

Fairfax Leadership Academy Grade Level Curriculum Framework

7th Grade

<u>Subject</u>	<u>Course</u>	<u>FCPS Program of Studies (POS) and International Baccalaureate (IB) curriculum and related state and IB assessments</u>	<u>Notes</u>
English (Language Arts)	<i>English 7 Honors</i>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Give and seek information in conversations, discussions, etc. 2. Identify relationship between verbal, nonverbal messages 3. Describe persuasive messages in nonprint media 4. Determine meanings, pronunciation of words, phrases 5. Read, comprehend fiction, narrative nonfiction, poetry 6. Read, demonstrate comprehension of informational texts 7. Apply knowledge of appropriate reference materials 8. Develop narrative, expository and persuasive writing 9. Edit writing for grammar, capitalization, spelling, etc. <p>Please see http://www.fcps.edu/is/socialstudies/middleschool/index.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for this course.</p> <p>All students will take the Virginia SOL end of course test.</p> <p>The IB MYP five “Areas of Interaction” as applied to English (Language A) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/. Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	All students not in ESOL will take this course. We will only offer the FCPS honors level curriculum for this course.
Math	<i>Math 7, Math 7 Honors or Algebra 1 Honors</i>	<p>Math 7 – FCPS POS:</p> <ol style="list-style-type: none"> 1. Compare, order and find equivalent fractions, decimals and percents 2. Describe and represent arithmetic and geometric sequences 3. Model and solve problems involving computation with integers 4. Solve practical problems using proportional reasoning 5. Solve problems involving volume/surface area of prisms and cylinders 6. Define if plane figures are similar and write proportions 7. Compare and contrast quadrilaterals based on properties 8. Represent transformations by graphing in the coordinate plane 9. Describe the difference between theoretical and experimental probability 10. Determine probability of compound events 11. Construct/analyze/compare/contrast histograms with other graphs 12. Represent relationships with tables, graphs, rules and words 	<p>We will consider offering differing levels of Math based on students ability levels entering 7th grade. We will look closely at 6th grade Math assessment scores as well as recommendations from 6th grade teachers and counselors to help determine proper placement.</p> <p>Because Math is sequential, and highly dependent on acquisition of skills prior to</p>

		<p>13. Write and evaluate algebraic equations 14. Solve one- and two-step linear equations in one variable 15. Solve one-step inequalities and graph solutions 16. Apply properties of operations with real numbers</p> <p>Math 7 Honors– FCPS POS:</p> <ol style="list-style-type: none"> Simplify numeric equations and compare/order rational numbers Describe relationships between subsets of real number system Solve problems with rational numbers/percents/ratios/proportions Apply order of operations to evaluate algebraic equations Identify a perfect square/approximate a square foot Verify by measuring/describe angle relationships Solve problems involving angle and surface area Apply transformations to plane figures and identify applications Construct a three dimensional model give top/side/front views Verify and apply the Pythagorean theorem Solve practical area and perimeter problems Determine the probability of independent and dependent events Compare/predict/infer using info in displayed in graphs Make connections between representations of a relationship Solve multistep equations and inequalities in one variable Graph a linear equation in two variables Identify the domain, range, independent/dependent variable <p>Algebra 1 honors – FCPS POS:</p> <ol style="list-style-type: none"> Represent verbal quantitative situations algebraically and evaluate Perform operations on polynomials Express square roots and cube roots in simplest radical form Solve multistep linear and quadratic equations Solve multistep linear inequalities in two variables Graph linear equations and inequalities appropriately Investigate and analyze function families and their characteristics Determine whether a direct or inverse variation exists Given a data set, interpret variation in real-world contexts Compare and contrast multiple univariate data sets Determine the equation of the curve of best fit <p>Please see http://www.fcps.edu/is/math/middleschool/index.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for these courses.</p> <p>All students will take the Virginia SOL end of course test for these courses.</p> <p>The IB MYP five “Areas of Interaction” as applied to Math will be incorporated into this course:</p> <ul style="list-style-type: none"> Approaches to learning Community and service Human ingenuity Environments Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at</p>	<p>moving up in courses, it is necessary to differentiate and offer varying levels of math in each grade. However, the sequence of all courses in math grades 7 – 11 will lead to students reaching an IB level math course by grade 12, thus preparing students to enter a post-secondary institution with required math skills and knowledge.</p> <p>Ultimately, what we offer in math in 7th grade will be driven by the skill levels of our incoming students.</p>
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		http://ibo.org/myp/curriculum/ . Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/ .	
Science	<i>Investigations in Environmental Science Honors</i>	FCPS POS: <ol style="list-style-type: none"> 1. Plan and conduct investigations 2. Living things are composed of cells 3. Cellular organization and life processes 4. Basic needs and life processes 5. Classification 6. Photosynthesis and respiration 7. Cycles and food webs 8. Interactions within a population 9. Interactions between populations 10. Biomes 11. Dynamic changes in ecosystems over time 12. Ecosystem dynamics and human activity 13. Heredity and Genetics 14. Evolution through natural selection 15. Watershed connections <p>The IB MYP five “Areas of Interaction” as applied to Science will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>Please see http://www.fcps.edu/is/science/middleschool/index.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for this course.</p> <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/ .	All students will take this course (with the exception of students in specialized ESOL courses).
Social Studies	<i>US History 7 Honors: 1865 – Present</i>	FCPS POS: <ol style="list-style-type: none"> 1. Demonstrate skills for historical and geographical analysis 2. Use geography skills to describe expansion of the US 3. Demonstrate the effects of Reconstruction on American life 4. Demonstrate how life changed after the Civil War 5. Demonstrate knowledge of the changing role of the US, late 1800s – WWI. 6. Demonstrate knowledge of changes in the early 20th century 7. Demonstrate causes and effects of US involvement in WWII 8. Demonstrate US and world transformations after WWII 9. Demonstrate key domestic issues from 1950 – 2000 <p>Please see http://www.fcps.edu/is/socialstudies/middleschool/index.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for this course.</p>	All students will take this course (with the exception of students in specialized ESOL courses).

		<p>All students will take the Virginia SOL end of course test.</p> <p>The IB MYP five “Areas of Interaction” as applied to Humanities will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
<p>Foreign Language</p>	<p><i>Online Foreign Language Courses in Select languages - Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</i></p>	<p>Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</p> <p>The FCPS POS for all of these languages except Latin at level 1 teaches the foreign language through the following themes: Theme 1: Personal and family life Theme 2: School life Theme 3: Social life Theme 4: Community life</p> <p>For the Latin course, the FCPS POS teaches Latin at level 1 through the following themes: Theme 1: Roman life Theme 2: Geography Theme 3: History Theme 4: Mythology</p> <p>Please see http://www.fcps.edu/is/worldlanguages/index.shtml for detailed descriptions of FCPS POS for courses in these foreign languages.</p> <p>We will insure that the online courses used for foreign language meet the requirements of FCPS POS.</p> <p>The IB MYP five “Areas of Interaction” as applied to Foreign Language (Language B) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>Foreign Languages will be offered through a “blended learning” model. We will have on staff foreign language teachers to whom students are assigned for their foreign language class. However, students will take their foreign language course as an online course in school on computers during the period assigned to them for foreign language. Teachers will serve as facilitators, assisting and monitoring students’ progress as they work through the online course in a foreign language of their choice. We will utilize Fairfax County Public Schools online courses, as well as online courses offered by Virginia Department of Education approved online providers such as Virtual Virginia online school, Virtual High School and K12 (who is working with the International Baccalaureate Organization to offer online IB courses).</p> <p>Note: Level 1 of the FCPS POS is listed here but students could start a foreign language in 7th grade at higher depending on their ability (for example, some ESOL students may study their native language and thus study the language at a different level)</p>

<p>ESOL</p>	<p><i>Depending on students' ESOL Level we will offer:</i></p> <p><i>Beginning ESOL English</i></p> <p><i>ESOL US History 7</i></p> <p><i>ESOL FOCUS Science</i></p> <p><i>ESOL FAST Math</i></p> <p><i>Developing ESOL English</i></p> <p><i>ESOL Academic Language</i></p>	<p>See WIDA (World-Class Instructional Design and Assessment) standards on the following website: http://www.wida.us/standards/6-12%20Standards%20web.pdf. We will follow WIDA standards and students exiting ESOL will take the WIDA exam.</p> <p>ESOL Levels 1 and 2 may take the four core academic subjects via ESOL classes (if students math skills are high enough to take non-ESOL math courses, we will enroll them a non-ESOL math course)</p> <p>We will enroll ESOL levels 3 and 4 into non-ESOL core subjects.</p> <p>In addition, in place of a foreign language, all ESOL students will take a “double block” of ESOL English to further build their skills for faster acquisition of the English language.</p> <p>Students will take the Virginia SOL end of course test for applicable subjects.</p> <p>The IB MYP five “Areas of Interaction” as applied to English (Language A) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>ESOL courses offered will depend on the number of ESOL students and their levels. We expect in 7th grade approximately 35% of students being ESOL students, from levels 1 – 4.</p>
<p>Physical Education</p>	<p><i>Health and Physical Education 7</i></p>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Demonstrate competence in various skilled movement activities 2. Understand and apply movement principles and concepts 3. Apply competence and principles of personal fitness planning 4. Demonstrate essential life skills in physical activity settings 5. Select and participate in physical activities to produce health habits <p>Please see http://www.fcps.edu/is/hpe/index.shtml for detailed description of FCPS POS for this course.</p> <p>The IB MYP five “Areas of Interaction” as applied to Physical Education will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
<p>Business/ Information Technology</p>	<p><i>Computer Solutions (semester)</i></p>	<p>Computer Solutions – FCPS POS:</p> <ol style="list-style-type: none"> 1. Develop workplace readiness skills: personal qualities and people skills 2. Develop workplace readiness skills: professional knowledge and skills 	<p>These courses will be offered in 7th or 8th grade as electives to students.</p>

	<p>course) Digital Input Technologies (semester course)</p>	<ol style="list-style-type: none"> 3. Develop workplace readiness skills: technology knowledge and skills 4. Address elements of student life 5. Demonstrate keyboarding skills <p>Digital Input Technologies – FCPS POS:</p> <ol style="list-style-type: none"> 1. Develop workplace readiness skills: personal qualities and people skills 2. Develop workplace readiness skills: professional knowledge and skills 3. Develop workplace readiness skills: technology knowledge and skills 4. Understand all aspects of industry <p>Please see http://www.fcps.edu/is/cte/bit.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for these courses.</p> <p>The IB MYP five “Areas of Interaction” as applied to Business/Technology will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
<p>Art</p>	<p>Semester courses (Art I, II, III, IV): Art Foundations Art Extensions 3D Art Exploration Computers in Art</p>	<p>The Art course for 7th/8th grade art elective in FCPS is offered in the following components: Art Foundations (Art I) Art Extensions (Art II) 3D Art Exploration (Art III) Computers in Art (Art IV)</p> <p>State Standards for 8th grade art fit into the following areas:</p> <ol style="list-style-type: none"> 1. Visual communication and production 2. Cultural context and art history 3. Judgment and criticism 4. Aesthetics <p>Detailed outline of the State Standards for 8th grade can be found on the following site: http://www.doe.virginia.gov/testing/sol/standards_docs/fine_arts/visual_arts/k-8/stds_visualarts8.pdf</p> <p>Please see http://www.fcps.edu/is/finearts/visualart.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for these courses.</p> <p>The IB MYP five “Areas of Interaction” as applied to Arts will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity 	<p>These courses will be offered in 7th or 8th grade as electives to students.</p>

		<ul style="list-style-type: none"> • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
Music	<i>Beginning band/ Intermediate band</i>	<p><u>Beginning band</u> – FCPS POS:</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to sing and play instruments 2. Demonstrate the ability to compose and improvise 3. Demonstrate music literacy and listening skills 4. Identify/Compare relationships between music and other experiences <p><u>Intermediate band</u> – FCPS POS:</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to sing and play instruments 2. Demonstrate the ability to compose and improvise 3. Demonstrate music literacy and listening skills 4. Identify/Compare relationships between music and other experiences <p>See the following website for details on FCPS POS: http://www.fcps.edu/is/finearts/music.shtml</p> <p>The IB MYP five “Areas of Interaction” as applied to Arts will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	These courses will be offered for 7 th and 8 th grade students as electives.
AVID	<i>AVID 7</i>	<p>AVID is a college preparatory course and program designed to:</p> <ul style="list-style-type: none"> • increase core academic skills (WICR: Writing, Inquiry, Collaboration and Reading) • provide academic support to students enrolled in honors and IB courses • teach important life skills such as organization and time management skills for academic and professional success • educate students and their families on the process of attending college <p>See the following websites for details on FCPS and national AVID program: http://www.fcps.edu/is/schoolcounseling/collegesuccess/avid.shtml http://www.avid.org/abo_whatisavid.html#whopays</p> <p>The IB MYP five “Areas of Interaction” will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning 	All students will be enrolled in the AVID course.

		<ul style="list-style-type: none">• Community and service• Human ingenuity• Environments• Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
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8th Grade

<u>Subject</u>	<u>Course</u>	<u>FCPS Program of Studies (POS) and International Baccalaureate (IB) curriculum and related state and IB assessments</u>	<u>Notes</u>
English	English 8 Honors	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Use interviewing techniques to gain information 2. Develop and deliver oral presentations 3. The student will analyze mass media messages 4. Extend vocabulary develop using word origins, etc. 5. Read and analyze a variety of narrative and poetic forms 6. Read, comprehend, analyze a variety of informational sources 7. Write in a variety of forms 8. Edit writing for correct grammar, capitalization, etc. <p>Please see http://www.fcps.edu/is/socialstudies/middleschool/index.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for this course.</p> <p>All students will take the Virginia SOL end of course test.</p> <p>The IB MYP five “Areas of Interaction” as applied to English (Language A) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/. Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	All students not in ESOL will take this course. We will only offer the FCPS honors level curriculum for this course.
Math	Math 8, Algebra 1 Honors or Geometry Honors	<p>Math 8 – FCPS POS:</p> <ol style="list-style-type: none"> 1. Simplify numeric equations and compare/order rational numbers 2. Describe relationships between subsets of real number system 3. Solve problems with rational numbers/percents/ratios/proportions 4. Apply order of operations to evaluate algebraic equations 5. Identify a perfect square/approximate a square foot 6. Verify by measuring/describe angle relationships 7. Solve problems involving angle and surface area 8. Apply transformations to plane figures and identify applications 9. Construct a three dimensional model give top/side/front views 10. Verify and apply the Pythagorean theorem 11. Solve practical area and perimeter problems 12. Determine the probability of independent and dependent events 13. Compare/predict/infer using info in displayed in graphs 14. Make connections between representations of a relationship 15. Solve multistep equations and inequalities in one variable 16. Graph a linear equation in two variables 	<p>We will consider offering differing levels of Math based on students ability levels entering 8th grade. We will look closely at 7th grade Math assessment scores and grades, as well as recommendations from 7th grade teachers and counselors to help determine proper placement.</p> <p>Because Math is sequential, and highly dependent on acquisition of skills prior to moving up in courses, it is necessary to differentiate and offer varying levels of math in each grade. However, the sequence of all courses in math grades 7 –</p>

		<p>17. Identify the domain, range, independent/dependent variable</p> <p>Algebra 1 honors – FCPS POS:</p> <ol style="list-style-type: none"> 1. Represent verbal quantitative situations algebraically and evaluate 2. Perform operations on polynomials 3. Express square roots and cube roots in simplest radical form 4. Solve multistep linear and quadratic equations 5. Solve multistep linear inequalities in two variables 6. Graph linear equations and inequalities appropriately 7. Investigate and analyze function families and their characteristics 8. Determine whether a direct or inverse variation exists 9. Given a data set, interpret variation in real-world contexts 10. Compare and contrast multiple univariate data sets 11. Determine the equation of the curve of best fit <p>Geometry Honors – FCPS POS:</p> <ol style="list-style-type: none"> 1. Construct and judge the validity of a logical argument 2. Use angle relationships to determine if two lines are parallel 3. Solve problems involving symmetry and transformation 4. Perform a variety of geometric constructions 5. Apply the triangle inequality properties to solve practical problems 6. Prove two triangles are congruent using a variety of methods 7. Prove two triangles are similar using a variety of methods 8. Solve real-world problems involving right triangles 9. Investigate and solve problems involving circles 10. Write the equation of a circle 11. Use formulas for surface area and volume to solve problems 12. Use proportional reasoning/determine affect of change to dimensions 13. Investigate non-Euclidian geometries (optional) <p>Please see http://www.fcps.edu/is/math/middleschool/index.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for this course.</p> <p>All students will take the Virginia SOL end of course test for these courses.</p> <p>The IB MYP five “Areas of Interaction” as applied to Math will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>11 will lead to students reaching an IB level math course by grade 12, thus preparing students to enter a post-secondary institution with required math skills and knowledge.</p> <p>Ultimately, what we offer in math in 8th grade will be driven by the skill levels of our students at the end of 7th grade.</p>
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<p>Science</p>	<p><i>Investigating Matter and Energy Honors</i></p>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Plan and conduct investigations 2. Basic nature of matter 3. Modern and historic models of atomic structure 4. Organization and use of the periodic table of elements 5. Law of conservation of mass (matter) and energy 6. Energy transformations 7. Temperature scales, heat and thermal energy transfer 8. Characteristics and applications of sound waves 9. Nature and technological applications of light 10. Work, force and motion 11. Basic principles of electricity and magnetism <p>Please see http://www.fcps.edu/is/science/middleschool/index.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for this course.</p> <p>All students will take the Virginia SOL end of course test.</p> <p>The IB MYP five “Areas of Interaction” as applied to Science will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>All students will take this course (with the exception of students in specialized ESOL courses).</p>
<p>Social Studies</p>	<p><i>Civics and Economics Honors</i></p>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Develop social studies skills required for citizenship 2. Demonstrate knowledge of foundations of American government 3. Demonstrate knowledge of citizenship rights, duties and responsibilities 4. Demonstrate character traits that aid participation in civic life 5. Demonstrate knowledge of political process 6. Demonstrate knowledge of the US government – national level 7. Demonstrate knowledge of the US government – state level 8. Demonstrate knowledge of the US government – local level 9. Demonstrate knowledge of how public policy is made at all levels process 10. Demonstrate knowledge of the US and VA judicial systems 11. Demonstrate how economic decisions are made in the marketplace 12. Demonstrate the structure and operation of the US economy 13. Demonstrate the role of government in the US economy 14. Demonstrate knowledge of career opportunities 15. Demonstrate knowledge of world geography <p>Please see http://www.fcps.edu/is/socialstudies/middleschool/index.shtml and</p>	<p>All students will take this course (with the exception of students in specialized ESOL courses).</p>

		<p>http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for this course.</p> <p>All students will take the Virginia SOL end of course test.</p> <p>The IB MYP five “Areas of Interaction” as applied to Humanities will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
<p>Foreign Language</p>	<p><i>Online Foreign Language Courses in Select languages - Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</i></p>	<p>Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</p> <p>The FCPS POS for all of these languages except Latin at level 2 teaches the foreign language through the following themes: Theme 1: Home life Theme 2: Student life Theme 3: Leisure time Theme 4: Vacation and travel</p> <p>For the Latin course, the FCPS POS teaches Latin at level 1 through the following themes: Theme 1: Roman life Theme 2: Geography Theme 3: History Theme 4: Mythology</p> <p>Please see http://www.fcps.edu/is/worldlanguages/index.shtml for detailed descriptions of FCPS POS for courses in these foreign languages.</p> <p>We will insure that the online courses used for foreign language meet the requirements of FCPS POS.</p> <p>The IB MYP five “Areas of Interaction” as applied to Foreign Language (Language B) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>Foreign Languages will be offered through a “blended learning” model. We will have on staff foreign language teachers to whom students are assigned for their foreign language class. However, students will take their foreign language course as an online course in school on computers during the period assigned to them for foreign language. Teachers will serve as facilitators, assisting and monitoring students’ progress as they work through the online course in a foreign language of their choice. We will utilize Fairfax County Public Schools online courses, as well as online courses offered by Virginia Department of Education approved online providers such as Virtual Virginia online school, Virtual High School and K12 (who is working with the International Baccalaureate Organization to offer online IB courses).</p> <p>Note: Level 2 of the FCPS POS is listed here but students could start a new foreign language in 8th grade at Level 1 or higher depending on their ability (for example, some ESOL students may study their native</p>

			language and thus study the language at a different level)
ESOL	<p>Depending on students' ESOL Level we will offer:</p> <p>Beginning ESOL English ESOL Civics and Economics 8 ESOL FOCUS Science ESOL FAST Math Developing ESOL English ESOL Academic Language</p>	<p>See WIDA (World-Class Instructional Design and Assessment) standards on the following website: http://www.wida.us/standards/6-12%20Standards%20web.pdf. We will follow WIDA standards and students exiting ESOL will take the WIDA exam.</p> <p>ESOL Levels 1 and 2 may take the four core academic subjects via ESOL classes (if students math skills are high enough to take non-ESOL math courses, we will enroll them a non-ESOL math course)</p> <p>We will enroll ESOL levels 3 and 4 into non-ESOL core subjects.</p> <p>In addition, in place of a foreign language, all ESOL students will take a “double block” of ESOL English to further build their skills for faster acquisition of the English language.</p> <p>Students will take the Virginia SOL end of course test for applicable subjects.</p> <p>The IB MYP five “Areas of Interaction” as applied to English (Language A) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/. Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	ESOL courses offered will depend on the number of ESOL students and their levels. We expect in 8 th grade approximately 25% of students being ESOL students, from levels 1 – 4.
Health and Physical Education	<p>Health and Physical Education 8</p>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Demonstrate competence in one or more skilled movement activities 2. Perform skills in several game/sport, dance and recreational activities 3. Apply movement principles and concepts 4. Apply self-assessment skills for personal fitness planning 5. Demonstrate essential life skills in physical activity settings 6. Demonstrate a physically active lifestyle outside the PE setting <p>Please see http://www.fcps.edu/is/hpe/index.shtm for detailed description of FCPS POS for this course.</p> <p>The IB MYP five “Areas of Interaction” as applied to Physical Education will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/. Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB</p>	

		MYP and found at http://ibo.org/myp/assessment/ .	
Business/ Information Technology	Computer Solutions (semester course) Digital Input Technologies (semester course)	<p>Computer Solutions – FCPS POS:</p> <ol style="list-style-type: none"> 1. Develop workplace readiness skills: personal qualities and people skills 2. Develop workplace readiness skills: professional knowledge and skills 3. Develop workplace readiness skills: technology knowledge and skills 4. Address elements of student life 5. Demonstrate keyboarding skills <p>Digital Input Technologies – FCPS POS:</p> <ol style="list-style-type: none"> 1. Develop workplace readiness skills: personal qualities and people skills 2. Develop workplace readiness skills: professional knowledge and skills 3. Develop workplace readiness skills: technology knowledge and skills 4. Understand all aspects of industry <p>Please see http://www.fcps.edu/is/cte/bit.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for these courses.</p> <p>The IB MYP five “Areas of Interaction” as applied to Business/Technology will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	These courses will be offered in 7 th or 8 th grade as electives to students.
Art	Semester courses (7th/8th grade Art I, II, III, IV): Art Foundations Art Extensions 3D Art Exploration Computers in Art	<p>The Art course for 7th/8th grade art elective in FCPS is offered in the following components: Art Foundations (Art I) Art Extensions (Art II) 3D Art Exploration (Art III) Computers in Art (Art IV)</p> <p>State Standards for 8th grade art fit into the following areas:</p> <ol style="list-style-type: none"> 5. Visual communication and production 6. Cultural context and art history 7. Judgment and criticism 8. Aesthetics <p>Detailed outline of the State Standards for 8th grade can be found on the following site: http://www.doe.virginia.gov/testing/sol/standards_docs/fine_arts/visual_arts/k-8/stds_visualarts8.pdf</p> <p>Please see http://www.fcps.edu/is/finearts/visualart.shtml and http://www.fcps.edu/is/pos/ms.shtml for detailed description of FCPS POS for these courses.</p>	These courses will be offered in 7 th or 8 th grade as electives to students.

		<p>The IB MYP five “Areas of Interaction” as applied to Arts will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
Music	<i>Beginning band/ Intermediate band</i>	<p><u>Beginning band</u> – FCPS POS:</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to sing and play instruments 2. Demonstrate the ability to compose and improvise 3. Demonstrate music literacy and listening skills 4. Identify/Compare relationships between music and other experiences <p><u>Intermediate band</u> – FCPS POS:</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to sing and play instruments 2. Demonstrate the ability to compose and improvise 3. Demonstrate music literacy and listening skills 4. Identify/Compare relationships between music and other experiences <p>See the following website for details on FCPS POS: http://www.fcps.edu/is/finearts/music.shtml</p> <p>The IB MYP five “Areas of Interaction” as applied to Arts will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	These courses will be offered for 7 th and 8 th grade students as electives.
AVID	<i>AVID 8</i>	<p>AVID is a college preparatory course and program designed to:</p> <ul style="list-style-type: none"> • increase core academic skills (WICR: Writing, Inquiry, Collaboration and Reading) • provide academic support to students enrolled in honors and IB courses • teach important life skills such as organization and time management skills for academic and professional success • educate students and their families on the process of attending college <p>See the following websites for details on FCPS and national AVID program: http://www.fcps.edu/is/schoolcounseling/collegesuccess/avid.shtml</p>	All students will be enrolled in the AVID course.

		<p>http://www.avid.org/abo_whatissavid.html#whopays</p> <p>The IB MYP five “Areas of Interaction” will be incorporated into this course:</p> <ul style="list-style-type: none">• Approaches to learning• Community and service• Human ingenuity• Environments• Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
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9th Grade

Subject	Course	FCPS Program of Studies (POS) and International Baccalaureate (IB) curriculum and related state and IB assessments	Notes
English	English 9 Honors	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Plan, present, critique dramatic readings of lit selections 2. Make planned oral presentations 3. Read and analyze a variety of literature 4. Read and analyze informational materials and nonfiction materials 5. Read dramatic selections 6. Develop narrative, expository, and informational writings 7. Edit writing for correct grammar, capitalization, etc. 8. Credit the sources of both quoted and paraphrased ideas 9. Use print, online resources, etc. to access information <p>Please see http://www.fcps.edu/is/languagearts/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsLA for detailed description of FCPS POS for this course.</p> <p>The IB MYP five “Areas of Interaction” as applied to English (Language A) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	All students not in ESOL will take this course. We will only offer the FCPS honors level curriculum for this course.
Math	Algebra 1 Honors, Geometry Honors or Algebra 2 Honors	<p>Algebra 1 honors – FCPS POS:</p> <ol style="list-style-type: none"> 1. Represent verbal quantitative situations algebraically and evaluate 2. Perform operations on polynomials 3. Express square roots and cube roots in simplest radical form 4. Solve multistep linear and quadratic equations 5. Solve multistep linear inequalities in two variables 6. Graph linear equations and inequalities appropriately 7. Investigate and analyze function families and their characteristics 8. Determine whether a direct or inverse variation exists 9. Given a data set, interpret variation in real-world contexts 10. Compare and contrast multiple univariate data sets 11. Determine the equation of the curve of best fit <p>Geometry Honors – FCPS POS:</p> <ol style="list-style-type: none"> 1. Construct and judge the validity of a logical argument 2. Use angle relationships to determine if two lines are parallel 3. Solve problems involving symmetry and transformation 4. Perform a variety of geometric constructions 	<p>We will consider offering differing levels of Math based on students ability levels entering 9th grade. We will look closely at 8th grade Math assessment scores and grades, as well as recommendations from 8th grade teachers and counselors to help determine proper placement.</p> <p>Because Math is sequential, and highly dependent on acquisition of skills prior to moving up in courses, it is necessary to differentiate and offer varying levels of math in each grade. However, the</p>

		<ol style="list-style-type: none"> 5. Apply the triangle inequality properties to solve practical problems 6. Prove two triangles are congruent using a variety of methods 7. Prove two triangles are similar using a variety of methods 8. Solve real-world problems involving right triangles 9. Investigate and solve problems involving circles 10. Write the equation of a circle 11. Use formulas for surface area and volume to solve problems 12. Use proportional reasoning/determine affect of change to dimensions 13. Investigate non-Euclidian geometries (optional) <p>Algebra 2 Honors – FCPS POS</p> <ol style="list-style-type: none"> 1. Develop skills involving rational, radical and polynomial expressions 2. Investigate/apply properties of arithmetic/geometric sequences/series 3. Solve a variety of equations, algebraically and graphically 4. Solve nonlinear systems of equations 5. Recognize multiple representations of functions 6. Investigate and analyze functions, algebraically and graphically 7. Investigate and describe relationships 8. Collect/analyze data to make predictions and solve practical problems 9. Solve problems involving direct, joint and inverse variations 10. Identify and apply properties of a normal distribution 11. Use matrix multiplication to solve practical problems <p>Please see http://www.fcps.edu/is/math/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsM for detailed description of FCPS POS for these course.</p> <p>All students will take the Virginia SOL end of course test for all these courses.</p> <p>The IB MYP five “Areas of Interaction” as applied to Math will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>sequence of all courses in math grades 7 – 11 will lead to students reaching an IB level math course by grade 12, thus preparing students to enter a post-secondary institution with required math skills and knowledge.</p> <p>Ultimately, what we offer in math in 9th grade will be driven by the skill levels of our students at the end of 8th grade.</p>
Science	Earth Science Honors	<p>Virginia SOL:</p> <ol style="list-style-type: none"> 1. Plan and conduct investigations 2. Demonstrate scientific reasoning and logic 3. Investigate and understand how to read and interpret maps, globes, models, charts and imagery 4. Investigate and understand the characteristics of the Earth and the solar system 5. Investigate and understand how to identify major rock-forming and ore minerals based on physical and chemical properties 6. Investigate and understand the rock cycle as it relates to the origin and transformation of rock types 	<p>FCPS does not offer Earth Science in 9th grade and does a different course sequence than the state standard course sequence. We will follow the state standard course sequence and will have Earth Science in 9th grade.</p>

		<p>and how to identify common rock types based on mineral composition and textures</p> <ol style="list-style-type: none"> 7. Investigate and understand the differences between renewable and non-renewable resources 8. Investigate and understand geological processes including plate tectonics 9. Investigate and understand how fresh water resources are influenced by geological processes and the activities of humans 10. Investigate and understand many aspects of the history and evolution of the Earth and life can be inferred by studying rocks and fossils 11. Investigate and understand that oceans are complex, interactive physical, chemical and biological systems and are subject to long- and short-term variations 12. Investigate and understand the origin and evolution of the atmosphere and the interrelationship of geological processes, biological processes and human activities on its composition and dynamics 13. Investigate and understand that energy transfer between the sun and Earth and its atmosphere drives weather and climate on Earth 14. Investigate and understand scientific concepts related to the origin and evolution of the universe <p>Please see http://www.doe.virginia.gov/testing/sol/standards_docs/science/courses/stds_earth_sci.pdf for detailed description of Virginia SOL for this course.</p> <p>All students will take the Virginia SOL end of course test.</p> <p>The IB MYP five “Areas of Interaction” as applied to Science will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>All students will take this course (with the exception of students in specialized ESOL courses).</p> <p>We may consider based on students skill levels and interests in science, having some students to take biology in 9th grade (placing them in a section of 10th graders), but the primary course for 9th graders will be Earth Science.</p>
<p>Social Studies</p>	<p><i>World History 2 Honors</i></p>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Improve skills in historic and geographic research and analysis 2. Demonstrate knowledge of various societal conditions at 1500 AD 3. Demonstrate knowledge of the Reformation and its impact 4. Demonstrate the impact of the age of discovery and expansion 5. Demonstrate knowledge of status and impact of global trade post 1500 6. Demonstrate knowledge of changes in the 16th, 17th and 18th centuries 7. Demonstrate knowledge of the Latin American revolutions 8. Demonstrate knowledge of political/philosophical developments – 1800s 9. Demonstrate effects of the Industrial Revolution in the 1800s 10. Demonstrate knowledge of the worldwide impact of WWI 11. Demonstrate knowledge of socio-economic and cultural developments between wars 12. Demonstrate worldwide impact of WWII 13. Demonstrate knowledge of events and outcomes of the Cold War 14. Demonstrate knowledge of aspects of independence movements 15. Demonstrate knowledge of influence of major world religions 16. Demonstrate knowledge of conditions in developed and developing nations 	<p>All students will take this course (with the exception of students in specialized ESOL courses).</p>

		<p>Please see http://www.fcps.edu/is/languagearts/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsLA for detailed description of FCPS POS for this course.</p> <p>All students will take the Virginia SOL end of course test.</p> <p>The IB MYP five “Areas of Interaction” as applied to Humanities will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
<p>Foreign Language</p>	<p><i>Online Foreign Language Courses in Select languages - Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</i></p>	<p>Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</p> <p>The Virginia High School SOLs for all of these languages will be followed at the appropriate levels.</p> <p>Please see http://www.fcps.edu/is/pos/hs.shtml#hsWL for detailed descriptions of Virginia SOLs for courses in these foreign languages.</p> <p>We will insure that the online courses used for foreign language meet the requirements of FCPS POS and Virginia SOLs.</p> <p>The IB MYP five “Areas of Interaction” as applied to Foreign Language (Language B) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>Foreign Languages will be offered through a “blended learning” model. We will have on staff foreign language teachers to whom students are assigned for their foreign language class. However, students will take their foreign language course as an online course in school on computers during the period assigned to them for foreign language. Teachers will serve as facilitators, assisting and monitoring students’ progress as they work through the online course in a foreign language of their choice. We will utilize Fairfax County Public Schools online courses, as well as online courses offered by Virginia Department of Education approved online providers such as Virtual Virginia online school, Virtual High School and K12 (who is working with the International Baccalaureate Organization to offer online IB courses).</p>

<p>ESOL</p>	<p><i>Depending on students' ESOL Level we will offer:</i></p> <p><i>Beginning ESOL English</i></p> <p><i>ESOL World History II</i></p> <p><i>ESOL FOCUS Science</i></p> <p><i>ESOL FAST Math</i></p> <p><i>Developing ESOL English</i></p> <p><i>ESOL Academic Language</i></p>	<p>See WIDA (World-Class Instructional Design and Assessment) standards on the following website: http://www.wida.us/standards/6-12%20Standards%20web.pdf. We will follow WIDA standards and students exiting ESOL will take the WIDA exam.</p> <p>ESOL Levels 1 and 2 may take the four core academic subjects via ESOL classes (if students math skills are high enough to take non-ESOL math courses, we will enroll them a non-ESOL math course)</p> <p>We will enroll ESOL levels 3 and 4 into non-ESOL core subjects.</p> <p>In addition, in place of a foreign language, all ESOL students will take a “double block” of ESOL English to further build their skills for faster acquisition of the English language.</p> <p>Students will take the Virginia SOL end of course test for applicable subjects.</p> <p>The IB MYP five “Areas of Interaction” as applied to English (Language A) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>Note: Most of our 9th grade students will have been with us since 7th and 8th grade and we expect progress in ESOL over that time. Therefore, most of our ESOL students we expect to have exited from ESOL classes or be at levels 3 and 4 and need only ESOL support, but are mainstreamed into other regular courses. The exception may be a small number of new students we enroll in 9th grade who are still at ESOL levels 1 and 2. In this case, depending on the numbers, we would offer beginning ESOL and specialized content courses in ESOL.</p>
<p>Health and Physical Education</p>	<p><i>Health and Physical Education 9</i></p>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Perform basic movement skills 2. Apply movement principles and concepts to specific skill performances 3. Demonstrate personal fitness planning 4. Demonstrate essential life skills in physical activity settings 5. Participate in school and community physical activities <p>Please see http://www.fcps.edu/is/hpe/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsPE for detailed description of FCPS POS for this course.</p> <p>The IB MYP five “Areas of Interaction” as applied to Physical Education will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	

<p>Business/Technology</p>	<p>Information Systems</p>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Develop workplace readiness skills: personal qualities and people skills 2. Develop workplace readiness skills: professional knowledge and skills 3. Develop workplace readiness skills: technology knowledge and skills 4. Understand all aspects of industry 5. Address elements of student life 6. Exploring computer concepts 7. Explore ethical issues related to computers and computer systems 8. Manage computer systems 9. Produce word processing documents 10. Develop electronic spreadsheets 11. Develop and manage databases 12. Develop multimedia presentations 13. Communicate through technology 14. Prepare for industry certification 15. Develop employability skills <p>Please see http://www.fcps.edu/is/cte/bit.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsBIT and attached addendum for detailed description of FCPS POS for this course.</p> <p>The IB MYP five “Areas of Interaction” as applied to Business/Technology will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>Information systems will be offered to 9th, 10th, 11th and 12th graders (although priority will be given to 9th and 10th grade)</p>
<p>Art</p>	<p>Studio Art and Design 1</p>	<p>State Standards for the Studio Art and Design 1 course fit into the following areas:</p> <ol style="list-style-type: none"> 1. Visual communication and production 2. Cultural context and art history 3. Judgment and criticism 4. Aesthetics <p>Detailed outline of the State Standards for Studio Art and Design 1 can be found on the following site: http://www.doe.virginia.gov/testing/sol/standards_docs/fine_arts/visual_arts/stds_visualarts1_artfoundations.pdf</p> <p>The IB MYP five “Areas of Interaction” as applied to Arts will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p>	<p>Students may choose to do Studio Art and Design 1 course in grade 9, 10, 11 or 12 (although preference will be given to 9th grade)</p>

		Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/ .	
Music	<i>Beginning Band, Intermediate Band or Advanced Band</i>	<p>FCPS POS for all three courses fit under the following categories:</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to sing and play instruments 2. Demonstrate the ability to compose and improvise 3. Demonstrate music literacy and listening skills 4. Identify/Compare relationships between music and other experiences <p>Detailed outline of the FCPS POS for all three courses can be found on the following site: http://www.fcps.edu/is/pos/hs.shtml#hsFA</p> <p>The IB MYP five “Areas of Interaction” as applied to Arts will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	A section of each of these courses – Beginning Band, Intermediate Band and Advanced Band will be offered with students of mixed grade levels in each course, grades 9 – 12.
AVID	<i>AVID 9</i>	<p>AVID is a college preparatory course and program designed to:</p> <ul style="list-style-type: none"> • increase core academic skills (WICR: Writing, Inquiry, Collaboration and Reading) • provide academic support to students enrolled in honors and IB courses • teach important life skills such as organization and time management skills for academic and professional success • educate students and their families on the process of attending college <p>See attached addendum or the following websites for details on FCPS and national AVID program: http://www.fcps.edu/is/schoolcounseling/collegesuccess/avid.shtml http://www.avid.org/abo_whatisavid.html#whopays</p> <p>The IB MYP five “Areas of Interaction” will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and</p>	All students will be enrolled in the AVID course.

		found at http://ibo.org/myp/assessment/ .	
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10th Grade

<u>Subject</u>	<u>Course</u>	<u>FCPS Program of Studies (POS) and International Baccalaureate (IB) curriculum and related state and IB assessments</u>	<u>Notes</u>
English	English 10 Honors	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Participate and report on small group learning activities 2. Critique oral reports of small group learning activities 3. Read, comprehend and critique literary works 4. Read and interpret informational materials 5. Read and analyze a variety of poetry 6. Read and critique dramatic selections 7. Develop a variety of writing, with emphasis on exposition 8. Edit writing for correct grammar, punctuation, spelling, etc. 9. Critique professional and peer writing 10. Use writing to interpret, analyze and evaluate ideas 11. Collect, evaluate, organize and present information <p>Please see http://www.fcps.edu/is/languagearts/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsLA for detailed description of FCPS POS for this course.</p> <p>The IB MYP five “Areas of Interaction” as applied to English (Language A) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/. Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	All students not in ESOL will take this course. We will only offer the FCPS honors level curriculum for this course.
Math	Geometry Honors or Algebra 2 Honors or IB Standard Level Math 1 (Precalculus with Trigonometry Honors)	<p>Geometry Honors – FCPS POS:</p> <ol style="list-style-type: none"> 1. Construct and judge the validity of a logical argument 2. Use angle relationships to determine if two lines are parallel 3. Solve problems involving symmetry and transformation 4. Perform a variety of geometric constructions 5. Apply the triangle inequality properties to solve practical problems 6. Prove two triangles are congruent using a variety of methods 7. Prove two triangles are similar using a variety of methods 8. Solve real-world problems involving right triangles 9. Investigate and solve problems involving circles 10. Write the equation of a circle 11. Use formulas for surface area and volume to solve problems 12. Use proportional reasoning/determine affect of change to dimensions 13. Investigate non-Euclidian geometries (optional) 	<p>We will consider offering differing levels of Math based on students ability levels entering 10th grade. We will look closely at 9th grade Math assessment scores and grades, as well as recommendations from 9th grade teachers and counselors to help determine proper placement.</p> <p>Because Math is sequential, and highly dependent on acquisition of skills prior</p>

		<p>Algebra 2 Honors – FCPS POS</p> <ol style="list-style-type: none"> 1. Develop skills involving rational, radical and polynomial expressions 2. Investigate/apply properties of arithmetic/geometric sequences/series 3. Solve a variety of equations, algebraically and graphically 4. Solve nonlinear systems of equations 5. Recognize multiple representations of functions 6. Investigate and analyze functions, algebraically and graphically 7. Investigate and describe relationships 8. Collect/analyze data to make predictions and solve practical problems 9. Solve problems involving direct, joint and inverse variations 10. Identify and apply properties of a normal distribution 11. Use matrix multiplication to solve practical problems <p>IB Math SL 1 (which follows the FCPS POS for Precalculus with Trigonometry honors) – FCPS POS</p> <ol style="list-style-type: none"> 1. Connect circular function with trig function definitions 2. Find the values of trigonometric functions 3. Find exact trig values of special angles in degrees and radians 4. Approximate values of trig functions and inverse trig functions 5. Verify basic trigonometric identities 6. Find domain, range, amplitude, period and graph trig functions 7. Identify the domain, range and graphs of inverse trig functions 8. Solve trig equations and inequalities 9. Solve practical problems using the laws of sines and cosines 10. Identify characteristics and graph polynomial and rational functions 11. Find compositions and inverse functions 12. Find the limit of functions graphically, numerically and algebraically 13. Find the domain and range of the inverse of a function 14. Identify characteristics and graph exponential and log functions 15. Expand binomials using the binomial theorem and Pascal’s triangle 16. Solve problems involving sequences and series 17. Prove formulas and statements using mathematical induction 18. Identify characteristics and graph polar equations 19. Model and solve problems parametrically 20. Perform operations on vectors and solve practical problems 21. Investigate fundamental principles of differential calculus <p>Please see http://www.fcps.edu/is/math/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsM for detailed description of FCPS POS for these courses.</p> <p>All students will take the Virginia SOL end of course test for Geometry and Algebra 2 courses.</p> <p>The IB MYP five “Areas of Interaction” as applied to Math will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at</p>	<p>to moving up in courses, it is necessary to differentiate and offer varying levels of math in each grade. However, the sequence of all courses in math grades 7 – 11 will lead to students reaching an IB level math course by grade 12, thus preparing students to enter a post-secondary institution with required math skills and knowledge.</p> <p>Ultimately, what we offer in math in 10th grade will be driven by the skill levels of our students at the end of 9th grade.</p>
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		http://ibo.org/myp/curriculum/ . Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/ .	
Science	<i>Biology 1 Honors or Chemistry 1 Honors</i>	<p>Biology 1 Honors – FCPS POS:</p> <ol style="list-style-type: none"> 1. Plan and conduct investigations 2. Investigate and understand the history of biological concepts 3. Understand chemical and biochemical processes essential for life 4. Understand the relationships between cell structure and function 5. Understand life functions of the six kingdoms 6. Understand mechanisms of inheritance and protein synthesis 7. Understand basis for modern classification systems 8. Understand how populations change through time 9. Understand population, community and ecosystem dynamic equilibria <p>Chemistry 1 Honors – FCPS POS:</p> <ol style="list-style-type: none"> 1. Understand that experiments produce observations and data 2. Understand the placement of elements on the periodic table 3. Conservation of energy and matter: chemical formulas, balanced equations 4. Quantities in chemical reaction are based on molar relationships 5. Phases of matter: kinetic theory and forces of attraction <p>Please see http://www.fcps.edu/is/science/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hslA \ for descriptions of FCPS POS for these courses.</p> <p>All students will take the Virginia SOL end of course test for these courses.</p> <p>The IB MYP five “Areas of Interaction” as applied to Science will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/. Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	We will offer students the option to take Biology or Chemistry in 10 th grade, based on their preference for future IB courses in sciences. This way they will be able to follow a sequence towards taking IB Biology, IB Environmental Systems and Society, or IB Physics. All students will be enrolled in these honors level courses with the exception of Level 1 or 2 ESOL students who will take a specialized ESOL science course.
Social Studies	<i>Honors Virginia and US Government</i>	<p>FCPS POS:</p> <ol style="list-style-type: none"> 1. Demonstrate mastery of social studies skills for citizenship 2. Demonstrate knowledge of political philosophies 3. Demonstrate knowledge of the concepts of government 4. Demonstrate knowledge of the Constitution of the United States 5. Demonstrate knowledge of the federal system 6. Demonstrate knowledge of local, state and national elections 7. Demonstrate knowledge of the organization/powers of the national government 8. Demonstrate knowledge of the organization/powers of state/local government 	We will offer Honors Virginia and US Government in 10 th grade in order to follow sequencing of IB courses in 11 th and 12 th grades. Other FCPS schools that have the IB Program do this as well. All students will be enrolled in this

		<ol style="list-style-type: none"> 9. Demonstrate knowledge of the public policy making process 10. Demonstrate knowledge of the operation of the federal judiciary 11. Demonstrate knowledge of civil liberties and civil rights 12. Demonstrate knowledge of the role of the US in a changing world 13. Demonstrate knowledge of government and economics in other countries 14. Demonstrate knowledge of economic systems 15. Demonstrate knowledge of the United States market economy 16. Demonstrate knowledge of government role in VA and US economies 17. Explain meaning of citizenship in US and relation to civic life <p>Please see http://www.fcps.edu/is/socialstudies/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsLA for detailed description of FCPS POS for this course.</p> <p>The IB MYP five “Areas of Interaction” as applied to Social Studies will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>honors level course with the exception of Level 1 or 2 ESOL students who will take a specialized ESOL Virginia and US Government course.</p>
<p>Foreign Language</p>	<p><i>Online Foreign Language Courses in Select languages - Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</i></p>	<p>Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</p> <p>The Virginia High School SOLs for all of these languages will be followed at the appropriate levels.</p> <p>Please see http://www.fcps.edu/is/pos/hs.shtml#hsWL for detailed descriptions of Virginia SOLs for courses in these foreign languages.</p> <p>We will insure that the online courses used for foreign language meet the requirements of FCPS POS and Virginia SOLs.</p> <p>The IB MYP five “Areas of Interaction” as applied to Foreign Language (Language B) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>Foreign Languages will be offered through a “blended learning” model. We will have on staff foreign language teachers to whom students are assigned for their foreign language class. However, students will take their foreign language course as an online course in school on computers during the period assigned to them for foreign language. Teachers will serve as facilitators, assisting and monitoring students’ progress as they work through the online course in a foreign language of their choice. We will utilize Fairfax County Public Schools online courses, as well as online courses offered by Virginia Department of Education approved online providers such as Virtual Virginia online school, Virtual High School and K12 (who is</p>

			working with the International Baccalaureate Organization to offer online IB courses).
ESOL	<p>Depending on students' ESOL Level we will offer:</p> <p>Beginning ESOL English ESOL VA/US Government ESOL FOCUS Science ESOL FAST Math Developing ESOL English ESOL Academic Language</p>	<p>See WIDA (World-Class Instructional Design and Assessment) standards on the following website: http://www.wida.us/standards/6-12%20Standards%20web.pdf. We will follow WIDA standards and students exiting ESOL will take the WIDA exam.</p> <p>ESOL Levels 1 and 2 may take the four core academic subjects via ESOL classes (if students math skills are high enough to take non-ESOL math courses, we will enroll them a non-ESOL math course)</p> <p>We will enroll ESOL levels 3 and 4 into non-ESOL core subjects.</p> <p>In addition, in place of a foreign language, all ESOL students will take a "double block" of ESOL English to further build their skills for faster acquisition of the English language.</p> <p>Students will take the Virginia SOL end of course test for applicable subjects.</p> <p>The IB MYP five "Areas of Interaction" as applied to English (Language A) will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five "Areas of Interaction" which can be found at http://ibo.org/myp/curriculum/. Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	<p>Note: Most of our 10th grade students will have been with us since 7th and 8th grade and we expect progress in ESOL over that time. Therefore, most of our ESOL students we expect to have exited from ESOL classes or be at levels 3 and 4 and need only ESOL support, but are mainstreamed into other regular courses. The exception may be a small number of new students we enroll in 10th grade who are still at ESOL levels 1 and 2. In this case, depending on the numbers, we would offer beginning ESOL and specialized content courses in ESOL.</p>
Physical Education	<p>Health and Physical Education 10</p> <p>Classroom Drivers Education course</p>	<p>Health and Physical Education 10 – FCPS POS:</p> <ol style="list-style-type: none"> 1. Demonstrate proficiency in basic skilled movement 2. Apply movement principles and concepts to skill performance 3. Apply training and scientific concepts to personal fitness planning 4. Demonstrate appropriate behavior in physical activity settings 5. Analyze the significance of physical activity for a healthy lifestyle <p>Classroom Drivers Education Course – FCPS POS:</p> <ol style="list-style-type: none"> 1. Explain the licensing and identify laws 2. Understand vehicle operation and maintenance 3. Explain basic driving maneuvers 4. Explain reduction of driving risk 5. Explain communication between roadway users 6. Identify and explain factors that contribute to impaired driving 7. Explain strategies to use in responding to emergency situations 8. Explain vehicle braking systems and proper braking techniques 9. Evaluate financial and environmental costs of owning a vehicle 	<p>Students in 10th grade Health and PE class will also complete the Classroom Drivers Education course. This course is offered in 10th grade through Health and PE classes throughout FCPS.</p>

		<p>For Health and Physical Education 10 : Please see http://www.fcps.edu/is/hpe/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsPE for detailed description of FCPS POS for this course.</p> <p>For Classroom Drivers Education Course: Please see http://www.fcps.edu/is/hpe/drivered.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsLA for detailed description of FCPS POS for this course.</p> <p>The IB MYP five “Areas of Interaction” as applied to Physical Education will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	
Business/Tech/Marketing	<i>Entrepreneurship 1 (NFTE) (Economics and Personal Finance)</i>	<p>The Entrepreneurship 1 course will be conducted through the Network for Teaching Entrepreneurship (NFTE) program. In addition, this course will fulfill the state requirement for Economics and personal finance.</p> <p>This course will follow the state standards for Entrepreneurship Education:</p> <ol style="list-style-type: none"> 1. Demonstrating workplace readiness skills: personal qualities and people skills 2. Demonstrating workplace readiness skills: professional knowledge and skills 3. Demonstrating workplace readiness skills: technology knowledge and skills 4. Examining all aspects of an industry 5. Addressing elements of student life 6. Understanding entrepreneurship 7. Understanding business ownership 8. Understanding financial requirements 9. Understanding marketing principles 10. Understanding basic economic principles 11. Developing sales and customer service skills 12. Planning an entrepreneurial business <p>Please see http://www.cteresource.org/verso2/framework/tasklist/marketing/entrepreneurship_education/2011/9093 or the attached addendum for detailed information on the state standards for Entrepreneurship Education.</p> <p>Please see http://nfte.com/what/classroom-programs or the attached addendum for detailed information on the NFTE program.</p>	All students will take this course in either 10 th , 11 th or 12 th grade to fulfill the state requirement for Economics and Personal Finance.
Art	<i>Studio Art and Design 2</i>	<p>State Standards for the Studio Art and Design 2 course fit into the following areas:</p> <ol style="list-style-type: none"> 1. Visual communication and production 2. Cultural context and art history 3. Judgment and criticism 4. Aesthetics <p>Detailed outline of the State Standards for Studio Art and Design 1 can be found on the following site: http://www.doe.virginia.gov/testing/sol/standards_docs/fine_arts/visual_arts/stds_visualarts2_intermediate.pdf</p>	In addition, students may choose to do Studio Art and Design 1 listed in 9 th grade (if room in this course is available). Students may choose to do Studio Art and Design 2 course in grade 10, 11 or 12 (although preference will be given to

			10 th grade)
Music	<i>Beginning Band, Intermediate Band or Advanced Band</i>	<p>FCPS POS for all three courses fit under the following categories:</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to sing and play instruments 2. Demonstrate the ability to compose and improvise 3. Demonstrate music literacy and listening skills 4. Identify/Compare relationships between music and other experiences <p>Detailed outline of the FCPS POS for all three courses can be found on the following site: http://www.fcps.edu/is/pos/hs.shtml#hsFA</p> <p>The IB MYP five “Areas of Interaction” as applied to Arts will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education <p>See attached addendum for description of the five “Areas of Interaction” which can be found at http://ibo.org/myp/curriculum/.</p> <p>Assessments will meet the assessment standards for IB MYP as described in the attached addendum on IB MYP and found at http://ibo.org/myp/assessment/.</p>	A section of each of these courses – Beginning Band, Intermediate Band and Advanced Band will be offered with students of mixed grade levels in each course, grades 9 – 12.
AVID	<i>AVID 10</i>	<p>AVID is a college preparatory course and program designed to:</p> <ul style="list-style-type: none"> • increase core academic skills (WICR: Writing, Inquiry, Collaboration and Reading) • provide academic support to students enrolled in honors and IB courses • teach important life skills such as organization and time management skills for academic and professional success • educate students and their families on the process of attending college <p>See attached addendum or the following websites for details on FCPS and national AVID program: http://www.fcps.edu/is/schoolcounseling/collegesuccess/avid.shtml http://www.avid.org/abo_whatisavid.html#whopays</p> <p>The IB MYP five “Areas of Interaction” will be incorporated into this course:</p> <ul style="list-style-type: none"> • Approaches to learning • Community and service • Human ingenuity • Environments • Health and Social Education 	All student students will be enrolled in the AVID course.

11th Grade

<u>Subject</u>	<u>Course</u>	<u>FCPS Program of Studies (POS) and International Baccalaureate (IB) curriculum and related state and IB assessments</u>	<u>Notes</u>
English	<p>English 11, IB English Higher Level 1 (HL), or IB English Standard Level 1 (SL)</p>	<p>English 11 – FCPS POS:</p> <ol style="list-style-type: none"> 1. Make informative and persuasive presentations 2. Analyze and evaluate informative and persuasive presentations 3. Analyze relationships among American lit, history and culture 4. Read and analyze a variety of informational materials 5. Read and critique a variety of poetry 6. Read and critique a variety of dramatic selections 7. Write in a variety of forms, with emphasis on persuasion 8. Edit writing for correct grammar, capitalization, etc. 9. Write, revise, edit to workplace and higher ed standards 10. Analyze, evaluate, synthesize, organize info for research <p>In addition to these English 11 FCPS POS, the following are descriptions of the IB English HL and SL courses:</p> <p>IB English HL 1 This is the first year of a two-year intensive college-level study of language and literature in English. Over these two years students develop their analytical and creative powers of expression, both in oral and written communication. They practice the skills involved in writing and speaking in a variety of styles and situations, using English as a means of effective communication and as a key to the study of other disciplines. Students are introduced not only to major classical works of literature, but also to a range of contemporary writing. They also study different genre, styles, and contexts through the comparative study of works from various cultures. IB English 1 HL together with IB English 2 HL prepares students for the higher level exam.</p> <p>IB English SL 1 This is the first year of a two-year college-level intensive study of language and literature in English. Over these two years students develop their analytical and creative powers of expression, both in oral and written communication. They practice the skills involved in writing and speaking in a variety of styles and situations, using English as a means of effective communication and as a key to the study of other disciplines. Students are introduced not only to major classical works of literature, but also to a range of contemporary writing. They also study different genres, styles, and contexts through the comparative study of works from various cultures. IB English I SL together with IB English II SL prepares students for the standard level exam.</p> <p>All students will take the Virginia SOL end of course test for these courses.</p> <p>Please see http://www.fcps.edu/is/languagearts/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsLA and detailed description of FCPS POS for this course. Also see http://www.fcps.edu/is/pos/documents/coursecatalogs/HSoptionalCatalog.pdf for descriptions of IB courses offered in FCPS.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to these two courses that meet and go beyond the required FCPS POS and Virginia SOLs. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	<p>All students will be enrolled in one of these courses. These IB courses meet the FCPS POS and SOLs for 11th grade English and the SOL end of course exam. Any student still in ESOL (level 3 or 4) will be enrolled in an ESOL course in addition to one of these IB English courses.</p>
Math	Algebra 2	Algebra 2 Honors – FCPS POS	We will consider offering differing levels

	<p>Honors, IB Math Standard Level 1 (Precalculus with Trigonometry honors) or IB Math Higher Level 1 (HL)</p>	<ol style="list-style-type: none"> 1. Develop skills involving rational, radical and polynomial expressions 2. Investigate/apply properties of arithmetic/geometric sequences/series 3. Solve a variety of equations, algebraically and graphically 4. Solve nonlinear systems of equations 5. Recognize multiple representations of functions 6. Investigate and analyze functions, algebraically and graphically 7. Investigate and describe relationships 8. Collect/analyze data to make predictions and solve practical problems 9. Solve problems involving direct, joint and inverse variations 10. Identify and apply properties of a normal distribution 11. Use matrix multiplication to solve practical problems <p>IB Math SL 1 (which follows the FCPS POS for Precalculus with Trigonometry honors) – FCPS POS</p> <ol style="list-style-type: none"> 1. Connect circular function with trig function definitions 2. Find the values of trigonometric functions 3. Find exact trig values of special angles in degrees and radians 4. Approximate values of trig functions and inverse trig functions 5. Verify basic trigonometric identities 6. Find domain, range, amplitude, period and graph trig functions 7. Identify the domain, range and graphs of inverse trig functions 8. Solve trig equations and inequalities 9. Solve practical problems using the laws of sines and cosines 10. Identify characteristics and graph polynomial and rational functions 11. Find compositions and inverse functions 12. Find the limit of functions graphically, numerically and algebraically 13. Find the domain and range of the inverse of a function 14. Identify characteristics and graph exponential and log functions 15. Expand binomials using the binomial theorem and Pascal’s triangle 16. Solve problems involving sequences and series 17. Prove formulas and statements using mathematical induction 18. Identify characteristics and graph polar equations 19. Model and solve problems parametrically 20. Perform operations on vectors and solve practical problems 21. Investigate fundamental principles of differential calculus <p>IB Math Higher Level 1 (HL)</p> <p>This is the first year of a two-year intensive college-level study of mathematics. Course content includes the study of precalculus topics, algebraic and transcendental functions and their inverses, matrices, three dimensional vectors and differential calculus. Students will be required to begin a portfolio of problems for the Internal Assessment. IB Mathematics HL I together with IB Mathematics HL II prepares students for the higher level exam.</p> <p>Students enrolled in Algebra 2 Honors will take the Virginia SOL end of course test for Algebra 2.</p> <p>Please see http://www.fcps.edu/is/science/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsS for detailed description of FCPS POS for these course. Also see http://www.fcps.edu/is/pos/documents/coursecatalogs/HSoptionalCatalog.pdf for descriptions of IB courses offered in FCPS.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to these two courses that meet</p>	<p>of Math based on students ability levels entering 11th grade. We will look closely at 10th grade Math assessment scores and grades, as well as recommendations from 10th grade teachers and counselors to help determine proper placement.</p> <p>Because Math is sequential, and highly dependent on acquisition of skills prior to moving up in courses, it is necessary to differentiate and offer varying levels of math in each grade. However, the sequence of all courses in math grades 7 – 11 will lead to students reaching an IB level math course by grade 12, thus preparing students to enter a post-secondary institution with required math skills and knowledge.</p> <p>Ultimately, what we offer in math in 11th grade will be driven by the skill levels of our students at the end of 10th grade.</p>
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		and go beyond the required FCPS POS and Virginia SOLs. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/	
Science	IB Biology Higher Level 1 (HL), IB Physics Standard Level 1 (SL) or Chemistry 1 Honors	<p>IB Biology 1 (HL): IB Biology I is the first year of a two-year sequence wherein students study biology in depth. During this course, students will study such topics as cell structure; nucleic acids and proteins; cellular respiration and photosynthesis; genetics; human reproduction; defense against infectious disease; classification and diversity; nerves, muscles, and movement; and plant science. Participation in an interdisciplinary science research (Group 4) project is required. Laboratory investigations form a major component of the course, and all students must maintain a portfolio of laboratory work that is presented to the IB examiners. If dissections are part of the laboratory experience, alternatives are available. IB Biology I together with IB Biology II will prepare students for the higher level exam. In addition, IB Biology meets all the FCPS POS for biology as follows:</p> <ol style="list-style-type: none"> 1. Plan and conduct investigations 2. Investigate and understand the history of biological concepts 3. Understand chemical and biochemical processes essential for life 4. Understand the relationships between cell structure and function 5. Understand life functions of the six kingdoms 6. Understand mechanisms of inheritance and protein synthesis 7. Understand basis for modern classification systems 8. Understand how populations change through time 9. Understand population, community and ecosystem dynamic equilibria <p>IB Physics 1 (SL): IB Physics I topics include mechanics, electricity, magnetism, waves, thermodynamics, atomic physics, climate change, and alternative energy sources. Laboratory investigations form a major component of the course, and all students must maintain a portfolio of laboratory work that is presented to the IB examiners. At the end of the first year, students may choose to continue with either standard or higher level IB physics studies, according to the student's and the local school's offerings. This course is the first in a two-year sequence designed to prepare students for either the IB standard level or higher level examination in physics. Students will be involved in an externally-moderated experimental/research project. IB Physics I meets the course requirements of Physics 1 Honors.</p> <p>Chemistry 1 Honors – FCPS POS:</p> <ol style="list-style-type: none"> 1. Understand that experiments produce observations and data 2. Understand the placement of elements on the periodic table 3. Conservation of energy and matter: chemical formulas, balanced equations 4. Quantities in chemical reaction are based on molar relationships 5. Phases of matter: kinetic theory and forces of attraction <p>Students enrolled in Chemistry 1 Honors will take the Virginia SOL end of course test for Chemistry. Students enrolled in IB Biology may choose to take the Virginia SOL end of course test for biology to earn a verified credit towards graduation requirements.</p> <p>Please see http://www.fcps.edu/is/science/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsS for detailed description of FCPS POS for these course. Also see http://www.fcps.edu/is/pos/documents/coursecatalogs/HSoptionalCatalog.pdf for descriptions of IB courses offered in FCPS.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to these two courses that meet</p>	We will offer varying levels and types of courses for students take in sciences in 11 th and 12 th grade. Course selection will be based on a student's strengths in sciences, looking closing at 9 th and 10 th grade science assessments, grades and recommendations by teachers and counselors, as well as on a student's interest in future careers in science.

		and go beyond the required FCPS POS and Virginia SOLs. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/	
Social Studies	<i>IB History of Americas (course will cover SOLs for VA/US History) Or VA/US History</i>	<p><u>IB History of Americas:</u> Students study political, social, economic and cultural history of the nations of the Western Hemisphere with an emphasis placed on the history of the United States and are introduced to history as a discipline, the nature and variety of historical sources, and the historian's methods. The historical narrative begins with the fifteenth century encounter by Europeans with American cultures and concludes with the entrance of the United States upon the world stage in the early years of the twentieth century. Topics for study include encounter and exchange, colonial institutions, collapse of imperial regimes, evolution of nineteenth century institutions, and the Americas in the industrial age. Students are expected to perceive past events and issues as they were experienced by people at the time, to acquire a comprehension both of diverse cultures and of shared humanity, and to understand the significance of the past to their own lives. IB History I together with IB History II prepares students to take the higher level exam.</p> <p>In addition to meeting IB course requirements, IB History of Americas also meets all FCPS POS and Virginia SOLs for the VA/US History courses as outlined below under the VA/US History course.</p> <p><u>VA/US History – FCPS POS:</u></p> <ol style="list-style-type: none"> 1. Demonstrate skills for historical and geographical analysis 2. Describe European exploration and colonization 3. Describe how European values took root in the colonies 4. Demonstrate knowledge of the Revolutionary War period 5. Demonstrate knowledge of the US Constitution 6. Demonstrate knowledge of the first half of the 19th century 7. Demonstrate knowledge of the Civil War and Reconstruction era 8. Demonstrate nation's growth and change from 1860s – early 1900s 9. Demonstrate emerging role of US in world affairs 10. Demonstrate knowledge of key domestic events of the 1920s and 1930s 11. Demonstrate knowledge of WWII 12. Demonstrate the effects of WWII on the home front 13. Demonstrate knowledge of US foreign policy since WWII 14. Demonstrate knowledge of Civil Rights movement 15. Demonstrate knowledge of developments in recent decades and today <p>All students will take the Virginia SOL end of course test for VA/US History.</p> <p>Please see http://www.fcps.edu/is/socialstudies/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsS for detailed description of FCPS POS for these courses. Also see http://www.fcps.edu/is/pos/documents/coursecatalogs/HSoptionalCatalog.pdf for descriptions of IB courses offered in FCPS.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to these two courses that meet and go beyond the required FCPS POS and Virginia SOLs. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	We will offer varying courses for students to take in grade 11 social studies. Course selection will be based on a student's strengths in social studies, looking closing at 9 th and 10 th grade social studies assessments, grades and recommendations by teachers and counselors, as well as on a student's interest in future careers in social sciences.
Foreign Language	<i>Online Foreign Language</i>	<p>Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</p> <p>The Virginia High School SOLs for all of these languages will be followed at the appropriate levels.</p>	Foreign Languages will be offered through a “blended learning” model. We will have

	<p><i>Courses in Select languages - Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</i></p>	<p>Please see http://www.fcps.edu/is/pos/hs.shtml#hsWL for detailed descriptions of Virginia SOLs for courses in these foreign languages.</p> <p>We will insure that the online courses used for foreign language meet the requirements of FCPS POS and Virginia SOLs.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to those foreign language courses that students are taking for the IB Diploma or for IB course certification. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	<p>on staff foreign language teachers to whom students are assigned for their foreign language class. However, students will take their foreign language course as an online course in school on computers during the period assigned to them for foreign language. Teachers will serve as facilitators, assisting and monitoring students' progress as they work through the online course in a foreign language of their choice. We will utilize Fairfax County Public Schools online courses, as well as online courses offered by Virginia Department of Education approved online providers such as Virtual Virginia online school, Virtual High School and K12 (who is working with the International Baccalaureate Organization to offer online IB courses).</p> <p>Note: For students who plan to receive an IB diploma, we will work with the International Baccalaureate Organization (IBO) to insure that online courses taken by students are provided by an IB-sanctioned online provider and meet IB curriculum requirements for receiving an IB diploma.</p>
<p>ESOL</p>	<p><i>Developing ESOL English ESOL Academic Language</i></p>	<p>See WIDA (World-Class Instructional Design and Assessment) standards on the following website: http://www.wida.us/standards/6-12%20Standards%20web.pdf. We will follow WIDA standards and students exiting ESOL will take the WIDA exam.</p> <p>Both of these courses are for level 3 and 4 ESOL students.</p>	<p>By 11th grade, we expect all of our ESOL students who started school with us in grades 7, 8 or 9 to have exited ESOL. In 11th grade, we may have only a small number of level 3 and 4 ESOL students who entered our school in 10th or 11th grade. For those students, we will provide ESOL support through these two courses, but expect them to be enrolled in the typical courses taken by 11th grade students in other subjects.</p>

<p>Business/Tech/Marketing</p>	<p>Entrepreneurship 1 (NFTE) (Economics and Personal Finance) and/or IB Business and Management (SL)</p>	<p>The Entrepreneurship 1 course will be conducted through the Network for Teaching Entrepreneurship (NFTE) program. In addition, this course will fulfill the state requirement for Economics and personal finance.</p> <p>This course will follow the state standards for Entrepreneurship Education:</p> <ol style="list-style-type: none"> 1. Demonstrating workplace readiness skills: personal qualities and people skills 2. Demonstrating workplace readiness skills: professional knowledge and skills 3. Demonstrating workplace readiness skills: technology knowledge and skills 4. Examining all aspects of an industry 5. Addressing elements of student life 6. Understanding entrepreneurship 7. Understanding business ownership 8. Understanding financial requirements 9. Understanding marketing principles 10. Understanding basic economic principles 11. Developing sales and customer service skills 12. Planning an entrepreneurial business <p>Please see http://www.cteresource.org/verso2/framework/tasklist/marketing/entrepreneurship_education/2011/9093 for detailed information on the state standards for Entrepreneurship Education.</p> <p>Please see http://nfte.com/what/classroom-programs and the attached addendum for information on the NFTE program.</p> <p>IB Business and Management (SL)</p> <p>The IB Business and Management SL course is designed to provide a broad introduction to the basic principles and practices of businesses and other organizations, both profit-making and nonprofit in nature. Fundamental principles and skills are studied in local, national and international context, thus affording the opportunity to reflect the differences in perspectives and cultures. Instruction includes units in introduction to business, marketing, finance, accounting, and human resource management. For students attending base schools that have the IB program, this course may serve as an elective ("Sixth Subject") in the IB Diploma program or may be taken independently for an IB certificate. These IB students are required to take the IB exam, and the course carries a weighted credit of 1.0 on the student's GPA. The cooperative education (Business Cooperative Internship--679920) method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to this course that meet and go beyond the required FCPS POS and Virginia SOLs for Fine Arts. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	<p>All students will take Entrepreneurship 1 in either 10th, 11th or 12th grade to fulfill the state requirement for Economics and Personal Finance.</p> <p>Students may choose to do IB Business and Management (SL) as an elective in 11th or 12th grade</p>
<p>Art</p>	<p>IB Visual Arts 1 (SL)</p>	<p>IB Visual Arts 1 (SL):</p> <p>Students engage in advanced study of art processes, aesthetic issues, art criticism, and art history and culture while maintaining the self-discipline of the working artist. They exhibit technical proficiency and personal style while working in advanced media, and arrange an art show of their own work using professional exhibiting techniques. A culminating portfolio evidencing quality, a thematic series, breadth of work, progress over time, and highest level of achievement will be required. An investigation workbook which evidences critical research in an area agreed upon by the teacher and the student is required. Students are required to take the standard level exam at the end of year 2. Standard level students must complete the IB Visual Arts I requirements within a two-year period.</p>	<p>In addition to IB Visual Arts 1, students may choose to do Studio Art and Design 1 or 2, which are listed in 9th and 10th grade (if room in these courses are available)</p>

		<p>Program curriculum and standards for the IB Diploma program will be applied to this course that meet and go beyond the required FCPS POS and Virginia SOLs for Fine Arts. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	
Music	<i>IB Music 1 (SL and HL)</i>	<p><u>IB Music 1 SL</u> Students engage in advanced study of musical performance. An in-depth study of the historical perspective of music including Western society and other world societies is included. Students study cultures and traditions of various regions of the world and gain an insight into the political, social, and economic conditions that impact composers and performers. The study of traditional music in western society focuses on broad periods of time in history and includes specific style, form, and structure of vocal and instrumental music with analyses of specific works from those periods. This course also provides a solid foundation in the fundamentals of music including: intervals, pitch and rhythmic patterns, chords and chord progressions, and musical terms applicable to listening to and performance of musical literature. Students are required to be a member of an advanced level performance ensemble to participate in the course if the ensemble instrumentation is appropriate. Students are required to take the standard level exam at the end of year 2.</p> <p><u>IB Music 1 HL</u> Students engage in advanced study of musical performance. An in-depth study of the historical perspective of music including Western society and other world societies is included. Students study cultures and traditions of various regions of the world and gain an insight into the political, social, and economic conditions that impact composers and performers. The study of traditional music in western society focuses on broad periods of time in history and includes specific style, form, and structure of vocal and instrumental music with analyses of specific works from those periods. This course also provides a solid foundation in the fundamentals of music including: intervals, pitch and rhythmic patterns, chords and chord progressions, and musical terms applicable to listening to and performance of musical literature. Students are required to be a member of an advanced level performance ensemble to participate in the course if the ensemble instrumentation is appropriate. Students are required to take the higher level exam at the end of year 2.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to this course that meet and go beyond the required FCPS POS and Virginia SOLs for Fine Arts. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	<p>These classes will be offered jointly, with some students pursuing the SL curriculum and some students pursuing the HL curriculum.</p> <p>In addition to these IB Music courses, beginner, intermediate and advanced band will be available for 11th grade students to take as well.</p>
AVID	<i>AVID 11</i>	<p>AVID is a college preparatory course and program designed to:</p> <ul style="list-style-type: none"> • increase core academic skills (WICR: Writing, Inquiry, Collaboration and Reading) • provide academic support to students enrolled in honors and IB courses • teach important life skills such as organization and time management skills for academic and professional success • educate students and their families on the process of attending college <p>See attached addendum or the following websites for details on FCPS and national AVID program: http://www.fcps.edu/is/schoolcounseling/collegesuccess/avid.shtm http://www.avid.org/abo_whatisavid.html#whopays</p>	All student students will be enrolled in the AVID course.
Online Elective Course (blended learning model)	<i>Selection of online elective courses from FCPS and</i>	In 11 th grade, students may take a variety of online elective courses through approved online course providers. These courses will be placed as period in their daily school. During that period, students will go to a designated room (media or IT center) in the building to work on their online course under the supervision of a teacher. The teacher will serve as a facilitator for the online course, checking on students' progress and providing academic and technical guidance as necessary.	Note: Based on students' academic needs, it is possible that we may schedule some students into a "double block" course of English or Math, instead of

	<p>Virginia approved online providers</p>	<p>We look forward to offering online electives to students in a wide variety of subjects. We will utilize Fairfax County Public Schools online courses, as well as online courses offered by Virginia Department of Education approved online providers such as Virtual Virginia online school, Virtual High School and K12 (who is working with the International Baccalaureate Organization to offer online IB courses). We will insure that these online courses meet the requirements of FCPS POS and Virginia SOLs, as well as, if necessary, requirements for the IB program.</p>	<p>having them take an online elective course, if they need remedial assistance in these subjects.</p>
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12th Grade

<u>Subject</u>	<u>Course</u>	<u>FCPS Program of Studies (POS) and International Baccalaureate (IB) curriculum and related state and IB assessments</u>	<u>Notes</u>
English	<p>English 12, IB English Higher Level 2 (HL) or IB English Standard Level 2 (SL)</p>	<p>English 12 - FCPS POS:</p> <ol style="list-style-type: none"> 1. Make a 5 to 10 minute oral presentation 2. Evaluate formal presentations 3. Read and analyze British lit and lit of other countries 4. Read and analyze a variety of informational materials 5. Read and critique a variety of poetry 6. Read and critique dramatic selections from a variety of authors 7. Develop expository and informational writings 8. Write documented research papers <p>In addition to these English 12 FCPS POS, the following are descriptions of the IB English HL and SL courses:</p> <p>IB English HL 2 This is the second year of a two-year course in which students continue a rigorous study of language and literature in English. They demonstrate an increasing proficiency in creative and analytical thinking skills through reading, writing and speaking. They develop an understanding of the techniques involved in literary study and criticism, and engage in a detailed and critical examination of written works from world literature. Students develop an appreciation for, and lifelong interest in literature and language. Students are required to take the higher level English A1 IB exam.</p> <p>IB English SL 2 This is the second year of a two-year course in which students continue a rigorous study of language and literature in English. They demonstrate an increasing proficiency in creative and analytical thinking skills through reading, writing and speaking. They develop an understanding of the techniques involved in literary study and criticism, and engage in a detailed and critical examination of written works from world literature. Students develop an appreciation for, and lifelong interest in literature and language. Students are required to take the standard level English A1 IB exam.</p> <p>Please see http://www.fcps.edu/is/languagearts/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsLA for detailed description of FCPS POS for this course. Also see http://www.fcps.edu/is/pos/documents/coursecatalogs/HSoptionalCatalog.pdf for descriptions of IB courses offered in FCPS.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to these two courses that meet and go beyond the required FCPS POS and Virginia SOLs. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	<p>All students will be enrolled in one of these courses. These IB courses meet the FCPS POS and SOLs for 12th grade English. Any student still in ESOL (level 3 or 4) will be enrolled in an ESOL course in addition to one of these IB English courses.</p>
Math	<p>IB Math Studies, IB Math Standard Level 1 (Precalculus with Trigonometry)</p>	<p>IB Math Studies The content of this course includes a study of functions, algebraic geometry, trigonometry, probability and statistics, sets and logic, financial mathematics, introductory differential calculus, and mathematical applications in the natural world. All students in this course must complete a project. Students are required to take the standard level exam.</p>	<p>We will consider offer differing levels of Math based on students ability levels entering 12th grade. We will look closely at 11th grade Math assessment scores and grades, as well as recommendations</p>

	<p>honors), IB Math Standard Level 2 or IB Math Higher Level 1 (HL)</p>	<p><u>IB Math Standard Level 1 (SL) (which follows the FCPS POS for Precalculus with Trigonometry honors) – FCPS POS</u></p> <ol style="list-style-type: none"> 1. Connect circular function with trig function definitions 2. Find the values of trigonometric functions 3. Find exact trig values of special angles in degrees and radians 4. Approximate values of trig functions and inverse trig functions 5. Verify basic trigonometric identities 6. Find domain, range, amplitude, period and graph trig functions 7. Identify the domain, range and graphs of inverse trig functions 8. Solve trig equations and inequalities 9. Solve practical problems using the laws of sines and cosines 10. Identify characteristics and graph polynomial and rational functions 11. Find compositions and inverse functions 12. Find the limit of functions graphically, numerically and algebraically 13. Find the domain and range of the inverse of a function 14. Identify characteristics and graph exponential and log functions 15. Expand binomials using the binomial theorem and Pascal’s triangle 16. Solve problems involving sequences and series 17. Prove formulas and statements using mathematical induction 18. Identify characteristics and graph polar equations 19. Model and solve problems parametrically 20. Perform operations on vectors and solve practical problems 21. Investigate fundamental principles of differential calculus <p>The IB Math SL 1 course begins with the study of polynomial, rational, logarithmic, exponential, trigonometric, and inverse functions and their applications. Sequences and series are investigated to provide a foundation for limits and continuity. The course includes the study of vectors, matrices and differential calculus and expands on topics in trigonometry. Students will be required to begin a portfolio of problems for the Internal Assessment. IB Mathematics SL I together with IB Mathematics SL II prepares students to take the standard level exam.</p> <p><u>IB Math Standard Level 2 (SL)</u></p> <p>This course concludes the study of the concepts introduced in IB Mathematics SL I. The course includes the study of differential and integral calculus of functions of a single variable with applications. The course reemphasizes and expands upon topics in vectors and matrices introduced in IB Mathematics SL I. The course also includes the study of the theory and application of probability, random variables, and both descriptive and inferential statistics. Students are required to complete a portfolio of problems for the Internal Assessment. Students are required to take the standard level exam.</p> <p><u>IB Math Higher Level 2 (HL)</u></p> <p>This is the second year of a two-year intensive college level study of mathematics. Course content includes integral calculus, the study of the theory and application of probability, random variables, both descriptive and inferential statistics, three-dimensional vectors, infinite series and differential equations. Students are required to complete a portfolio of problems for the Internal Assessment. IB Mathematics HL I together with IB Mathematics HL II prepares students for the higher level exam. Students are required to take the higher level exam.</p> <p>Please see http://www.fcps.edu/is/science/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsS for detailed description of FCPS POS for these course. Also see http://www.fcps.edu/is/pos/documents/coursecatalogs/HSoptionalCatalog.pdf for descriptions of IB courses</p>	<p>from 11th grade teachers and counselors to help determine proper placement.</p> <p>Because Math is sequential, and highly dependent on acquisition of skills prior to moving up in courses, it is necessary to differentiate and offer varying levels of math in each grade. However, the sequence of all courses in math grades 7 – 11 will lead to students reaching an IB level math course by grade 12, thus preparing students to enter a post-secondary institution with required math skills and knowledge.</p> <p>Ultimately, what we offer in math in 12th grade will be driven by the skill levels of our students at the end of 11th grade.</p>
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		<p>offered in FCPS.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to these two courses that meet and go beyond the required FCPS POS and Virginia SOLs. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	
<p>Science</p>	<p><i>IB Biology Higher Level 2 (HL), IB Environmental Systems and Society Standard Level 2 (SL) or IB Physics Standard Level 2 (SL)</i></p>	<p><u>IB Biology 2 (HL):</u> IB Biology II is the second year of a two-year sequence wherein students study biology in depth. Students continue the higher level topics on the cell; nucleic acids and proteins; cell respiration and photosynthesis; genetics; human reproduction; defense against infectious disease; classification and diversity; nerves, muscles, and movement; and plant science. In addition, students study higher level options that may include evolution; neurobiology and behavior; applied plant and animal science; ecology and conservation; microbes and biotechnology; or human physiology. Participation in an interdisciplinary science research (Group 4) project is required (either in IB Biology I or in this class). Laboratory investigations form a major component of the course, and all students must maintain a portfolio of laboratory work that is presented to the IB examiners. If dissections are part of the laboratory experience, alternatives are available. Students are required to take the IB Biology higher level exam.</p> <p>In addition, IB Biology meets all the FCPS POS for biology as follows:</p> <ol style="list-style-type: none"> 1. Plan and conduct investigations 2. Investigate and understand the history of biological concepts 3. Understand chemical and biochemical processes essential for life 4. Understand the relationships between cell structure and function 5. Understand life functions of the six kingdoms 6. Understand mechanisms of inheritance and protein synthesis 7. Understand basis for modern classification systems 8. Understand how populations change through time 9. Understand population, community and ecosystem dynamic equilibria <p><u>IB Physics 2 (SL):</u> The topics--mechanics, electricity and magnetism, waves, thermodynamics, climate, and atomic physics--addressed in IB Physics I are revisited in more depth and breadth. Additionally, students will study two topics among sight & wave phenomena, quantum & nuclear physics, digital technology, relativity & particle physics, astrophysics, communications, and electromagnetic waves. Students are required to complete an interdisciplinary science research (Group 4) project. Students are required to take the IB Physics standard level exam.</p> <p><u>IB Environmental Systems and Society 1 (SL):</u> The course focuses on the fundamental structure and functioning of natural systems and the broad impacts of human activities. Students examine systems and models, the ecosystem, global cycles and physical systems, and human population and carrying capacity. They analyze a specific ecosystem as well as the impacts of resource exploitation, conservation and biodiversity, and pollution. Laboratory investigations, including field studies, form a major component of the course, and all students must maintain a portfolio of laboratory work that is presented to the IB examiners. Students are required to take the IB Environmental Systems and Societies standard level exam.</p> <p>Please see http://www.fcps.edu/is/science/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsS for detailed description of FCPS POS for these course. Also see http://www.fcps.edu/is/pos/documents/coursecatalogs/HSoptionalCatalog.pdf for descriptions of IB courses offered in FCPS.</p>	

		<p>Program curriculum and standards for the IB Diploma program will be applied to these two courses that meet and go beyond the required FCPS POS and Virginia SOLs. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	
<p>Social Studies</p>	<p><i>IB History II: Topics in 20th Century World History (HL)</i></p> <p><i>IB Geography (SL)</i></p> <p><i>IB Economics (SL)</i></p>	<p><u>IB History II: Topics in 20th Century World History (HL)</u> This course offers students an opportunity to study selected twentieth century topics in World History in an international dimension. Case studies of the major events and issues of the twentieth century are studied. Students read widely, acquiring the skills to evaluate, to interpret, and to use source material critically as historical evidence. These skills are specifically examined in the IB final. Additionally, students are expected to demonstrate an awareness of historical perspective and a consistently high level of critical analysis and handling of evidence in expository writing. A significant part of the final grade is an independent research project. Students are required to take either the standard level or the higher level exam. IB History II, together with IB History I, prepares students to take the higher level exam.</p> <p><u>IB Geography (SL)</u> IB Geography SL is a thematic study of real-world issues of spatial analysis. In contemporary society, issues such as urbanization, population development and environmental quality are increasingly important. These and other related themes that express the major concerns of our times reflect the consequences of spatial decisions. Conducting its analyses at the local, regional, national and international scales, IB Geography examines the spatial processes and the perceptions of humans, as well as the interrelations between the human and natural environments. The questions 'where?' and 'why?' are central to the course. Students study five core themes: population dynamics, economic growth and development, human responses to natural hazards, agriculture and world food supply, and urban environments. Students learn to apply the tools and techniques of geographers. Students are required to take the standard level exam.</p> <p><u>IB Economics (SL)</u> This course provides students with an introduction to economics. Topics studied include basic terms and concepts, microeconomics, macroeconomics, international economics and development economics. Students examine economic phenomena through the use of diagrams, data analysis and the evaluation of economic material. Students are required to take the standard level exam.</p> <p>Please see http://www.fcps.edu/is/socialstudies/highschool/index.shtml and http://www.fcps.edu/is/pos/hs.shtml#hsS for detailed description of FCPS POS for these courses. Also see http://www.fcps.edu/is/pos/documents/coursecatalogs/HSoptionalCatalog.pdf for descriptions of IB courses offered in FCPS.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to these two courses that meet and go beyond the required FCPS POS and Virginia SOLs. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	<p>We will offer varying courses for students to take in grade 12 social studies. Course selection will be based on a student's strengths in social studies, looking closing at 9th, 10th and 11th grade social studies assessments, grades and recommendations by teachers and counselors, as well as on a student's interest in future careers in social sciences.</p>
<p>Foreign Language</p>	<p><i>Online Foreign Language Courses in Select languages - Arabic, Chinese, French, German,</i></p>	<p>Arabic, Chinese, French, German, Japanese, Korean, Latin, Russian and Spanish</p> <p>The Virginia High School SOLs for all of these languages will be followed at the appropriate levels.</p> <p>Please see http://www.fcps.edu/is/pos/hs.shtml#hsWL for detailed descriptions of Virginia SOLs for courses in these foreign languages.</p> <p>We will insure that the online courses used for foreign language meet the requirements of FCPS POS and</p>	<p>Foreign Languages will be offered through a "blended learning" model. We will have on staff foreign language teachers to whom students are assigned for their foreign language class. However, students will take their foreign</p>

	<p>Japanese, Korean, Latin, Russian and Spanish</p>	<p>Virginia SOLs.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to those foreign language courses that students are taking for the IB Diploma or for IB course certification. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	<p>language course as an online course in school on computers during the period assigned to them for foreign language. Teachers will serve as facilitators, assisting and monitoring students' progress as they work through the online course in a foreign language of their choice. We will utilize Fairfax County Public Schools online courses, as well as online courses offered by Virginia Department of Education approved online providers such as Virtual Virginia online school, Virtual High School and K12 (who is working with the International Baccalaureate Organization to offer online IB courses).</p> <p>Note: For students who plan to receive an IB diploma, we will work with the International Baccalaureate Organization (IBO) to insure that online courses taken by students are provided by an IB-sanctioned online provider and meet IB curriculum requirements for receiving an IB diploma.</p>
<p>ESOL</p>			<p>We plan that all students by grade 12 will have exited the ESOL program. In the event we find any students that do need additional ESOL support in 12th grade, we will enroll them in one of ESOL classes listed in previous grades in place of elective courses in 12th grade.</p>
<p>Business/Tech/Marketing</p>	<p>Entrepreneurship 1 (NFTE) (Economics and Personal Finance) or IB Business and</p>	<p>The Entrepreneurship 1 course will be conducted through the Network for Teaching Entrepreneurship (NFTE) program. In addition, this course will fulfill the state requirement for Economics and personal finance.</p> <p>This course will follow the state standards for Entrepreneurship Education:</p> <ol style="list-style-type: none"> 1. Demonstrating workplace readiness skills: personal qualities and people skills 2. Demonstrating workplace readiness skills: professional knowledge and skills 3. Demonstrating workplace readiness skills: technology knowledge and skills 4. Examining all aspects of an industry 5. Addressing elements of student life 	<p>All students will take this course in either 10th, 11th or 12th grade to fulfill the state requirement for Economics and Personal Finance. 12th grade students who have taken IB Business and Management (SL) may choose to take IB Business and</p>

	Management (HL)	<ol style="list-style-type: none"> 6. Understanding entrepreneurship 7. Understanding business ownership 8. Understanding financial requirements 9. Understanding marketing principles 10. Understanding basic economic principles 11. Developing sales and customer service skills 12. Planning an entrepreneurial business <p>Please see http://www.cteresource.org/verso2/framework/tasklist/marketing/entrepreneurship_education/2011/9093 detailed information on the state standards for Entrepreneurship Education.</p> <p>Please see http://nfte.com/what/classroom-programs or the attached addendum for detailed information on the NFTE program.</p> <p>IB Business and Management (HL)</p> <p>This course is the second segment of a two-year series. It will continue and expand the curriculum of the first-year course and will require a written research project. The class is designed to promote the importance of exploring business issues from different cultural perspectives, to encourage a holistic view of the world of business, to enable the student to develop the capacity to think critically, and to enhance the student's ability to make decisions. Through the assessment of data from a variety of sources, students will identify social factors, cultural factors, and ethical considerations in the actions of organizations as well as examine the impact of the actions of organizations on the internal and external environment. For students attending base schools that have the IB program, this course may serve as an elective ("Sixth Subject") in the IB Diploma program or may be taken independently for an IB certificate. These IB students are required to take the IB exam, and the course carries a weighted credit of 1.0 on the student's GPA. The cooperative education (Business Cooperative Internship--679920) method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to this course that meet and go beyond the required FCPS POS and Virginia SOLs for Fine Arts. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	Management (HL).
Art	IB Visual Arts 2 (SL)	<p>IB Visual Arts 2 (SL):</p> <p>Students engage in advanced study of art processes, aesthetic issues, art criticism, and art history and culture while maintaining the self-discipline of the working artist. They exhibit technical proficiency and personal style while working in advanced media, and arrange an art show of their own work using professional exhibiting techniques. A culminating portfolio evidencing quality, a thematic series, breadth of work, progress over time, and highest level of achievement will be required. An investigation workbook which evidences critical research in an area agreed upon by the teacher and the student is required. Students are required to take the standard level exam at the end of year 2. Standard level students must complete the IB Visual Arts I requirements within a two-year period.</p>	In addition to IB Visual Arts 2, students may choose to do Studio Art and Design 1 or 2, which are listed in 9 th and 10 th grade (if room in these courses are available)
Music	IB Music 2 (SL and HL)	<p>IB Music 2 SL</p> <p>Students engage in advanced study of musical performance. An in-depth study of the historical perspective of music including Western society and other world societies is included. Students study cultures and traditions of various regions of the world and gain an insight into the political, social, and economic conditions that impact composers and performers. The study of traditional music in western society focuses on broad periods of time in history and includes specific style, form, and structure of vocal and instrumental music with analyses of specific works from those periods. This course also provides a solid foundation in the</p>	<p>These classes will be offered jointly, with some students pursuing the SL curriculum and some students pursuing the HL curriculum.</p> <p>In addition to these IB Music courses,</p>

		<p>fundamentals of music including: intervals, pitch and rhythmic patterns, chords and chord progressions, and musical terms applicable to listening to and performance of musical literature. Students are required to be a member of an advanced level performance ensemble to participate in the course if the ensemble instrumentation is appropriate. Students are required to take the standard level exam at the end of year 2.</p> <p>IB Music 2 HL</p> <p>Students engage in advanced study of musical performance. An in-depth study of the historical perspective of music including Western society and other world societies is included. Students study cultures and traditions of various regions of the world and gain an insight into the political, social, and economic conditions that impact composers and performers. The study of traditional music in western society focuses on broad periods of time in history and includes specific style, form, and structure of vocal and instrumental music with analyses of specific works from those periods. This course also provides a solid foundation in the fundamentals of music including: intervals, pitch and rhythmic patterns, chords and chord progressions, and musical terms applicable to listening to and performance of musical literature. Students are required to be a member of an advanced level performance ensemble to participate in the course if the ensemble instrumentation is appropriate. Students are required to take the higher level exam at the end of year 2.</p> <p>Program curriculum and standards for the IB Diploma program will be applied to this course that meet and go beyond the required FCPS POS and Virginia SOLs for Fine Arts. Information on the IB program is in an addendum and can be found at http://ibo.org/diploma/curriculum/</p>	<p>beginner, intermediate and advanced band will be available for 12th grade students to take as well.</p>
AVID	AVID 12	<p>AVID is a college preparatory course and program designed to:</p> <ul style="list-style-type: none"> • increase core academic skills (WICR: Writing, Inquiry, Collaboration and Reading) • provide academic support to students enrolled in honors and IB courses • teach important life skills such as organization and time management skills for academic and professional success • educate students and their families on the process of attending college <p>See attached addendum or the following websites for details on FCPS and national AVID program: http://www.fcps.edu/is/schoolcounseling/collegesuccess/avid.shtml http://www.avid.org/abo_whatisavid.html#whopays</p>	<p>All student students will be enrolled in the AVID course.</p>
Online Elective Course (blended learning model)	Selection of online elective courses from FCPS and Virginia approved online providers	<p>In 12th grade, students may take a variety of online elective courses through approved online course providers. These courses will be placed as period in their daily school. During that period, students will go to a designated room (media or IT center) in the building to work on their online course under the supervision of a teacher. The teacher will serve as a facilitator for the online course, checking on students' progress and providing academic and technical guidance as necessary.</p> <p>We look forward to offering online electives to students in a wide variety of subjects. We will utilize Fairfax County Public Schools online courses, as well as online courses offered by Virginia Department of Education approved online providers such as Virtual Virginia online school, Virtual High School and K12 (who is working with the International Baccalaureate Organization to offer online IB courses). We will insure that these online courses meet the requirements of FCPS POS and Virginia SOLs, as well as, if necessary, requirements for the IB program.</p>	<p>Note: Based on students' academic needs, it is possible that we may schedule some students into a "double block" course of English or Math, instead of having them take an online elective course, if they need remedial assistance in these subjects.</p>