge of analytic geometry, and functions (including trigonometric functions, logarithmic functions, and exponential functions). The course provides students with a study of limits, continuity of functions, the derivative and its applications, and the definite integral and its applications. All topics will be investigated analytically, numerically and graphically. Graphing calculators will be used as a tool to verify and investigate mathematical concepts and ideas. This course can be used to prepare students for the rigors of Advanced Placement Calculus AB (789).

**SCIENCE**

**SMA Principles of Earth Systems (37071) State Code 4210**
- **Grade Level:** 9  
- **Level of Difficulty:** Honors  
- **Credit:** 1 Unit  
- **Weight:** 0.025  
- **Prerequisite:** Accelerated/Honors Placement Requirements  
- **Standard of Learning End-of-Course Test:** Yes  
- **Course Description:** Principles of Earth Systems is a laboratory course, which connects the study of the Earth's composition, structure, processes, and history; its atmospheres, fresh water, and oceans; and its environment in space. This course stresses the interpretation of maps, charts, tables, and profiles; the uses of technology to collect, analyze, and report data; and the utilization of science skills in systematic investigations. This is a very rigorous course with a strong research component that uses the experimental design model of investigations. Principles of Earth Systems students will be challenged to learn, research, and utilize hand-on experiments in greater depth. Students formulate a basic understanding of and implied actions for the introduced science and medical issues.

**SMA Contemporary Science Investigations in Biology (37271) State Code 4310**
- **Grade Level:** 9  
- **Level of Difficulty:** Honors  
- **Credit:** 1 Unit  
- **Weight:** 0.025  
- **Prerequisite:** Principles of Earth Systems  
- **Standard of Learning End-of-Course Test:** Yes  
- **Course Description:** This course is designed to give students a detailed, in-depth understanding of living systems. Emphasis is placed on the skills necessary to examine scientific explanations, to conduct controlled experiments, to analyze and communicate information, and to use scientific literature. The history of biological thought, and the evidence that supports it, is explored; they provide the foundation for scientific investigation. This rigorous course contains strong research components, which enable students to apply scientific concepts. Students will learn and research, utilizing both classroom experimentation and literature reviews from written and electronic resources. Students will utilize medical terminology and current science and medical trends/issues in our society.

**SMA Honors Medicinal Chemistry (37671) State Code 4410**
- **Grade Level:** 10  
- **Level of Difficulty:** Honors  
- **Credit:** 1 Unit  
- **Weight:** 0.025  
- **Prerequisite:** Accelerate/Honors Placement Requirements  
- **Standard of Learning End-of-Course Test:** Yes  
- **Course Description:** Medicinal Chemistry is a laboratory course, which allows the students to conduct laboratory experiments, which involve short and long-term bacterial studies as well as computer modeling and basic drug design. Medicinal and pharmaceutical research is an integral part of the health professions. Through this
course, students will apply their knowledge of the life sciences to extend their understanding of biochemistry and pharmacology. This course focuses on pharmaceutical development practices and strategies at the molecular level. In addition, they will investigate the structure, function, and therapeutic administration of chemical compounds. Students will write medical journal quality research papers, which reinforce topics that will be emphasized throughout the course. The course activities will emphasize research skills; critical thinking and problem solving will be emphasized. These skills will be encouraged through inquiry-based activities and challenging research investigations.

SMA Astronomy (37171) State Code 4260
Grade Level: 10th or 11th
Level of Difficulty: Honors
Credit: 1 Unit
Weight: 0.025
Prerequisite: Academy Placement Requirements
Standard of Learning End-of-Course Test: No
Course Description: Astronomy is a laboratory course, which connects the study of the Earth's celestial coordinates, telescopes, the Solar System, the orbit of the moon, H-R diagrams, the nature of light, and the age of the Universe. As students learn more about astronomy, they will appreciate just how much astronomy has affected and continues to affect their lives. This course is designed to give students an in-depth understanding of the universe. The course is focused on organizing facts into logical hypothesis, testing that hypothesis, and coming up with a feasible conclusion. The course requires investigating new and historical astronomy, utilizing the newest technology, and the use of deductive reasoning.

SMA Forensic Science (37771) State Code 4610
Grade Level: 10th or 11th
Level of Difficulty: Honors
Credit: 1 Unit
Weight: 0.025
Prerequisite: Academy Placement Requirements
Standard of Learning End-of-Course Test: No
Course Description: Forensic Science is a laboratory course, which allows the students to take on the various roles of a crime scene investigator, scientist, and medical examiner in order to collect and evaluate evidence in a problem-solving environment. Students will develop scientific bench techniques necessary for the handling and evaluation of evidence. Students will develop the field skills necessary to collect and maintain a chain of evidence, explore the history of DNA studies and the current standard acceptance of DNA in courts, and explore career opportunities involved in the medical, law enforcement, scientific, and legal aspects of forensic investigation.

SMA PLTW Principles of Biomedical Science (PBS) (80171)
Grade Level: 10th or 12th
Level of Difficulty: Honors
Credit: 1 Unit
Weight: 0.025
Prerequisite: Academy Placement Requirements
Standard of Learning End-of-Course Test: No
Course Description: In the introductory course of the PLTW Biomedical Science program, 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.

SMA PLTW Human Body Systems (HBS) (37771)
Grade Level: 10th – 12th
Level of Difficulty: Honors
Credit: 1 Unit
Weight: 0.025
Prerequisite: Academy Placement Requirements
Standard of Learning End-of-Course Test: No
Course Description: Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. 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.

SMA Animal Science (37571) State code 4611
Grade Level: 11th or 12th
Level of Difficulty: Accelerated
Credit: 1 unit
Weight: 0.05
Prerequisite: Earth Systems, CSI in Biology, Medicinal Chemistry and Human Anatomy and Pathophysiology
Standard of Learning End-of-Course Test: No
Course Description: Animal Science is a laboratory course, which allows the student to be introduced to the foundations for veterinary medical language and basic anatomy & physiology. Positional, directional and planes of body and body cavity terminology will be discussed. The course will introduce basic concepts and principles of animal nutrition, growth, health, behavior, reproduction, and genetics, as well as practical applications, such as disease prevention, genetic selection, and crossbreeding systems.

SMA PLTW Medical Interventions (MI) (80371)
Grade Level: 11th or 12th
Level of Difficulty: Accelerated
Credit: 1 unit
Weight: 0.05
Prerequisite: Earth Systems, CSI in Biology, Medicinal Chemistry
Standard of Learning End-of-Course Test: No
Course Description: 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.
SMA Human Movement Science (38371) State code 4612

Grade Level: 11th or 12th
Level of Difficulty: Accelerated
Credit: 1 unit
Weight: 0.05
Prerequisite(s): Earth Systems, CSI in Biology, Medicinal Chemistry and Human Anatomy and Pathophysiology

Standard of Learning End-of-Course Test: No

Course Description: Human Movement Science is a laboratory course, which allows the student to learn proper anatomy, physiology, and biomechanical functions of the joints, muscles and ligaments in the body and will be able to identify and make decisions about injuries. Sports medicine is a branch of healthcare devoted to the application of medical knowledge and expertise to the prevention, diagnosis, treatment, and management of injuries related to participation in sports, exercise, and other physical and recreational activities. This course will help students get a better understanding of how sports medicine factors into athletic injuries. Each student will participate in practical applications of modern athletic training including post injury care, application and instruction in Physical Therapy techniques, Sports Massage, Strength & Conditioning and athletic Rehabilitation therapy. At the end of the course, students will be CPR and First Aid Certified.

SMA Molecular Genetics and Biotechnology (37471) State Code 4611

Grade Level: 11th or 12th
Level of Difficulty: Accelerated
Credit: 1 unit
Weight: 0.05
Prerequisite(s): Earth Systems, CSI in Biology, and Medicinal Chemistry

Standard of Learning End-of-Course Test: No

Course Description: Molecular biotechnology results from the convergence of many areas of research, such as molecular biology, microbiology, biochemistry, immunology, genetics, and cell biology. It is an exciting field fueled by the ability to transfer genetic information between organisms with the goal of understanding important biological processes or creating a useful product. Students will learn about genetic engineering and why new vaccines are being created, how plants and animals are being genetically altered to meet the world’s demands, DNA fingerprinting, stem cell research, and how microbes are being harvested for energy efficiency. The students will connect what is learned in the classroom with instruction and experiences related to the science and medical fields. The tools of molecular biotechnology can be applied to develop and improve drugs, vaccines, therapies, and diagnostic tests that will improve human and animal health. Molecular biotechnology has applications in plant and animal agriculture, aquaculture, chemical and textile manufacturing, forestry, and food processing. Every aspect of our lives in the coming decades will be affected by this dynamic field.

SMA Advanced Placement Environmental Science (38071) State Code 4270

Grade Level: 11th or 12th
Level of Difficulty: Advanced Placement
Credit: 1 unit
Weight: 0.05
Prerequisite(s): Earth Systems, CSI in Biology, Medicinal Chemistry

Standard of Learning End-of-Course Test: No

Course Description: The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. This course is designed to prepare students for the Advanced Placement examination in chemistry to receive college credit. Completion of an investigative research project is an expectation of all Advanced Placement Environmental Science students.

SMA Advanced Placement Biology (37371) State Code 4370

Grade Level: 11th or 12th
Level of Difficulty: Advanced Placement
Credit: 1 Unit
Weight: 0.05
Level of Difficulty: College Level
Prerequisite(s): Earth Systems, CSI in Biology, Medicinal Chemistry

Standard of Learning End-of-Course Test: No

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

SMA Advanced Placement Chemistry (37871) State Code 4470

Grade Level: 11th or 12th
Level of Difficulty: Advanced Placement
Credit: 1 Unit
Weight: 0.05
Level of Difficulty: College Level
Science Prerequisite(s): Earth Systems, CSI in Biology, Medicinal Chemistry
Mathematics Prerequisite(s): Algebra II and a higher-level math course

Standard of Learning End-of-Course Test: No

Course Description: This course is designed to place emphasis on the major topics covered in introductory college level chemistry courses. This college level course will provide a depth of understanding of the fundamentals and competencies needed to apply chemical calculations and the mathematical formulation of principles. This course is designed to prepare students for the Advanced Placement examination in chemistry to receive college credit. In meeting the rigorous course standards, students will be encouraged to share their ideas, use the language of chemistry, discuss problem-solving techniques, and communicate effectively. Advanced Placement chemistry students will be challenged to learn, to research, utilizing both classroom experimentation and literature reviews from written and electronic resources, and to present topics in chemistry in greater depth. Completion of an investigative research project is an expectation of all Advanced Placement chemistry students.
SMA Advanced Senior Seminar (38271) State code 4612

Grade Level: 12th
Level of Difficulty: Honors
Credit: 1 Unit
Weight: 0.025
Level of Difficulty: Intensified Honors
Science Prerequisite(s): Earth Systems, CSI in Biology and/or Medicinal Chemistry, a minimum of 4 additional elective SMA courses and a minimum of 20 hours of Job Shadowing
Standard of Learning End-of-Course Test: No
Course Description: The goal of the Science and Medicine Academy is to introduce students to the vast field of science and medical careers. The focus is to give each student rigorous academic coursework necessary to compete in post-secondary institutions. The student will be introduced to a work-related learning experience where they will develop hands on work experience in a certain occupational field or gain the relevant knowledge and skills required to enter into a particular career field. This internships will be short term in nature with the primary focus of getting some on the job training and taking what’s learned in the classroom and applying it to the real world. This advanced seminar will help develop professional work habits; provides an understanding of corporate cultures, and offer a platform to compare differences in work styles. Students will be required to complete a minimum of 60 hours of hands on training. Students must complete an internal assessment in the form of a presentation and an external assessment in the form of a 1200-1600 word essay that addresses the students’ skills, attitude and awareness of the career field of internship.

GOVERNOR’S STEM ACADEMY AT GRASSFIELD HIGH SCHOOL

ENGINEERING AND TECHNOLOGY PATHWAY

STEM Introduction to Engineering Design (79181) State Code 8439
Grade Level: 9 or 10
Level of Difficulty: Difficult
Credit: 1 Unit
Weight: 0.025
Prerequisite: None
Industry Credential: Yes
Course Description: Using computer-modeling software, students learn the design process. They solve design problems as they develop, create, and analyze product models.

STEM Principles of Engineering (79281) State Code 8441
Grade Level: 9 or 10
Level of Difficulty: Difficult
Credit: 1 Unit
Weight: 0.025
Prerequisite: Algebra I Recommended
Industry Credential: Yes
Course Description: Students develop an understanding of the engineering profession and the fundamental aspects of engineering problem solving. Students study the historical and current impact of engineering on society as well as ethical implications. Mathematical and scientific concepts will be applied to fundamental engineering topics, including mechanics and electrical circuit theory.

STEM Digital Electronics (79581) State Code 8440
Grade Level: 10 or 11
Level of Difficulty: Difficult
Credit: 1 Unit
Weight: 0.05
Prerequisite: None
Industry Credential: Yes
Course Description: Students use computer simulations to learn about the logic of electronics as they design, test, and construct circuits and devices. They apply control system programming and explore sequential logic and digital circuitry fundamentals. Topics in computer circuitry are also presented, including circuitry analysis and an exploration into diodes, transistors, and operational amplifiers.

STEM Aerospace Engineering (79381) State Code 8428
Grade Level: 11 or 12
Level of Difficulty: Difficult
Credit: 1 Unit
Weight: 0.05
Prerequisite(s): Principles of Engineering (79281) and Introduction to Engineering (79181)
Industry Credential: Yes
Course Description: The Aerospace course expands horizons with projects developed with NASA-aerodynamics, astronautics, space-life sciences, and systems engineering.

STEM Civil Engineering and Architecture (79481) State Code 8430
Grade Level: 11 or 12
Level of Difficulty: Difficult
Credit: 1 Unit
Weight: 0.05
Prerequisite(s): Principles of Engineering (79281) and Introduction to Engineering (79181)
Industry Credential: Yes
Course Description: Introduces students to the interdependent fields of civil engineering and architecture; students learn project planning, site planning, and building design.
STEM Engineering Design and Development (79681) State Code 8443
Grade Level: 12
Level of Difficulty: Difficult
Credit: 1 Unit
Weight: 0.05
Prerequisite(s): Principles of Engineering (79281) and Introduction to Engineering (79181)
Industry Credential: No
Course Description: This pre-engineering course is designed to follow three core courses (Principles of Engineering, Introduction to Engineering Design, and Digital Electronics) as part of a national engineering program. Students enrolled in the Engineering Design and Development course synthesize knowledge, skills, and abilities through an authentic engineering experience. Students are expected to develop and formally present an independent study project and a team-oriented project, which are critiqued by an evaluation committee. Students interact and work with community mentors to research, design, and construct solutions to engineering problems.

PROGRAMMING AND SOFTWARE DEVELOPMENT PATHWAY

STEM Information Technology Fundamentals (71481) State Code 6670
Grade Level: 9 or 10
Level of Difficulty: Average
Credit: 1 Unit
Weight: None
Prerequisite: Keyboarding (71111) Recommended
Industry Credential: Yes
Course Description: Introduces the essential skills needed for students to pursue specialized programs leading to technical and professional careers and certifications in the Information Technology (IT) industry. Students have an opportunity to investigate career opportunities in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. The focus of the IT Fundamentals course is on introducing skills related to information technology basics, Internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, Web page design, and interactive media. Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability.

STEM Database Design and Management (71381) State Code 6660
Grade Level: 10 or 11
Level of Difficulty: Average
Credit: 1 Unit
Weight: None
Prerequisite: Information Technology Fundamentals (71481) Recommended
Industry Credential: Yes
Course Description: This course includes database design and programming. Students study database fundamentals to include database development, modeling, design, and normalization. In addition, students are introduced to database programming. Students gain the skills and knowledge needed to use features of database software and programming to manage and control access to data.

STEM Advanced Database Design and Management (71382) State Code 6661
Grade Level: 11 or 12
Level of Difficulty: Difficult
Credit: 1 Unit
Weight: 0.025
Prerequisite: Database Design and Management (71381)
Industry Credential: Yes
Course Description: Students study Java programming and Java database applications. The basics of object-oriented programming and the Java programming language are emphasized in this instruction. Students will prepare for industry certification in database applications and programming.

STEM Programming (71281) State Code 6640
Grade Level: 10, 11 or 12
Level of Difficulty: Average
Credit: 1 Unit
Weight: None
Prerequisite: Keyboarding (71111) and Information Technology Fundamentals (71481) Recommended
Industry Credential: Yes
Course Description: Students explore computer concepts, use logic procedures, and implement programming procedures using one or more programming languages, such as Visual Basic, Java, and C++. In addition, HTML or Java Scripting is used to program Web pages.

STEM Advanced Programming (71282) State Code 6641
Grade Level: 11 or 12
Level of Difficulty: Difficult
Credit: 1 Unit
Weight: 0.025
Prerequisite: Programming (71281)
Industry Credential: Yes
Course Description: Building on a foundation of programming skills, students will use object-oriented programming to develop applications for Windows, database, multimedia, games, mobile, and/or Web environments. Students will have the opportunity to explore and create applications related to the information technology and game design industries.
GLOBAL ENTREPRENEURSHIP AND TECHNOLOGY PATHWAY

STEM Leadership and Entrepreneurship Education (76581) State Code 9093
  Grade Level: 9 or 10
  Level of Difficulty: Average
  Credit: 1 Unit
  Weight: None
  Prerequisite: None
  Industry Credential: Yes
  Course Description: 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.

STEM Sports, Entertainment, and Recreation Marketing (76481) State Code 8175
  Grade Level: 10, 11 or 12
  Level of Difficulty: Average
  Credit: 1 Unit
  Weight: None
  Prerequisite: None
  Industry Credential: Yes
  Course Description: Students develop skills in the areas of marketing analysis, event marketing, communication, and human relations, along with a thorough understanding of the sports, entertainment, and recreation industry and career options available. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

STEM Advanced Sports, Entertainment, and Recreation Marketing (76482) State Code 8177
  Grade Level: 11 or 12
  Level of Difficulty: Difficult
  Credit: 1 Unit
  Weight: 0.025
  Prerequisite: None
  Industry Credential: Yes
  Course Description: Advanced Sports and Entertainment Marketing will build on students' prior knowledge of sports, entertainment, and recreation marketing. This course focuses on the principles of management and planning supported by research, financial, and legal concepts. Students will be able to plan and execute an event, develop a career plan, and establish a sports, entertainment, or recreation marketing product/business. Academic skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting the course are studied.

STEM Global Marketing and Commerce (76381) State Code 8135
  Grade Level: 11 or 12
  Level of Difficulty: Average
  Credit: 1 Unit
  Weight: None
  Prerequisite: None
  Industry Credential: Yes
  Course Description: Global Marketing and Commerce is a specialized course for students with a career interest in the field of international trade. Students gain an understanding of the various careers in global trade, finance, shipping, and marketing and consider fundamental concepts, principles, and theories of marketing in an international setting. Course content blends macroeconomic and microeconomic theory with international culture, politics, legal issues, concepts, practices, and applications. Internships may be available to provide students with additional opportunities for "hands-on" experiences in international marketing. Academic knowledge and skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

STEM Advanced Global Marketing and Commerce (76382) State Code 8136
  Grade Level: 12
  Level of Difficulty: Difficult
  Credit: 1 Unit
  Weight: 0.025
  Prerequisite: Global Marketing and Commerce (76381)
  Industry Credential: Yes
  Course Description: Advanced Global Marketing and Commerce, a specialized course for students with a career interest in international trade, builds upon concepts learned in Global Marketing and Commerce (76381). Economic and international trade concepts are reviewed, and the world environment of international trade is further explored. Students expand their knowledge about the impact of culture on international trade and continue their study of the legal and political aspects of international marketing. Global product strategies are examined. Concepts detailing entry into international markets, pricing strategies, international promotion, and marketing research are studied. Computer/technology applications supporting international marketing are explored. A review of skills and preparation required for careers in international marketing complete this course. Internships that provide “hands-on” opportunities in the international area may be available to students. Academic knowledge and skills (mathematics, science, English, and history/social science) related to the content are a part of this course. Computer/technology applications supporting this course are studied.

STEM Leadership Development (76681) State Code 9097
  Grade Level: 11 or 12
  Level of Difficulty: Average
  Credit: 1 Unit
  Weight: None
  Prerequisite: None
  Industry Credential: Yes
Course Description: Students develop competencies in identifying individual aptitudes in relation to effective leadership skills, understanding organizational behavior, using effective communication in the workplace, handling human resources and organizational problems, supervising and training employees, resolving conflict, and planning for the future. Continuing education in leadership is emphasized as well as practical leadership.

INTERNATIONAL BACCALAUREATE AT OSCAR SMITH HIGH SCHOOL

LANGUAGES

GROUP 1: LANGUAGE A1 (First Language)

CPS Pre-IB English 9 (10031) State Code IB1130
Level of Difficulty: Intensified Honors
Credit: 1 Unit
Weight: 0.025
Course Description: Students study language and classics in world literature, explore literary criticism, and complete a documented literary research paper. The course emphasizes precision in the use of language, both orally and in writing, and the use of standard grammar, usage, and mechanics. Students must complete summer reading assignments and read independently throughout the course.

CPS Pre-IB English 10 (11031) State Code IB1140
Level of Difficulty: Intensified Honors
Credit: 1 Unit
Weight: 0.025
Prerequisite: Pre-IB English 9
Course Description: Students study American literature, engage in comparative literary analysis, and compose a documented literary research paper. Students are expected to gain mastery of the writing process with careful attention to organization, writing style, correct grammar, usage and mechanics. Students must complete summer reading assignments and engage in independent reading assignments throughout the course.

IB English HL 1 (12261) State Code IB1150
Level of Difficulty: IB Higher Level
Grade Level: 11
Credit: 1 Unit
Weight: 0.05
Prerequisite: Pre-IB English 10
Course Description: This is the first year of an intensive, two-year study of language and literature in English. The course involves comparative study of literary works, both classical and contemporary, from various cultures. The texts, including American, British, and other world literature pieces in translation, are chosen from a broad list of prescribed authors and works representing different literary genres and styles. Students develop analytical and creative powers of expression, both in oral and written communication by practicing the skills involved in speaking and writing in a variety of styles and situations. Summer reading assignments are required. This course has end-of-course Standards of Learning tests.

IB English HL 2 (13261) State Code IB1160
Level of Difficulty: IB Higher Level
Grade Level: 12
Credit: 1 Unit
Weight: 0.05
Prerequisite: IB English HL 1
Course Description: Students continue a rigorous study of language and literature in IB English HL 2. Students demonstrate an increasing proficiency in creative and analytical thinking skills through their speech and writing. They develop a thorough understanding of the techniques involved in literary study and criticism, engage in detailed and critical examination of written works from world literature, and express a personal and independent response to literature. Numerous written and oral assignments are graded both internally and externally by the International Baccalaureate. Students take the higher-level IB English HL examination. Summer reading assignments are required.

GROUP 2: LANGUAGE B (Second Language)

CPS Pre-IB French 2 (50232) State Code IB5122
CPS Pre-IB Spanish 2 (53232) State Code IB5522
Grade Level: 9
Level of Difficulty: Intensified Academic
Credit: 1 Unit
Weight: None
Prerequisite: French 1 or Spanish 1
Course Description: In CPS Pre-IB French 2 or Spanish 2, students develop skill 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. Evidence of language mastery is displayed through interactive conversation, written assessments and oral presentations in the target language. A summer assignment is required.

CPS Pre-IB French 3 (50333) State Code IB5132
CPS Pre-IB Spanish 3 (53333) State Code IB5532
Grade Level: 10
Level of Difficulty: Intensified Academic
Credit: 1 Unit
Weight: 0.025
Prerequisite: French 2 or Spanish 2
Course Description: In CPS Pre-IB French 3 or Spanish 3, 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. For assessment purposes, students continue display language mastery through oral and written assessments using IB-level rubrics in order to prepare them for IB Language B requirements. Summer reading assignments may be required.
IB Spanish SL, HL 4 (53464) State Code IB5542
Grade Level: 11
Level of Difficulty: IB Standard Level/Higher Level
Credit: 1 Unit
Weight: 0.05
Prerequisite: French 3 or Spanish 3
Course Description: IB French 4 or Spanish 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 read and analyze cultural literature in context and practice using the target language creatively through oral presentations and conversation. IB French HL or IB Spanish HL is an extension of French or Spanish language that includes a greater emphasis on fluency in the target language and a deeper understanding of the culture(s) of the countries in which the target language is spoken. A summer assignment is required.

IB French SL, HL 5 (50565) State Code IB5152
IB Spanish SL, HL 5 (53565) State Code IB5552
Grade Level: 12
Level of Difficulty: IB Standard Level/Higher Level
Credit: 1 Unit
Weight: 0.05
Prerequisite: IB French SL 4 or Spanish SL 4
Course Description: IB French 5 or Spanish 5, students employ their skills of listening, speaking, reading, and writing in a variety of culturally and linguistically sophisticated formats. Students continue to develop skills through the use of authentic materials, including recordings, films, newspapers and magazines, in addition to selected literary works. IB internal assessment monitoring continues using dialogue, interactive conversation, and oral presentations in the target language. At the end of the course, students take the IB Language B Standard-Level or Higher-Level examination. A summer assignment is required.

INDIVIDUALS AND SOCIETIES

GROUP 3: INDIVIDUALS AND SOCIETIES

CPS Pre-IB World History 1 (40031) and 2 (41031) State Code 2399
Grade Level: 9
Level of Difficulty: Advanced Placement
Credit: 2 Units (1 unit for each course)
Weight: 0.05 per unit
Course Description: In this two-term course, students study world history and geography at an accelerated pace with an emphasis on European history from the Middle Ages to the present. Students develop skills in historical analysis and research, essay writing, and discussion. Students also use the processes of conceptual and critical thinking to analyze document-based questions (DBQ’s) using primary sources. Students take the Virginia end-of-course Standards of Learning test for World History from 1000 A.D. to the present and have the option of taking the Advanced Placement European History examination. Summer assignments are required.

CPS Pre-IB U.S. Government and Politics (43031) State Code 2445
Grade Level: 10
Level of Difficulty: Advanced Placement
Credit: 1 Unit
Weight: 0.05
Course Description: This course provides a critical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret American politics (local, state, and national levels) and the analysis of specific case studies familiarizing the student with various institutions, groups, beliefs and ideas that make up the American political reality. Students have the opportunity to take the Advanced Placement United States Government examination at the end of the course. Summer assignments are required.

IB History of the Americas HL (42261) State Code IB2360
Grade Level: 11
Level of Difficulty: IB Higher Level
Credit: 1 Unit
Weight: 0.05
Course Description: The first of a two-part 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 1995. 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. At the end of the course, students have the opportunity to take the Advanced Placement US History examination. Summer assignments are required.

IB Topics in 20th Century History HL (46361) State Code IB2362
Grade Level: 12
Level of Difficulty: IB Higher Level
Credit: 1 Unit
Weight: 0.05
Prerequisite: IB History of the Americas HL
Course Description: In this course, students study selected twentieth century topics in world history and examine case studies of the major events and issues of the twentieth century. Students read widely acquiring the skills to evaluate, to interpret, and to use source material critically as historical evidence. They also engage in expository writing that demonstrates an awareness of historical perspective and a consistently high level of critical analysis and handling of evidence. At the end of the course, students take the higher-level examination in IB History. Summer assignments are required.
EXPERIMENTAL SCIENCES

GROUP 4: EXPERIMENTAL SCIENCES

CPS Pre-IB Biology (31031) State Code IB4310
Grade Level: 9
Level of Difficulty: Intensified Honors
Credit: 1 Unit
Weight: 0.025
Course Description: This course has an end-of-course Standards of Learning test.

IB Standard Level/Higher Level

CPS Pre-IB Chemistry (32031) State Code IB4410
Grade Level: 10
Level of Difficulty: Intensified Honors
Credit: 1 Unit
Weight: 0.025
Course Description: The aim of this course is to develop a foundation of chemical concepts and principles for understanding the structure and properties of matter. Students develop investigative skills in order to solve problems and to understand the interrelationships among the basic concepts of modern chemistry. Specific topics include chemical reactions, bonding, acids, bases, and salts, atomic structure, kinetic theory and gases, 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. A summer assignment is required.

IB Standard Level/Higher Level

IB Standard Level/Higher Level

CPS Pre-IB Biology (31061) State Code IB4380
Grade Level: 11
Level of Difficulty: IB Standard Level/Higher Level
Credit: 1 Unit
Weight: 0.05
Prerequisite: Pre-IB Biology
Course Description: This is the first part of a two-year course, which 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 science is a process as well as personal experience. They also use 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. IB Biology HL is an extension of Biology SL that requires additional lab hours and more in-depth study of several Biology Higher-Level options. A summer assignment, which reviews basic biological principles learned in CPS Pre-IB Biology, is required.

IB Standard Level/Higher Level

CPS Pre-IB Chemistry (32061) State Code IB4480
Grade Level: 11
Level of Difficulty: IB Standard Level/Higher Level
Credit: 1 Unit
Weight: 0.05
Prerequisite: Pre-IB Chemistry
Course Description: IB Chemistry 1 develops the ability to critically analyze 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. IB Chemistry HL is an extension of IB Chemistry SL that requires additional laboratory hours and more in-depth study of several Chemistry Higher-Level options. A summer assignment is required.

IB Standard Level/Higher Level

IB Standard Level/Higher Level

IB Physics SL, HL 1 (33261) State Code IB4580
Grade Level: 11
Level of Difficulty: IB Standard Level/Higher Level
Credit: 1 Unit
IB Physics SL, HL 2 (33262) State Code IB4590  
Grade Level: 12  
Level of Difficulty: IB Standard Level/Higher Level  
Credit: 1 Unit  
Weight: 0.05  
Prerequisite: IB Physics SL, HL 1  
Course Description: IB Physics 2 course offers a high-powered physics curriculum that will prepare students for college level calculus-based physics. The course allows students to develop the manipulative and experimental skills necessary to perform college-level physics investigations. Students participate in structured labs, design original research projects, and participate in a required IB interdisciplinary group project. Students learn a breadth of core physics principals from mechanics and thermal physics to gravitation and nuclear physics. The course also increases student awareness of global issues pertaining to Physics. IB Physics HL is an extension of IB Physics SL that requires additional laboratory hours and more in-depth study of several Physics Higher Level options. A summer assignment is required.

IB Physics SL, HL 1 (33261) State Code IB4590  
Grade Level: 11  
Level of Difficulty: IB Standard Level/Higher Level  
Credit: 1 Unit  
Weight: 0.05  
Prerequisite: CPS Pre-IB Biology, CPS Pre-IB Chemistry, CPS Pre-IB Algebra 2/Trig  
Course Description: IB Physics 1 course offers a high-powered physics curriculum that will prepare students for college level calculus-based physics. The course allows students to develop the manipulative and experimental skills necessary to perform college-level physics investigations. Students participate in structured labs, design original research projects, and participate in a required IB interdisciplinary group project. Students learn a breadth of core physics principals from mechanics and thermal physics to gravitation and nuclear physics. The course also increases student awareness of global issues pertaining to Physics. IB Physics HL is an extension of IB Physics SL that requires additional laboratory hours and more in-depth study of several Physics Higher Level options. A summer assignment is required.

CPS Pre-IB Geometry (22031) State Code IB3143  
Grade Level: 9  
Level of Difficulty: Intensified Academic  
Credit: 1 Unit  
Weight: 0.025  
Prerequisite: Algebra I  
Course Description: Students learn the principles of geometry and are rigorously required to demonstrate logical, step-by-step problem-solving techniques in preparation for IB assessments. Additional topics include introduction to truth tables, negation, quantifiers, the laws of sines and cosines, three-dimensional coordinates, and vectors and matrices. Emphasis is also placed on symbolic logic and geometric probability. A summer assignment is required. This course has an end-of-course Standards of Learning test.

CPS Pre-IB Algebra 2/Trigonometry (23231) State Code IB3137  
Grade Level: 9 or 10  
Level of Difficulty: Intensified Academic  
Credit: 1 Unit  
Weight: 0.025  
Prerequisite: Geometry  
Course Description: 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. Students demonstrate proficiency in solving problems using algebraic and graphic methods and a graphing calculator. A summer assignment is required. This course has an end-of-course Standards of Learning test.

CPS Pre-IB Mathematical Analysis (25031) State Code IB3162  
Grade Level: 10  
Level of Difficulty: Intensified Academic  
Credit: 1 Unit  
Weight: 0.025  
Prerequisites: Pre-IB Algebra 2/Trigonometry  
Course Description: This course extends students' knowledge of mathematical functions, introduces them to another mode of mathematical reasoning, and prepares them for the study of calculus. Students utilize graphing utilities, calculator-based labs, probes, computers, and advanced software to enhance their ability to use technological tools for investigation and exploration and to make connections to the real world. Additional topics include significant figures and scientific notation as well as systems of linear and quadratic equations. A summer assignment is required.

IB Mathematical Studies SL 1 (28061) State Code IB3196  
Grade Level: Grade 11  
Level of Difficulty: IB Standard Level  
Credit: 1 Unit  
Weight: 0.05  
Prerequisite: Pre-IB Algebra 2/Trigonometry  
Course Description: IB Mathematical Studies 1 is the first year of a two-year course designed to build confidence and to encourage an appreciation of mathematics in students who do not anticipate studying mathematics in post-secondary education. Students start with practical investigations followed by analysis of results leading to the understanding of a mathematical principle and its formulation into mathematical language. Before entering the course, students should have a good understanding of arithmetic, algebra, geometry, trigonometry, and statistics. A summer assignment is required.

IB Mathematical Studies SL 2 (28161) State Code IB3196  
Grade Level: Grade 12  
Level of Difficulty: IB Standard Level  
Credit: 1 Unit  
Weight: 0.05  
Prerequisite: IB Mathematical Studies SL 1  
Course Description: In IB Math Studies 2, students continue to develop skills needed to cope with the mathematical demands of a technological society. Through emphasis on the application of mathematics to real-life situations, students are able to use their own inherent, logical thinking skills and do not have to rely on standard
algorithms and remembered formulae. A substantial piece of personal research, in the form of a statistical project, is a requirement. Students take the IB Math Studies standard-level examination. A summer assignment is required.

**IB Mathematics SL 1 (28261) State Code IB3198**

- **Grade Level:** 11
- **Level of Difficulty:** IB Standard Level
- **Credit:** 1 Unit
- **Weight:** 0.05
- **Prerequisite:** Pre-IB Algebra II/Trigonometry
- **Course Description:** IB Mathematics SL 1 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. A summer assignment is required.

**IB Mathematics SL 2 (28361) State Code IB3198**

- **Grade Level:** 12
- **Level of Difficulty:** IB Standard Level
- **Credit:** 1 Unit
- **Weight:** 0.05
- **Prerequisite:** IB Mathematics SL 1
- **Course Description:** In IB Mathematics SL 2, students use their skills to develop and apply concepts involving more advanced and complex topics including vectors, statistics, probability, and calculus. Students continue to learn how these concepts relate to real-world situations. The course requires college-level performance and work habits. Students take the IB Mathematics SL examination. A summer assignment is required.

**IB Mathematics HL 1 (28461) State Code IB3197**

- **Grade Level:** 12
- **Level of Difficulty:** IB Higher Level
- **Credit:** 1 Unit
- **Weight:** 0.05
- **Prerequisite:** Mathematical Analysis
- **Course Description:** IB Mathematics HL 1 is the first part of a rigorous, two-year course of study designed for students who will major in mathematics or engineering in college and for students who have a good background and genuine interest in mathematics and enjoy meeting its challenges and problems. Before entering the course, students should have a strong understanding of arithmetic, algebra, geometry, trigonometry, and statistics. Course topics include sequences and series, counting and proof, trigonometry, complex numbers, discrete and continuous probability distributions, functions, differentiation, integration, differential equations, matrices, and vectors. A summer assignment is required.

**IB Mathematics HL 2 (28562) State Code IB3197**

- **Grade Level:** 12
- **Level of Difficulty:** IB Higher Level
- **Credit:** 1 Unit
- **Weight:** 0.05
- **Prerequisite:** IB Mathematics HL 1
- **Course Description:** In IB Mathematics HL 2, students continue to study sequences and series, counting and proof, trigonometry, complex numbers, discrete and continuous probability distributions, functions, differentiation, integration, differential equations, matrices, and vectors. Students take the higher level IB Mathematics HL examination at the end of the course. A summer assignment is required.

**ARTS AND ELECTIVES**

**GROUP 6: ARTS AND ELECTIVES**

**IB Psychology SL, HL 1 (45161) State Code IB2903**

- **Grade Level:** 11
- **Prerequisite:** None

**IB Psychology SL, HL 2 (45261) State Code IB2904**

- **Grade Level:** 12
- **Prerequisite:** IB Psychology SL, HL 1
- **Level of Difficulty:** IB Higher or IB Standard Level
- **Credit:** 2 Units (one for each course)
- **Weight:** 0.05 per unit
- **Course Description:** Course Description: IB Psychology 1 and 2 give students a broad understanding of psychology and of its different levels of analysis. The course introduces students to diverse methods of psychological inquiry and promotes ethical practices and responsibilities in psychological inquiry. 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. IB Psychology HL is an extension of IB Psychology SL, which introduces students to the psychology of dysfunctional behavior and psychodynamic psychology. In IB Psychology, students undertake an experimental study requiring them to research, design, implement, and analyze the resulting data. At the end of the second year, students take the Standard-Level or Higher-Level IB Psychology examination. Summer assignments are required.

**IB Visual Arts HL, SL 1 (63061) State Code IB9194**

- **Grade Level:** 11
- **Suggested Prerequisite:** Art I or Photography

**IB Visual Arts HL, SL 2 (63062) State Code IB9195**

- **Grade Level:** 12
- **Prerequisite:** IB Visual Arts HL, SL 1
- **Level of Difficulty:** IB Higher or IB Standard Level
- **Credit:** 2 Units (one for each course)
- **Weight:** 0.05 per unit
- **Course Description:** IB Visual Arts 1 and 2 stimulate and train the student's visual awareness, increase the student's perceptive and critical responses to the art of various cultures, and 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 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 or take IB Visual Arts at the higher level depending upon his/her level of artistic ability. Students who think they would enjoy exploring art but who do not regard themselves as especially artistic can be very successful at the standard level. More serious artists benefit from taking IB Visual Arts HL. Because much of the course involves independent study and individual art production, both the standard level and higher level are taught together. External assessments in this course consist of studio work and research workbooks, which are evaluated by an IB art examiner. Summer assignments are required.

IB World Religions SL 1 (44161)
Grade Level: 11
Level of Difficulty: IB Standard Level
Credit: 2 Units (one for each course)
Weight: 0.05 per unit
Course Description: IB World Religions 1 and 2 is a systematic, analytical, yet empathetic study of the variety of beliefs and practices encountered in nine main religions of the world. The course seeks to promote an awareness of religious issues in the contemporary world by requiring the study of a diverse range of religions. The course consists of an introductory unit, exploring five of the nine living world religions that form the basis of the syllabus. This is complemented by an in-depth study of two religions chosen from six world religions. This part of the syllabus is guided by themes, key concepts and key questions. The final component is the investigative study, which provides opportunities for individual research of an aspect of the religious experience, practice or belief of a group and/or individual adherents. Students take the standard level IB World Religions SL examination at the end of the course. A summer assignment is required.

REQUIRED INTERDISCIPLINARY SEMINAR COURSE

IB Theory of Knowledge 1 (18261) State Code IB1197
Grade Level: 11
Prerequisite: IB Diploma Candidate

IB Theory of Knowledge 2 (18362) State Code IB1198
Grade Level: 12
Prerequisite: IB Theory of Knowledge 1
Level of Difficulty: International Baccalaureate
Credit: 1 Unit (0.5 Units per course)
Weight: 0.025
Course Description: Students who are candidates for the International Baccalaureate Diploma are required to complete this course. 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 1,600 word essay that addresses one of six prescribed titles.

INTERNATIONAL BACCALAUREATE DIPLOMA PROGRAM SEQUENCE

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>Grade 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>10031 CPS Pre-IB English 9</td>
<td>11031 CPS Pre-IB English 10</td>
</tr>
<tr>
<td>50232 CPS Pre-IB French 2 or</td>
<td>50333 CPS Pre-IB French 3 or</td>
</tr>
<tr>
<td>53232 CPS Pre-IB Spanish 2</td>
<td>53333 CPS Pre-IB Spanish 3</td>
</tr>
<tr>
<td>40031 CPS Pre-IB World History 1</td>
<td>43031 CPS Pre-IB U.S. Government &amp; Politics</td>
</tr>
<tr>
<td>41031 CPS Pre-IB World History 2</td>
<td>32031 CPS Pre-IB Chemistry</td>
</tr>
<tr>
<td>31031 CPS Pre-IB Biology</td>
<td>23231 CPS Pre-IB Algebra 2/Trigonometry or</td>
</tr>
<tr>
<td>22031 CPS Pre-IB Geometry or</td>
<td>25031 CPS Pre-IB Math Analysis</td>
</tr>
<tr>
<td>23231 CPS Pre-IB Algebra 2/Trigonometry</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade 11</th>
<th>Grade 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>12261 IB English HL 1</td>
<td>13261 IB English HL 2</td>
</tr>
<tr>
<td>50464 IB French SL/HL 4 or</td>
<td>50565 IB French SL/HL 5 or</td>
</tr>
<tr>
<td>53464 IB Spanish SL/HL 4</td>
<td>53565 IB Spanish SL/HL 5</td>
</tr>
<tr>
<td>42261 IB History of the Americas HL</td>
<td>46361 IB Topics in 20th Century History HL</td>
</tr>
<tr>
<td>31061 IB Biology SL/HL 1 or</td>
<td>31062 IB Biology SL/HL 2 or</td>
</tr>
<tr>
<td>32061 IB Chemistry SL/HL 1 or</td>
<td>32062 IB Chemistry SL/HL 2 or</td>
</tr>
<tr>
<td>33261 IB Physics SL/HL 1</td>
<td>33262 IB Physics SL/HL 2</td>
</tr>
<tr>
<td>28061 IB Math Studies SL 1 or</td>
<td>28161 IB Math Studies SL 2 or</td>
</tr>
<tr>
<td>28261 IB Math SL 1</td>
<td>28361 IB Math SL 2 or</td>
</tr>
<tr>
<td>28461 IB Math HL 1</td>
<td>28562 IB Math HL 2</td>
</tr>
<tr>
<td>45161 IB Psychology SL/HL 1 or</td>
<td>45261 IB Psychology SL/HL 2 or</td>
</tr>
<tr>
<td>63061 IB Visual Arts SL/HL 1 or</td>
<td>63062 IB Visual Arts SL/HL 2 or</td>
</tr>
<tr>
<td>44161 IB World Religions SL 1</td>
<td>44261 IB World Religions SL 2</td>
</tr>
<tr>
<td>18261 IB Theory of Knowledge 1</td>
<td>18362 IB Theory of Knowledge 2</td>
</tr>
</tbody>
</table>
IMPORTANT WEBSITES

www.cpschools.com
Chesapeake Public Schools

www.doe.virginia.gov
Virginia Department of Education

www.ncaaeligibilitycenter.org
NCAA Eligibility Requirements

CAREER RESOURCES
Career Clusters in Virginia
www.doe.virginia.gov/instruction/career_technical/career_clusters/index.shtml
Career Clusters help you investigate careers and design your courses of study to advance your career goals. A career cluster is a grouping of occupations and broad industries that include multiple career pathways.

Virginia Career VIEW
www.vacareerview.org
This site helps K–8 students explore career options, introduces the 16 Career Clusters, and provides resources and activities to enhance career development.

Career Planning Guide
www.cteresource.org/cpg
The Career Planning Guide (CPG) is a career-planning tool for students and a resource for parents, teachers, and school counselors who guide students in career choices.

Virginia Education Wizard
www.vawizard.org
The Virginia Education Wizard offers extensive career information, including assessment tools based on interests. Virginia Education Wizard will help you choose a career, get the information you need to pursue your career, enroll in one of Virginia’s community colleges, pay for college, transfer to a four-year college or university, and get answers to your questions about your future. Interests, skills, and values assessments are available to help students in their career exploration.

COLLEGE RESOURCES
ACT
www.act.org
The ACT is America’s most widely accepted college entrance exam. It assesses high school students’ general educational development and their ability to complete college-level work. Online registration, practice tests, and score reporting options are available.

College Board
www.collegeboard.org
Register online for the SAT Reasoning Test and SAT Subject Test. Review directions and practice questions. SAT score results are now available at this site.

CollegeView
www.collegeview.com

The Princeton Review
www.princetonreview.com

GoCollege
www.gocollege.com
CHESAPEAKE SCHOOL BOARD
(as of January 2018)

Mr. C. Jeff Bunn, Chairman
Mrs. Victoria L. Proffitt, Vice Chairman
Mr. Samuel L. Boone, Jr.
Mrs. Colleen C. Leary
Mr. Thomas L. Mercer, Sr.
Mr. Harry A. Murphy
Mrs. Christie New Craig
Mr. Louis J. Tayon, Jr.
Mr. Michael J. Woods

Dr. Jean A. Infantino, Clerk of the Board
Mrs. Darlene N. Gorman, Deputy Clerk of the Board

ADMINISTRATIVE OFFICERS

Dr. James T. Roberts
Superintendent

Dr. Anita B. James
Assistant Superintendent for Curriculum and Instruction

Ms. Victoria R. Lucente
Assistant Superintendent for Budget & Finance

Dr. Jacqueline C. Miller
Assistant Superintendent of Student Services

Ms. J. Paige Stutz
Assistant Superintendent for Operations

Dr. Alan L. Vaughan
Assistant Superintendent for Human Resources and School Services

Dr. Jean A. Infantino
Executive Director of Administrative Services

Mrs. Kathleen R. Pitchford
Director of Information Technology

The Chesapeake Public School System is an equal educational opportunity school system. The School Board of the City of Chesapeake also adheres to the principles of equal opportunity in employment and, therefore, prohibits discrimination in terms and conditions of employment on the basis of race, sex, national origin, color, religion, age, or disability.