



**RACHEL CARSON  
MIDDLE SCHOOL  
COURSE SELECTION GUIDE  
2012-2013**

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**“...rediscovering...the joy, excitement and mystery of the world we live in.”**  
From Rachel Carson’s The Sense of Wonder



## **WELCOME TO RACHEL CARSON MIDDLE SCHOOL !**

Dear Students and Parents:

It is with great enthusiasm that we welcome you to Rachel Carson Middle School. As a middle school, we encompass the middle school philosophy of education which is designed to meet the ever demanding educational and social changes and needs of the 11-14 year old student. We welcome parent involvement in the education of your child through such activities as participation in the PTA and/or volunteering to assist with the many initiatives we will plan together for the school.

Middle school students are part of a team that will be comprised of approximately 130-140 students, along with four team teachers. Each team of teachers has an administrator and counselor assigned to assist in the education of the students. The team teachers teach the core classes of English, social studies, mathematics, and science. Students enrolled in advanced mathematic courses may have a math teacher not assigned to their team. Students participate in a variety of elective courses in addition to the challenging core classes.

Students should consider current interests and future goals when selecting courses. Plan carefully; talk with your parents/guardians, counselors, and teachers as they can help you make wise decisions about courses to take in middle school. World Languages, Algebra I, Algebra I Honors, Geometry Honors, and Algebra II Honors are high school credit courses offered to eighth graders. (Algebra I Honors is also available to 7<sup>th</sup> grade students who meet the criteria.) These courses become part of the high school transcript record, are included in the calculation of high school grade point average (GPA), and count toward credits for high school graduation. It is recommended, but not required, that 8<sup>th</sup> grade students take Algebra I and a world language if they are considering Thomas Jefferson High School for Science and Technology (TJHSST) or an Advanced Placement (AP) or International Baccalaureate (IB) diploma. Admission to the TJHSST requires the completion of Algebra I prior to grade 9.

Student services at our school will strive to meet the many educational needs of our students. Students who qualify may choose to participate in the Advanced Academic Program, World Languages, English for Speakers of Other Languages (ESOL), and special education programs. With the exception of Algebra I Honors and Geometry Honors, we have an open enrollment policy for honors classes.

All students will participate in the Virginia state-testing program. Each seventh and eighth grade student will take the Virginia Standards of Learning (SOL) Tests. Information relating to these tests will be provided throughout the next year. End-of-course SOL tests will be administered to students taking Algebra I, Algebra I Honors, and Geometry Honors.

We look forward to meeting and working with you. Should you have any questions regarding the information presented in this booklet, or any other questions regarding the opening of school, please call us at 703-925-3614.

*August Frattali*  
*Principal*

*Cheryl L. Weaver*  
*Director of Student Services*

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# MIDDLE SCHOOL STUDENT ACCOUNTABILITY

## GRADING SYSTEM

### **Effective September 2009**

FCPS adopted a new grading scale effective September 2009. Changes in the FCPS grading policy include a modified ten-point grading scale that uses pluses and minuses. An asterisk (\*) is used on the transcript to distinguish B+, C+, and D+ grades earned prior to September 2009. For example, B\* = B+.

A- (90-92) = 3.7	C+ (77-79) = 2.3	D (64-66) = 1.0
A (93-100) = 4.0	B- (80-82) = 2.7	D+ (67-69) = 1.3
B+ (87-89) = 3.3	C (73-76) = 2.0	F (below 64) = 0.0
B (83-86) = 3.0	C- (70-72) = 1.7	

## GRADE POINT AVERAGE

Middle schools do not calculate a grade-point average. High school grade point average (GPA) is calculated on the basis of **all courses for which high school credit has been earned or attempted, including repeated courses previously passed**. In order for a repeat course to raise a GPA, the student's grade must be higher than the one originally given. All classes appearing on the high school transcript including high school classes taken in summer school, middle school, elementary school, or online are included when calculating GPA.

Algebra 1 Honors, Geometry Honors and Algebra 2 Honors receive an additional 0.5 weight added to the final grade upon successful completion of the course. Successful completion is defined as completing the course with a passing grade. For example, a final grade of A in an honors class shall receive 4.5 quality points.

High school credit bearing courses dropped will not be counted in grade point average (GPA) except when a final grade of F is received: (a) for the fourth grading period of a full-year course, or (b) for the second grading period of a semester course. A student's GPA is determined by dividing the total number of quality points earned by the number of courses included in the transcript. The grade point average is reported to three decimal places (thousandths). Fairfax County Public Schools does not rank its students.

## EXPUNGING HIGH SCHOOL COURSES TAKEN IN MIDDLE SCHOOL

In accordance with Virginia state regulations, FCPS Regulation 2430 permits parents of students who take a high school credit-bearing course in middle school to request that the grade be omitted from the student's high school transcript and the student not earn high school credit for the course. **Parents must make this request in writing no later than the end of the first nine weeks of the school year following completion of the course.** The form to make this request, along with the process for making the request, is available at: <http://www.fcps.edu/it/forms/is104.pdf> or through your student's school counselor. Parents are strongly advised to discuss this decision with their student's school counselor and the impact of expunging a course on desired high school diploma type and standard and verified credit requirements.

## COURSES TAKEN OUTSIDE OF FCPS

Currently enrolled FCPS students who wish to take a course outside of FCPS and transfer back the credit must have written approval from their school prior to enrolling in the course. The course must meet the requirements outlined in the current version of FCPS regulation 2460 and Virginia state regulations. For additional information about pursuing coursework outside of FCPS for credit, please contact your school counselor.

## WITHDRAW POLICY

For the first grading period only, a student has five days after the date on which report cards are sent home in which to drop a course without having a grade recorded. Courses dropped are not counted in the grade point average except when an F is received for the course. Middle schools do not calculate grade-point averages; however, if a high school credit course is taken by a middle school student, courses dropped are not counted in the high school grade-point average except when an F is received for the course. Unless the principal approves an exception, a student may not withdraw during

the final quarter of a course if he or she is passing the course. If a student drops a course during the:

- 1st quarter** No penalty--nothing is recorded.
- 2nd quarter** WP (withdrawn passing) or WF (withdrawn failing) is recorded.  
Exception: For semester courses a WP or F for failure is recorded.
- 3rd quarter** WP or WF is recorded.
- 4th quarter** WP or F for failure is recorded.

## **PROMOTION POLICY**

### **Middle School**

To qualify for promotion, seventh and eighth grade middle school students must demonstrate knowledge and competency based upon identified standards of achievement in the four core areas of language arts, mathematics, science, and social studies. To guarantee promotion, students must demonstrate proficiency in the foundational knowledge and skills in each of the four core subject areas and earn a passing final grade based on grade level expectations.

Students who earn an “F” as a final grade in one or two core subjects are retained, at the discretion of the principal, and encouraged to participate in an intervention program. Based upon the extent to which a student demonstrates knowledge and competency of identified standards of achievement in an intervention program, he/she is promoted or retained. Students who are promoted may receive continued intervention throughout the following school year. If students do not participate in an intervention program, they are retained at the discretion of the principal.

Students who earn an “F” in three or four core courses are retained, at the discretion of the principal. To be placed in grade 9, the student must be promoted from the 8<sup>th</sup> grade

## **WORLD LANGUAGES PROFICIENCY CREDIT**

The Credit Exam for World Languages is given each fall to students who wish to demonstrate written proficiency in one of several languages: Amharic, Arabic, Bengali, Chinese, Farsi, French, German, Hindi, Japanese, Korean, Nepali, Punjabi, Russian, Somali, Spanish, Tagalog/Pilipino, Telugu, Twi, Urdu, or Vietnamese. Students who are successful on the exam receive two world languages credits which may be used to fulfill the world languages requirements/electives of the Advanced Studies, Advanced Technical, Standard Technical or Standard Diplomas. In addition, middle school

students in grades 6-8 enrolled in ESOL 5720-5730 courses may receive up to two world languages credits towards high school graduation requirements in the two-plus-two option for fulfilling the world languages requirement. High school students enrolled in ESOL 5720 courses may receive elective or up to two world languages credits toward high school graduation requirements in the two-plus-two option for fulfilling the world languages requirement. For more information on the exam, go to: <http://www.fcps.edu/is/worldlanguages/creditem/index.shtml> or contact the World Languages Team at 571-423-4602.

## **FCPS ONLINE COURSES**

FCPS Online Campus is a program designed to provide students with an online option for earning high school credits toward graduation. This program supports the Governor’s “Early College Scholars” program by providing advanced courses to students. Students registered in any Fairfax County Public School are eligible to apply to take a course through the FCPS Online Campus. These courses are for students who have scheduling conflicts, transportation issues, or have special needs requiring web-based instruction. Tuition will be charged when a student is already scheduled to receive seven credits during the academic year or when a student enrolls in an FCPS online summer course. Students must meet all course requirements to enroll in an FCPS online course. Students interested in enrolling in an FCPS Online Campus course should consult their school counselor for information regarding the registration process. For more information go to: <http://www.fcps.edu/is/onlinecampus/>. The following courses are currently available on line for middle school students: Algebra 1, Algebra 1 Honors, Geometry, Geometry Honors, Algebra 2, Algebra 2 Honors, Precalculus Spanish 1, Spanish 2

## **STUDENT FEES**

Courses that require a student fee for consumable materials have been designated in this catalog. The schedule of divisionwide student fees to be charged for any elective course can be found in Notice 5922 at <http://www.fcps.edu/Directives/topicalindexQR.shtml#REVE>. Students eligible for the federal Free and Reduced-Price meals program may have course and test fees waived. For more information, see your school counselor.

# WHAT THE MIDDLE SCHOOL STUDENT SHOULD EXPECT:

## CLASSES

Students will be expected to take seven classes each semester. Most classes will be for the entire year; some classes are only for a semester or 18 weeks.

**Seventh Graders** will take: English 7, U.S. History 7, Mathematics 7 (Algebra I Honors and Honor classes, when deemed appropriate), Investigations in Environmental Science 7, Health and Physical Education 7, and elective choices to complete the schedule.

**Eighth Graders** will take: English 8, Civics and Economics 8, Mathematics 8 (Algebra I, Algebra I Honors, Geometry Honors, or Algebra II Honors, and Honor classes, when deemed appropriate), Investigating Matter and Energy 8, Health and Physical Education 8, and elective choices to complete the schedule.

Students in grades 7-12 receive credit toward graduation for high school courses taken in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. **The request to remove a course from the transcript must be made in writing to the middle school (first quarter only) or high school the student will attend prior to the beginning of the next school year.**

## LUNCH/LEARNING SEMINAR

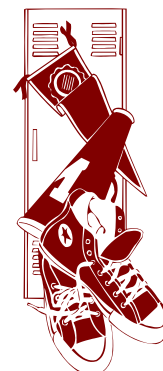
All students will have a 30-minute lunch period and an approximate 20-minute Learning Seminar. The Learning Seminar period provides teachers with time to assist individual students with their homework as well as reinforce study skills. In addition, teams have the opportunity to conduct team-building activities and interdisciplinary projects.

## LOCKERS

Lockers will be available for all students to use for storing coats, backpacks, books, and school supplies. Backpacks are to be kept in lockers during the school day. Lockers will not accommodate backpacks with wheels.

## AFTER SCHOOL ACTIVITIES

Students may stay after school to participate in school activities and to seek educational assistance from their teachers. School activities provide opportunities to pursue group, team, or individual interests students might have in a variety of areas. A list of After School Activities can be found on page 57.



## LATE BUSES

Late buses may be available during the week to take students home following after-school activities. Buses will leave after late day activities have ended. Normally this is about one hour to an hour and a half after the regular school day ends. Late bus days and schedules will be determined and publicized within the first month of school.



## HOMEWORK

All students will be expected to do homework on a regular basis. It is important that students understand the expectations of their team teachers. Each teacher sends home a syllabus indicating course requirements and grading expectations. Students are encouraged to spend a minimum of 30 minutes reading per night. To help with time management a schedule is included in the back of this booklet for your convenience.

## GRADES

Students will receive report cards four times during the school year. In addition, electronic progress reports will be e-mailed to your preferred e-mail address indicated on the course selection sheet. **Please be sure the school has your current e-mail address.** Students and parents are encouraged to communicate regularly regarding grades. When necessary, parents may want to schedule a parent conference through their student's assigned school counselor.



## GUIDANCE COUNSELORS

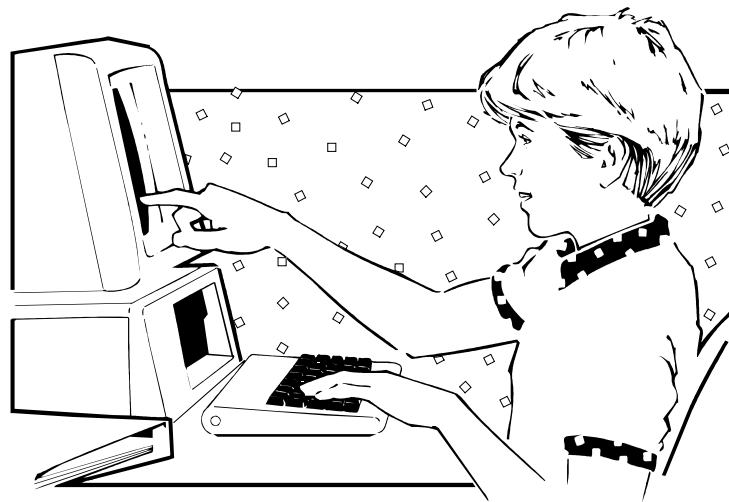
All students are assigned to the counselor for their team. Students and parents are encouraged to communicate on a regular basis with the team counselor and teachers. Counselors are available as a resource to students through parent, teacher, or student-self referrals. Students may work with counselors individually, in small groups, or in classroom guidance units. Other services include but are not limited to:

- Individual counseling
- Group counseling
- Academic counseling
- Peer mediation
- Group guidance
- Parent conferences
- Consultation with private resources
- Referrals to community agencies
- Annual registration for classes
- New student registration
- Conflict resolution
- Organizational and study skills
- Learning style information
- College and career search software
- Intermediate school orientations
- Programs for parents
- Recognition for outstanding students
- Special Education support
- Newsletter Counselor Tips for Parenting
- Minority achievement programs
- Individual progress reports
- Testing services
- Crisis resource team
- Career interest inventories
- Goal setting and reflection
- Student Recommendations<sup>1</sup>

<sup>1</sup> All private school recommendations must be provided to counselor at least 2 weeks in advance of due date.

# REQUIRED

## 7<sup>th</sup> Grade Courses



# COURSE SELECTIONS

## STANDARD COURSE OFFERINGS

### STUDENTS ARE REQUIRED TO TAKE THE STANDARDS OF LEARNING TEST IN ALL CORE SUBJECTS

**ENGLISH 7** (111000) 36 weeks (year) Grade: 7



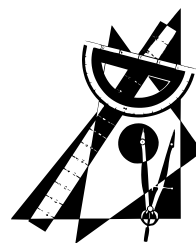
Students read and study a variety of literature, building on an understanding of reading as a process that includes analyzing and comprehending texts. Language study includes vocabulary building, learning about grammar, and spelling. Through varied and frequent writing assignments, students build on their understanding of writing as a process that includes drafting, revising, editing, proofreading, and publishing. They use writing to develop ideas and learn new concepts. Students also learn discussion skills and oral communication skills, and learn to adapt speaking and listening to the audience, topic, purpose, and situation. Reading and writing competencies addressed in the Virginia Standards of Learning are incorporated into the course objectives.

**Students are required to take the Standards of Learning End of Course Test.**

**MATHEMATICS 7** (311100) 36 weeks (year) Grade: 7

**Prerequisite:** Grade 6 Mathematics

Students examine algebra- and geometry-preparatory concepts and skills; strategies for collecting, analyzing, and interpreting data; and number concepts and skills especially proportional reasoning. Reasoning, problem solving, communication, concept representation, and connections among mathematical ideas are emphasized in a hands-on learning environment. Calculators and computers are integrated with instruction. This course provides students the opportunity to acquire the concepts and skills necessary for success in Algebra I or Algebra I Honors.



**Students are required to take the Standards of Learning End of Course Test.**

**MATHEMATICS 7 HONORS** (311136/39) 36 weeks (year) Grade: 7

The depth and level of understanding in Mathematics 7 Honors is beyond the scope of Mathematics 7. This course is based on Mathematics 8 curriculum and includes extensions and enrichment. Emphasis is placed on mathematical reasoning, non-routine problem solving, and algebraic connections among mathematical ideas. This course provides students the opportunity to acquire the concepts and skills necessary for success in Algebra I or Algebra I Honors.

**Students are required to take the Mathematics 8 Standards of Learning End of Course Test.**

**ALGEBRA I HONORS (313036/39) 36 weeks (year) Grade: 7**

**Credit: One/Weighted +.5**

**Prerequisite:** Requires eligibility

The depth and level of understanding expected in Algebra I Honors is beyond the scope of Algebra I. Students are expected to master algebraic mechanics and understand the underlying theory, as well as apply the concepts to real-world situations in a meaningful way. Students extend knowledge and understanding of the real number system and its properties through the study of variables, expressions, equations, inequalities, and the analysis of data from real world phenomena. Emphasis is placed on algebraic connections to arithmetic, geometry, and statistics. Calculators and computer technologies are integral tools. Graphing calculators are an essential tool for every student to explore graphical, numerical, and symbolic relationships.

**Students are required to take the Standards of Learning End of Course Test.**

**UNITED STATES HISTORY, 1865 TO THE PRESENT (235500) 36 weeks (year)**

**Grade: 7**

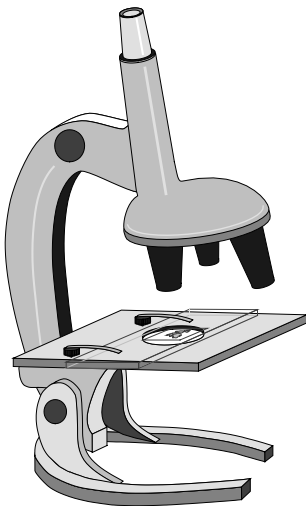


The grade seven program provides a survey of American history since 1865. This course incorporates the four strands of history, geography, civics, and economics. Important trends in American history are identified by the analysis of the role of ideas, individuals, and important events. Students develop historical-thinking skills and extend their understanding of how geography shapes history.

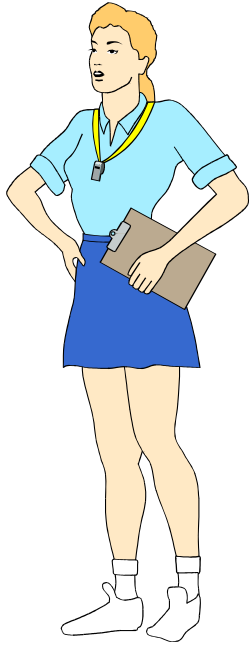
**Students are required to take the Standards of Learning End of Course Test.**

**INVESTIGATIONS IN ENVIRONMENTAL SCIENCE (411500) 36 weeks (year)**

**Grade: 7**



Investigations in Environmental Science builds upon the experiences in the life sciences introduced to students in upper-elementary grades. Cellular structure and function, heredity, diversity, populations and ecosystems are content strands developed through a sequence of hands-on investigations. To augment the inquiry-based investigations, computer technologies including Lab Quests, Vernier probeware, on-line databases, and streaming videos are used to build background knowledge and enhance student understanding. Process skills related to scientific investigation, reasoning, and logic are integrated throughout the course as students carry out investigations, make predictions, collect and analyze data, and formulate conclusions.



**HEALTH AND PHYSICAL EDUCATION 7  
(712000) 36 weeks (year) Grade: 7**

Students strengthen and/or master basic skills developed at the elementary level. Emphasis is on highly organized lead-up activities, modified games, and fitness and wellness activities. Content areas include rhythmic activities and dance, physical fitness, wellness-related testing, fitness planning, and application of skills in selected games and sports. Students study health units on alcohol, tobacco, and other drug use prevention, disease and the human body, personal safety, injury prevention, lifetime health habits, emotional and social health, and human growth and development.

**HONORS CLASSES**

Honors classes are available in all core subjects by request or teacher recommendation.



# ELECTIVES



## 7<sup>th</sup> Grade Courses

### CHOOSING ELECTIVES

Each student must take seven courses each semester. Five of these courses are required classes. A schedule is completed by making one of the following choices:

#### Choice 1

- Two Full Year Electives

*or*

#### Choice 2

- One Full Year Elective & Two Semester Electives

*or*

#### Choice 3

- Four Semester Electives



## MUSIC CHOICES - Full Year Courses



**BEGINNING BAND (923211) 36 weeks (year) Grade: 7, 8**  
**Prerequisite:** None

Beginning level band classes develop skills on woodwind, brass, or percussion instruments. Guidance will be given by the instructor in the selection of an instrument. Simple duets, rounds and other ensemble literature will be performed in the class. Students must meet both the school day and after-school participation requirements to receive credit for the course. This course is recommended for students wishing to begin an instrument or who were unable to take an instrument in elementary school. Rehearsals and performances outside of normal school hours will be required as a part of this course. Students will participate in three evening concerts during the year.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

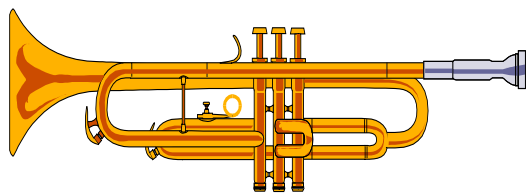
**PERCUSSION ENSEMBLE (925010) 36 weeks (year) Grade: 7, 8**

**Prerequisite:** Successful audition

**Corequisite:** May require membership in another music class

This course is designed to meet specific needs and/or interests for percussion instruments. Content includes study of appropriate ensemble literature, and rehearsal and performance techniques from the various areas of musical composition. Instrumentation of the group is at the discretion of the instructor. Students must meet both the school day and after-school participation requirements to receive credit for the course. Performances and rehearsals both in and out of school will be required. Students will participate in three evening concerts during the year.

**This course requires a student materials fee as listed in FCPS Notice 5922.**



**INTERMEDIATE BAND (CADET) (923311) 36 weeks (year) Level 2 Grade: 7, 8**

**Prerequisite:** Successful audition

Intermediate level band students will continue to develop skills on woodwind, brass, or percussion instruments. A variety of musical styles will be studied through the playing of band literature. Students must meet both the school day and after-school participation requirements to receive credit for the course. Rehearsals and performances outside of normal school hours will be required as a part of this course. Students will participate in three evening concerts during the year. Percussion will not be offered in this class.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED BAND (CONCERT) (923410) 36 weeks (year) Level 1 Grade: 7, 8**

**Prerequisite:** Successful audition

Advanced level band offers instruction to the advanced player. In-depth study of musical styles will be realized through challenging band literature. Students must meet both the school day and after-school participation requirements to receive credit for the course.

- Audition required: All audition requirements and dates will be provided by the band director.
- These two groups are performance oriented with required extra rehearsals and evening commitments as a part of these courses. Extra activities such as the District XII Band Festival and spring trip are possibilities for these groups.
- Selection for the advanced bands is determined by the directors and is based not only on talent and the ability but also on the student's sense of self-discipline and responsibility.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED BAND (SYMPHONIC) (923411) 36 weeks (year) Level 2 Grade: 7, 8**

**Prerequisite:** Successful audition

Advanced level band offers instruction to the advanced player. In-depth study of musical styles will be realized through challenging band literature. Students must meet both the school day and after-school participation requirements to receive credit for the course.

- Audition required: All audition requirements and dates will be provided by the band director.
- These two groups are performance oriented with required extra rehearsals and evening commitments as a part of these courses. Extra activities such as the District XII Band Festival and spring trip are possibilities for these groups.
- Selection for the advanced bands is determined by the directors and is based not only on talent and the ability but also on the student's sense of self-discipline and responsibility.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**INTERMEDIATE ORCHESTRA (923810)**

**36 weeks (year) Level 1 Grade: 7, 8**

**Prerequisite:** Successful audition

This course offers the opportunity to participate in string orchestra ensemble. Additionally, intermediate level orchestra students will continue to develop skills on violin, viola, cello, and double bass. A variety of musical styles will be studied through the playing of appropriate string orchestra literature. Students must meet both the school day and after-school participation requirements to receive credit for the course. Rehearsals and performances outside of normal school hours will be required as a part of this course. Required after-school and evening commitments are a part of the intermediate level orchestra.



Participation in the District XII Orchestra, Orchestra Festival, Solo Festivals and spring trip are possibilities at this level. **This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED ORCHESTRA (923911) 36 weeks (year) Level 2 Grade: 7, 8**

**Prerequisite:** Successful audition

Advanced Orchestra offers instruction to the experienced player through in-depth study and performance of challenging string orchestra literature, with an emphasis on upper level skills. Students must meet both the school day and after-school participation requirements to receive credit for the course. Required after-school and evening commitments are a part of the advanced level orchestra. Participation in the District XII Orchestra Festival, Solo Festivals, and spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**WOMEN'S CHORUS (TREBLE CHORUS) (926011) 36 weeks (year) Grade: 7, 8**

**Prerequisite:** None

Students participate in a choral experience designed to develop skills as individual musicians and as members of a women's ensemble. Emphasis is placed upon vocalization and sight-singing through the use of appropriate choral literature. Students must meet both the school day and after-school participation requirements to receive credit for the course. This course provides instruction in proper vocal techniques, music fundamentals, and sight-reading for females. Types of performances include concert choral performances during the day and evenings. A variety of musical styles will be studied through appropriate choral literature. Participation in the District XII Chorus, All-VA Chorus, Regional Chorus and National Chorus as well as the spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**MEN'S CHORUS (CAMBIATA CHORUS) (926012) 36 weeks (year) Grade: 7, 8**

**Prerequisite:** None

Students participate in a choral experience designed to develop skills as individual musicians and as members of a men's ensemble. Emphasis is placed upon vocalization and sight-singing through the use of appropriate choral literature. Students must meet both the school day and after-school participation requirements to receive credit for the course. This course is for all boys with changed or unchanged voices. Special attention is given to teach boys how to use their voices properly throughout the voice change and after. Opportunities will be provided to collaborate on choral literature with the RCMS women's choirs as well as male singers from the feeder high schools. Rehearsals and performances outside of normal school hours will be required. A small number of performances will take place during the school day. Participation in the District XII Chorus, All-VA Chorus, District Festival, Regional Chorus and National Chorus as well as the spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**VOCAL ENSEMBLE (928010) 36 weeks (year) Grade: 7, 8 Boys; 8 Girls**

**Prerequisite:** Successful audition

This ensemble is designed to meet specific needs and/or interests for vocalists. Content includes study of appropriate ensemble literature, and rehearsal and performance techniques from the various areas of musical composition. Voicing of the group is at the discretion of the instructor. Students must meet both the school day and after-school participation requirements to receive credit for the course. Students must be able to read music to enter this class. There will be a few performances during the school day. Participation in the District XII Chorus, All-VA Chorus, District Festival, Regional Chorus, and/or National Chorus as well as the spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED WOMEN'S CHORUS (928911) 36 weeks (year) Grade: 7, 8**

**Prerequisite:** Successful audition

This course offers advanced instruction in vocal techniques, music fundamentals, and sight-reading. Students must be able to read music upon entrance in this class. Through a variety of choral literature, students will experience three and/or four-part singing. Types of performances may include concert choral performances, choral choreography, and/or musical dramas. Students must meet both the school day and after-school participation requirements to receive credit for the course. There will be a few performances during the school day. Participation in the District XII Chorus, All-VA Chorus, District Festival, Regional Chorus and National Chorus as well as the spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**



## WORLD LANGUAGE - FULL YEAR COURSE

Credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the foreign language requirements of the high school diplomas. It also counts toward the total number of credits required for graduation.

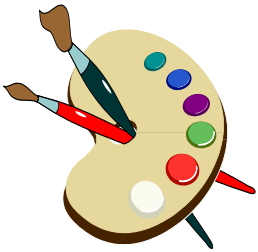
**JAPANESE IMMERSION 1 (591067) 36 weeks (year) Grade: 7 Credit: 1**  
**Prerequisite:** Participation in the Elementary Partial-Immersion Program in grades 1-6.

This course serves as a transition from elementary partial-immersion to the sequential world languages high school program. Students expand their knowledge of the language to include communicating about themselves and their immediate environment. This communication is evidenced in all four language skills: listening, speaking, reading, and writing, with an emphasis on the ability to communicate orally and in writing. The content of this course is aligned with the Level 1 POS. Credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts towards fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts towards the number of credits required for high school graduation.



# SEMESTER ELECTIVES

## 7<sup>th</sup> Grade



### **ART FOUNDATIONS (910532) 18 weeks (semester) Grade: 7**

Explore a variety of art materials, develop art techniques, and use creative thinking skills to express ideas and viewpoints about personal experiences and the world. Produce meaningful and unique drawings, paintings, prints, sculptures, ceramics and crafts in a studio setting. Study artists and their works to gain understanding of the artistic process and learn about art produced at different times and in diverse cultures. Make interdisciplinary connections based on the Virginia Standards of Learning for all disciplines.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

### **3D ART EXPLORATION (910632) 18 weeks (semester) Grade: 7, 8**

Work in the third-dimension by creating sculptures, ceramic objects, models and installations that express ideas about personal experiences and observations of the world. Learn to use a variety of art media, non-traditional materials, tools and equipment to compose, construct, and form functional and decorative artworks. Build knowledge, refine skills, improve techniques, and craftsmanship to meet challenges and solve problems in unique ways. Investigate three-dimensional artworks produced by artists in different times and places to inform the art-making process.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

### **MUSIC PARTICIPATION LAB 1 (921132) 18 weeks (semester) Grade: 7, 8**

**Prerequisite:** None

This course provides students an opportunity to examine many kinds of music. Students will be actively involved in music through singing, listening, playing instruments, moving, and improvising. Other experiences may include vocal and instrumental ensembles, musical dramatizations, contemporary music, computer music, guitar, piano, and/or recorder.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

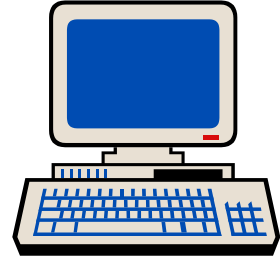
### **SPEECH AND THEATRE ARTS APPRECIATION (Drama) (139063) 18 weeks (semester) Grade: 7**

Students develop an appreciation of speech and theatre arts through an introduction to the basic concepts and skills of oral communication and acting. They begin to develop poise and confidence in speaking, and they develop skills in listening and discussing in group situations. They participate in a variety of dramatic activities by exploring improvisation and interpretation. Course may consist of speech topics, drama topics, or a combination of both.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**COMPUTER SOLUTIONS (660932) 18 weeks (semester) Grade: 7, 8**

Computer Solutions teaches concepts in database, spreadsheet, presentation, publishing, and Internet skills. The Computer Solutions course extends student expertise in a project-based curriculum. The Computer Solutions course is intended to serve as a bridge to the high school business department curriculum.



**COMPUTERS IN ART (911562) 18 weeks (semester) Grade: 7, 8**

**Prerequisite:** Art Foundations or eighth grade standing

Use the computer as a tool for creating original artwork. Work with a variety of software applications including Adobe Photoshop and Adobe Illustrator or other available software to explore subjects, ideas and themes related to living in the world. Make interdisciplinary connections based on the Virginia Standards of Learning for all disciplines and develop knowledge regarding ethical issues concerning computer generated imagery. Prior computer experience is not required.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**TECHNOLOGY & ENGINEERING 7 (846432) 18 weeks (semester) Grade: 7**

Technology & Engineering 7 is a **STEM** based course which infuses **Science, Technology, Engineering, & Math** concepts with exciting hands-on problem solving activities. Students are provided higher-order thinking skill development through practical problem-solving experiences. The goal of the course is to introduce students to the workforce with hands-on applications. The modular “Synergistics” lab provides 15 active learning situations that allow students to explore Dragster Design, Engineering Towers, Robotics, Rocketry and Space, Electronics and Flight to name a few. Students will also design, construct, and test a Water Bottle Rocket and Egg Crash Car. The content covered in this course reinforces the Virginia Standards of Learning (SOL) in math, science, language arts, and social studies. **This course requires a minimal student’s materials fee as listed in FCPS Notice 5922**

**CAREER SEARCH AND INVESTIGATION (907042) 18 weeks (semester)**

**Grade: 7, 8**

Students will explore the 16 Career Clusters and develop an understanding of career pathways. In addition, students will use approved career exploration resources to investigate the world of work in order to make informed career decisions. An emphasis will be placed on helping students to create an academic and career portfolio and learn to use a career plan of study. Upon completion of the course, students will recognize connections between education and work; demonstrate the career decision-making process; apply knowledge of self and career interests to education planning; identify personal characteristics for job success; and recognize that career planning is a life-long process.

**FAMILY AND CONSUMER SCIENCES 7 (826332) 18 weeks (semester)**

**Grade: 7**

This semester course uses higher order thinking skills that will help students develop responsible and positive attitudes toward their societal roles. Through lab experiences and simulated activities with peers, students will develop basic skills in sewing, clothing care, food management, care of others, and management of space and self.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**Wellness for Life**

This Family and Consumer Sciences course allows students to explore the importance of wellness as a lifestyle. Class time is divided between the classroom, sewing lab, cooking lab, garden lab, and fitness lab. Students will use higher order thinking skills and real life experiences to develop positive attitudes towards health and wellness.

**Subject to staffing and budgetary concerns.**

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**INTRODUCTION TO FRENCH (570060) 18 weeks (semester) Grade: 7**

**Prerequisite:** None

Students are introduced to French language and cultures of people in French-speaking countries. Students learn basic language structures, vocabulary, and expressions in French. Students explore traditions, customs, beliefs, and cultural contributions and how these elements relate to language. Through study of French, students recognize, compare, and contrast language concepts as well as cultural perspectives, and practices.

**This course does not count as a world language high school credit.**

**INTRODUCTION TO SPANISH (570061) 18 weeks (semester) Grade: 7**

**Prerequisite:** None



Students are introduced to Spanish language and cultures of people in Spanish-speaking countries. Students learn basic language structures, vocabulary, and expressions in Spanish. Students explore traditions, customs, beliefs, and cultural contributions and how these elements relate to language. Through study of Spanish, students recognize, compare, and contrast language concepts as well as cultural perspectives, and practices.

**This course does not count as a world language high school credit.**

Media Communications is a real-world, product-driven semester elective for 7<sup>th</sup> and 8<sup>th</sup> grade students. Students are actively involved in creating the school newspaper, The Carson Chronicle. Activities include interviewing, writing/editing articles, taking/editing pictures, and creating the layout of the paper. In addition, students are involved in the daily production of RC-TV, Carson's televised morning announcement show. Not only are they first to serve as "crew" of the show but will produce the resources used, including script, opening, middle, and closing slide shows, etc. Real world skills like working cooperatively in groups, managing multiple projects, meeting deadlines, and thinking creatively are woven within the course's foundation.

# REQUIRED

## 8<sup>th</sup> Grade Courses



# COURSE SELECTIONS

## STANDARD COURSE OFFERINGS

### STUDENTS ARE REQUIRED TO TAKE THE STANDARDS OF LEARNING TEST IN ALL CORE SUBJECTS

**ENGLISH 8 (112000) 36 weeks (year) Grade: 8**

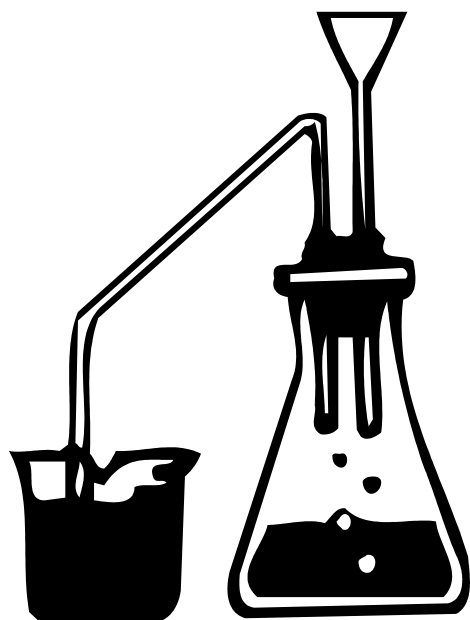
Students read and study a variety of literature, building on an understanding of reading as a process that includes analyzing and interpreting the text. Language study includes vocabulary building, learning about grammar, and spelling. Through varied and frequent writing assignments, students build on their understanding of writing as a process that includes drafting, revising, editing, proofreading, and publishing. Students practice a variety of writing forms including informational/technical and essay writing. All students learn to adapt speaking and writing skills to the audience, topic, purpose, and situation. Reading and writing competencies addressed in the Virginia Standards of Learning are incorporated into the course objectives.

**Students are required to take the Standards of Learning End of Course Test.**

**CIVICS AND ECONOMICS (235700) 36 weeks (year) Grade: 8**

The grade eight program is designed to prepare students to be responsible, productive citizens in a democratic republic and an interconnected world. Students will gain an understanding of the concepts and processes of democratic government and the American economic system. Students examine the role that citizens play in the political, governmental, and economic systems in the United States. Students will acquire knowledge of the structure and operation of these systems at the national, state and local levels. A service learning component helps students personalize citizenship education.

**Students are required to take the Standards of Learning End of Course Test.**



**INVESTIGATING MATTER AND ENERGY  
(412500) 36 weeks (year) Grade: 8**

Investigating Matter and Energy builds upon the experiences in the physical sciences introduced to students in the upper-elementary grades. Properties of matter, energy forms and their transformations, and forces and motion are content strands developed through a sequence of hands-on investigations. To augment the inquiry-based investigations, computer technologies including Lab Quests, Vernier probeware, Lab Quests, on-line databases, and streaming videos are used to build background knowledge and enhance student understanding. Process skills related to scientific investigation, reasoning, and logic are integrated throughout the course as students carry out investigations, make predictions, collect and analyze data, and formulate conclusions.

**Students are required to take the Standards of Learning End of Course Test.**

**HEALTH AND PHYSICAL EDUCATION 8 (72000) 36 weeks (year) Grade: 8**

Students continue to strengthen and/or master basic skills, and participate in wellness activities and wellness-related testing and fitness planning. Content areas include rhythmic activities and dance, and application of skills in selected games and sports. Students begin to review lifetime sports and activities for lifetime wellness planning. Students study health units on alcohol, tobacco, and other drug use prevention, person safety, injury prevention, lifetime health habits, emotional and social health, and human growth and development.



## **MATHEMATICS**

**MATHEMATICS 8 (311200) 36 weeks (year) Grade: 8**

**Prerequisite:** Mathematics 7

Students extend their study of algebra- and geometry-preparatory concepts and skills; strategies for collecting, analyzing, and interpreting data; and number concepts and skills especially proportional reasoning. Reasoning, problem solving, communication, concept representation, and connections among mathematical ideas are emphasized in a hands-on learning environment. Calculators and computers are integrated with instruction. This course provides students the opportunity to acquire the concepts and skills necessary for success in Algebra I or Algebra I Honors.

**Students are required to take the Standards of Learning End of Course Test.**

**ALGEBRA I (313000) 36 weeks (year) Grade: 8 Credit: 1**

**Prerequisite:** Middle School Mathematics

This course extends students' knowledge and understanding of the real number system and its properties through the study of variables, expressions, equations, inequalities, and analysis of data derived from real-world phenomena. Emphasis is placed on making connections in algebra to geometry and statistics. Calculator and computer technologies will be used as tools wherever appropriate. Use of a graphing calculator is considered essential to provide a graphical and numerical approach to topics in addition to a symbolic approach. Topics include linear equations and inequalities, systems of linear equations, relations, functions and polynomials.

**Students are required to take the Standards of Learning End of Course Test.**

**ALGEBRA I HONORS (313036/39) 36 weeks (year) Grade: 8**

**Credit: One/Weighted +.5**

**Prerequisite:** Mathematics 7 and/or Mathematics 8

The depth and level of understanding expected in Algebra I Honors is beyond the scope of Algebra I. Students are expected to master algebraic mechanics and understand the underlying theory, as well as apply the concepts to real-world situations in a meaningful way. Students extend knowledge and understanding of the real number system and its properties through the study of variables, expressions, equations, inequalities, and the analysis of data from real world phenomena. Emphasis is placed on algebraic connections to arithmetic, geometry, and statistics. Calculators and computer technologies are integral tools. Graphing calculators are an essential tool for every student to explore graphical, numerical, and symbolic relationships.

**Students are required to take the Standards of Learning End of Course Test.**

**GEOMETRY HONORS (314336/39) 36 weeks (year) Grade: 8**

**Credit: One/Weighted +.5**

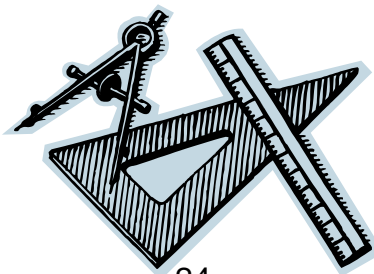
**Prerequisite:** Algebra I

The depth and level of understanding expected in Geometry Honors is beyond the scope of Geometry. This course emphasizes two- and three-dimensional reasoning skills, coordinate and transformational geometry, and the use of geometric models to solve problems. A variety of applications and some general problem-solving techniques, including algebraic skills, will be used to explore geometric relationships. Conjectures about properties and relationships are developed inductively and then verified deductively. Students investigate non-Euclidean geometries, formal logic, and use deductive proofs to verify theorems. Calculators, computers, graphing utilities, dynamic geometry software, and other appropriate technology tools will be used to assist in teaching and learning.

**Students are required to take the Standards of Learning End of Course Test.**

**Geometry Is A Prerequisite for Algebra II**

Instructional Services has clarified the requirement that students must successfully complete Geometry or Geometry Honors prior to enrolling in Algebra II or Algebra II Honors. Although a few high schools were granted permission to go out of sequence in the past allowing for Algebra II to be taken prior to Geometry, it was not intended to allow students to take both Geometry and Algebra II concurrently. These practices have been discontinued. Additionally, the implementation of the new mathematics Standards of Learning in SY 2011-12 makes it necessary for students to have a strong foundation in geometry before encountering advanced algebra topics.



**ONLINE ALGEBRA II HONORS (313597) 36 weeks (year) Grades: 8, 9, 10, 11, 12**

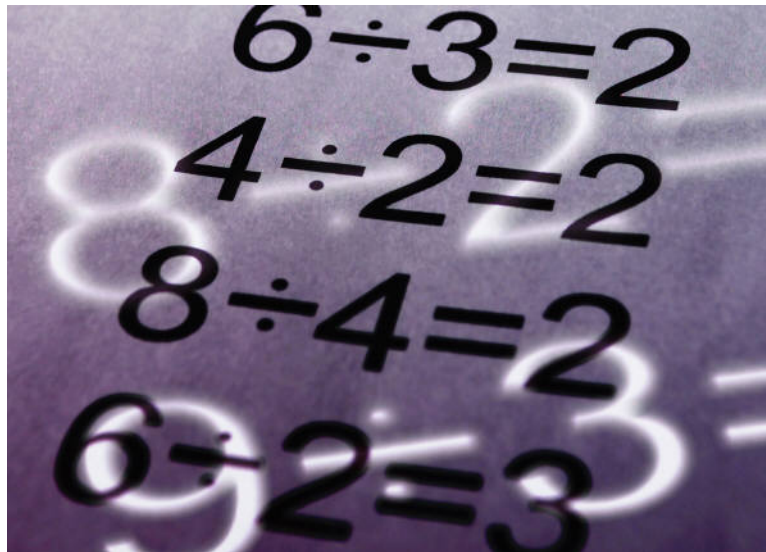
**Credit: One/Weighted +.5**

**Prerequisite:** Geometry

The depth and level of understanding expected in Algebra 2 Honors is beyond the scope of Algebra 2. Students are expected not only to master algebraic mechanics but also to understand the underlying theory and to apply the concepts to real-world situations in a meaningful way. A thorough treatment of advanced algebraic concepts is provided through the study of functions, polynomials, rational expressions, complex numbers, matrices, exponential and logarithmic equations, infinite geometric sequences and series, permutations and combinations, and selected topics in discrete mathematics. Emphasis is on modeling, logic, and interpretation of results. A transformational approach to graphing is used with families of related graphs. Numerical, graphical, and algebraic solutions are considered for all problems, as applicable. Graphing utilities, especially graphing calculators, are integral to the course.

**Teacher directed class is contingent upon enrollment.**

**Students are required to take the Standards of Learning End of Course Test.**



**HONORS CLASSES**

Honors classes are available in all core subjects by request, previous enrollment, or teacher recommendation.

# ELECTIVES

## 8<sup>th</sup> Grade Courses

### CHOOSING ELECTIVES

Each student must take seven courses each semester. Five of these courses are required classes. A schedule is completed by making one of the following choices:

#### Choice 1

- Two Full Year Electives

*or*

#### Choice 2

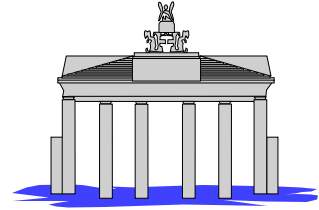
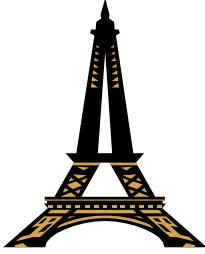
- One Full Year Elective & Two Semester Electives

*or*

#### Choice 3

- Four Semester Electives

## WORLD LANGUAGE CHOICES - FULL YEAR COURSES



### The following courses are subject to enrollment:

Credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the foreign language requirements of the high school diplomas. It also counts toward the total number of credits required for graduation.

Students should have demonstrated success in academics and/or teacher recommendation.

<b>FRENCH 1</b>	<b>(511000)</b>	<b>36 weeks (year)</b>	<b>Grade: 8</b>	<b>Credit: 1</b>
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**Prerequisite:** None

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the POS themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirement of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

<b>SPANISH 1</b>	<b>(551000)</b>	<b>36 weeks (year)</b>	<b>Grade: 8</b>	<b>Credit: 1</b>
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**Prerequisite:** None

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. Students begin to explore and study the POS themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

**JAPANESE 1 (591000) 36 weeks (year) Grade: 8 Credit: 1**

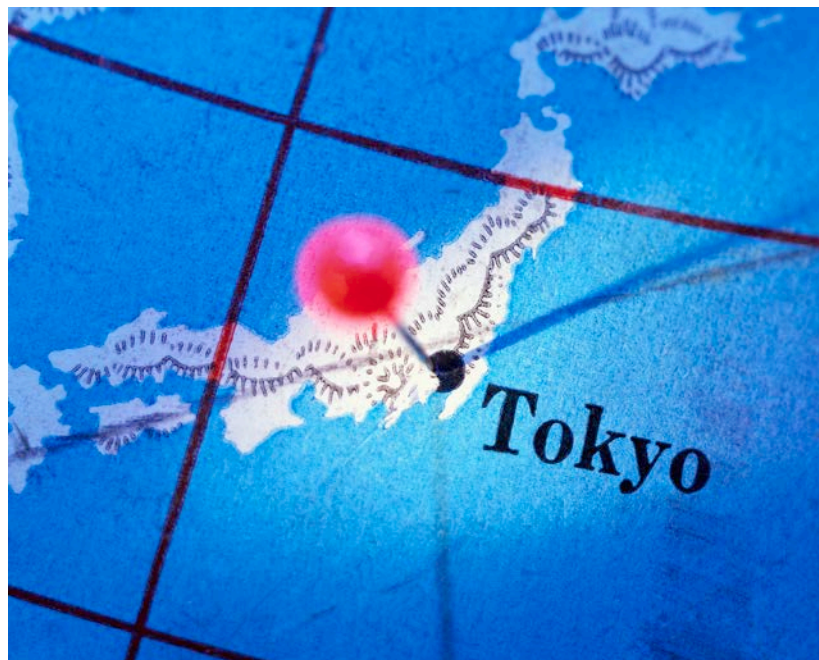
**Prerequisite:** None

Students develop the ability to communicate about themselves and their immediate environment using simple sentences containing basic language structures. This communication is evidenced in all four language skills - listening, speaking, reading and writing - with emphasis on the ability to communicate orally and in writing. The Kana system of writing, along with some basic characters, is taught in this course. Students begin to explore and study the themes of Personal and Family Life, School Life, Social Life, and Community Life. For middle school students, this credit becomes a part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts toward fulfilling the world languages requirements of the high school Advanced Studies diploma. It also counts toward the total number of credits required for graduation.

**JAPANESE IMMERSION 2 (592068) 36 weeks (year) Grade: 8 Credit: 1**

**Prerequisite:** Seventh Grade Immersion 1

This course is designed to meet the needs of the immersion students in regard to their second language development. Students continue their development of language proficiency in all four skills: listening, speaking, reading, and writing. They read material on familiar topics and produce short writing samples while studying the themes and topics of Home Life, Student Life, Leisure Time, and Vacation and Travel. The content of this course is aligned with the Level 2 POS. Credit becomes part of the high school transcript, is included in the determination of the high school grade point average (GPA), and counts towards fulfilling the world languages requirements of the Advanced Studies diploma. This course counts toward the number of credits required for graduation





## MUSIC CHOICES - FULL YEAR COURSES



**BEGINNING BAND (923211) 36 weeks (year) Grade: 7, 8**  
**Prerequisite:** None

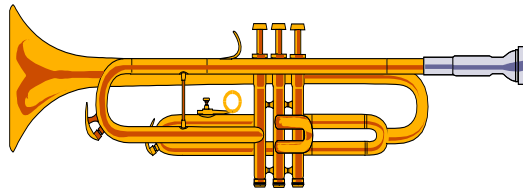
Beginning level band classes develop skills on woodwind, brass, or percussion instruments. Guidance will be given by the instructor in the selection of an instrument. Simple duets, rounds and other ensemble literature will be performed in the class. Students must meet both the school day and after-school participation requirements to receive credit for the course. This course is recommended for students wishing to begin an instrument or who were unable to take an instrument in elementary school. Rehearsals and performances outside of normal school hours will be required as a part of this course. Students will participate in three evening concerts during the year.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**PERCUSSION ENSEMBLE (925010) 36 weeks (year) Grade: 7, 8**  
**Prerequisite:** Successful audition  
**Corequisite:** May require membership in another music class

This course is designed to meet specific needs and/or interests for percussion instruments. Content includes study of appropriate ensemble literature, and rehearsal and performance techniques from the various areas of musical composition. Instrumentation of the group is at the discretion of the instructor. Students must meet both the school day and after-school participation requirements to receive credit for the course. Performances and rehearsals both in and out of school will be required. Students will participate in three evening concerts during the year.

**This course requires a student materials fee as listed in FCPS Notice 5922.**



**INTERMEDIATE BAND (CADET) (923311) 36 weeks (year) Level 2 Grade: 7, 8**  
**Prerequisite:** Successful audition

Intermediate level band students will continue to develop skills on woodwind, brass, or percussion instruments. A variety of musical styles will be studied through the playing of band literature. Students must meet both the school day and after-school participation requirements to receive credit for the course. Rehearsals and performances outside of normal school hours will be required as a part of this course. Students will participate in three evening concerts during the year. Percussion will not be offered in this class.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED BAND (CONCERT) (923410) 36 weeks (year) Level 1 Grade: 7, 8**

**Prerequisite:** Successful audition

Advanced level band offers instruction to the advanced player. In-depth study of musical styles will be realized through challenging band literature. Students must meet both the school day and after-school participation requirements to receive credit for the course.

- Audition required: All audition requirements and dates will be provided by the band director.
- These two groups are performance oriented with required extra rehearsals and evening commitments as a part of these courses. Extra activities such as the District XII Band Festival and spring trip are possibilities for these groups.
- Selection for the advanced bands is determined by the directors and is based not only on talent and the ability but also on the student's sense of self-discipline and responsibility.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED BAND (SYMPHONIC) (923411) 36 weeks (year) Level 2 Grade: 7, 8**

**Prerequisite:** Successful audition

Advanced level band offers instruction to the advanced player. In-depth study of musical styles will be realized through challenging band literature. Students must meet both the school day and after-school participation requirements to receive credit for the course.

- Audition required: All audition requirements and dates will be provided by the band director.
- These two groups are performance oriented with required extra rehearsals and evening commitments as a part of these courses. Extra activities such as the District XII Band Festival and spring trip are possibilities for these groups.
- Selection for the advanced bands is determined by the directors and is based not only on talent and the ability but also on the student's sense of self-discipline and responsibility.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**INTERMEDIATE ORCHESTRA (923810)**

**36 weeks (year) Level 1 Grade: 7, 8**

**Prerequisite:** Successful audition

This course offers the opportunity to participate in string orchestra ensemble. Additionally, intermediate level orchestra students will continue to develop skills on violin, viola, cello, and double bass. A variety of musical styles will be studied through the playing of appropriate string orchestra literature. Students must meet both the school day and after-school participation requirements to receive credit for the course. Rehearsals and performances outside of normal school hours will be required as a part of this course. Required after-school and evening commitments are a part of the intermediate level orchestra.



Participation in the District XII Orchestra, Orchestra Festival, Solo Festivals and spring trip are possibilities at this level. **This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED ORCHESTRA (923911) 36 weeks (year) Level 2 Grade: 7, 8**

**Prerequisite:** Successful audition

Advanced Orchestra offers instruction to the experienced player through in-depth study and performance of challenging string orchestra literature, with an emphasis on upper level skills. Students must meet both the school day and after-school participation requirements to receive credit for the course. Required after-school and evening commitments are a part of the advanced level orchestra. Participation in the District XII Orchestra Festival, Solo Festivals, and spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**WOMEN'S CHORUS (TREBLE CHORUS) (926011) 36 weeks (year) Grade: 7, 8**

**Prerequisite:** None

Students participate in a choral experience designed to develop skills as individual musicians and as members of a women's ensemble. Emphasis is placed upon vocalization and sight-singing through the use of appropriate choral literature. Students must meet both the school day and after-school participation requirements to receive credit for the course. This course provides instruction in proper vocal techniques, music fundamentals, and sight-reading for females. Types of performances include concert choral performances during the day and evenings. A variety of musical styles will be studied through appropriate choral literature. Participation in the District XII Chorus, All-VA Chorus, Regional Chorus and National Chorus as well as the spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**MEN'S CHORUS (CAMBIATA CHORUS) (926012) 36 weeks (year) Grade: 7, 8**

**Prerequisite:** None

Students participate in a choral experience designed to develop skills as individual musicians and as members of a men's ensemble. Emphasis is placed upon vocalization and sight-singing through the use of appropriate choral literature. Students must meet both the school day and after-school participation requirements to receive credit for the course. This course is for all boys with changed or unchanged voices. Special attention is given to teach boys how to use their voices properly throughout the voice change and after. Opportunities will be provided to collaborate on choral literature with the RCMS women's choirs as well as male singers from the feeder high schools. Rehearsals and performances outside of normal school hours will be required. A small number of performances will take place during the school day. Participation in the District XII Chorus, All-VA Chorus, District Festival, Regional Chorus and National Chorus as well as the spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**VOCAL ENSEMBLE (928010) 36 weeks (year) Grade: 7, 8 Boys; 8 Girls**  
**Prerequisite:** Successful audition

This ensemble is designed to meet specific needs and/or interests for vocalists. Content includes study of appropriate ensemble literature, and rehearsal and performance techniques from the various areas of musical composition. Voicing of the group is at the discretion of the instructor. Students must meet both the school day and after-school participation requirements to receive credit for the course. Students must be able to read music to enter this class. There will be a few performances during the school day. Participation in the District XII Chorus, All-VA Chorus, District Festival, Regional Chorus, and/or National Chorus as well as the spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED WOMEN'S CHORUS (928911) 36 weeks (year) Grade: 7, 8**  
**Prerequisite:** Successful audition

This course offers advanced instruction in vocal techniques, music fundamentals, and sight-reading. Students must be able to read music upon entrance in this class. Through a variety of choral literature, students will experience three and/or four-part singing. Types of performances may include concert choral performances, choral choreography, and/or musical dramas. Students must meet both the school day and after-school participation requirements to receive credit for the course. There will be a few performances during the school day. Participation in the District XII Chorus, All-VA Chorus, District Festival, Regional Chorus and National Chorus as well as the spring trip are possibilities at this level.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**ART EXTENSIONS (911500) 36 weeks (year) Grade: 8**  
**Prerequisite:** Teacher Recommendation or portfolio review

Art Extensions - Full Year offers an opportunity for eighth grade students with interest and above average performance in art to refine their artistic skills and techniques. Students interpret and express personal feelings, experiences, and observations in advanced level art projects. They work with a variety of media and tools including technological applications in drawing, painting, printmaking, and sculpture and they evaluate and critique their own and other students' artwork. Students study art history and culture and analyze the works of great artists while making interdisciplinary connections based on the Virginia Standards of Learning for all disciplines.



**Subject to staffing and budgetary concerns.**

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**ADVANCED THEATRE ARTS APPRECIATION (Drama)****(139568)****36 weeks (year)    Grade: 8**

**Prerequisite:** Theatre Arts Course in Grade 7 and/or recommendation of the theatre or speech arts instructor.

Students who are continuing the study of theatre arts for a second year will be able to apply and expand the skills developed in the introductory class. They will participate in a variety of dramatic activities and perform for varied audiences. This course is designed for students who are interested in an expanded study of theatre arts and oral communication. (Subject to staffing and budgetary concerns.)

**Subject to staffing and budgetary concerns.**

**This course requires a student materials fee as listed in FCPS Notice 5922.**



# SEMESTER ELECTIVES

## 8<sup>th</sup> Grade

### **3D ART EXPLORATION (910632) 18 weeks (semester) Grade: 7, 8**

Work in the third-dimension by creating sculptures, ceramic objects, models and installations that express ideas about personal experiences and observations of the world. Learn to use a variety of art media, non-traditional materials, tools and equipment to compose, construct, and form functional and decorative artworks. Build knowledge, refine skills, improve techniques, and craftsmanship to meet challenges and solve problems in unique ways. Investigate three-dimensional artworks produced by artists in different times and places to inform the art-making process.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

### **THEATRE ARTS APPRECIATION (Drama) (139067) 18 weeks (semester) Grade: 8**

Students develop an appreciation of theatre and the ability to perform through an introduction to the basic concepts and skills of acting. Through viewing and participating in a variety of performance activities, students will enhance imagination, poise, and confidence. Students will use the skills and knowledge obtained to appreciate and understand the purpose of theatre arts in school and other activities.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

### **COMPUTERS IN ART (911562) 18 weeks (semester) Grade: 7, 8**

**Prerequisite:** Art Foundations or eighth grade standing

Use the computer as a tool for creating original artwork. Work with a variety of software applications including Adobe Photoshop and Adobe Illustrator or other available software to explore subjects, ideas and themes related to living in the world. Make interdisciplinary connections based on the Virginia Standards of Learning for all disciplines and develop knowledge regarding ethical issues concerning computer generated imagery. Prior computer experience is not required.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

### **COMPUTER SOLUTIONS (660932) 18 weeks (semester) Grade: 7, 8**

Computer Solutions teaches concepts in database, spreadsheet, presentation, publishing, and Internet skills. The Computer Solutions course extends student expertise in a project-based curriculum. The Computer Solutions course is intended to serve as a bridge to the high school business department curriculum.

### **CAREER SEARCH AND INVESTIGATION (907042) 18 weeks (semester) Grade: 7, 8**

Students will explore the 16 Career Clusters and develop an understanding of career pathways. In addition, students will use approved career exploration resources to investigate the world of work in order to make informed career decisions. An emphasis

will be placed on helping students to create an academic and career portfolio and learn to use a career plan of study. Upon completion of the course, students will recognize connections between education and work; demonstrate the career decision-making process; apply knowledge of self and career interests to education planning; identify personal characteristics for job success; and recognize that career planning is a life-long process.

**DIGITAL INPUT TECHNOLOGIES (616032) 18 weeks (semester) Grade: 7, 8**  
**Prerequisite:** Teacher recommendation/Computer Solutions or equivalent skill

Digital Input Technologies introduces new and emerging input devices (e.g., speech- and handwriting-recognition software, headset/microphone, personal data assistant [PDA], scanner, digital camera, digital video camera, keyboard, and mouse) to prepare students for using tools that are becoming standard in the workplace and in everyday life. (Subject to staffing and budgetary concerns.)



**TECHNOLOGY & ENGINEERING 8 (846332) 18 weeks (semester) Grade: 8**

Technology & Engineering 8 is the concluding technology education experience at the middle school level. This course infuses **Science, Technology, Engineering, & Math (STEM)** concepts with exciting hands-on problem solving activities. This course provides students with active learning situations to explore technology and engineering by using various technologies to learn the problem solving process and become technologically literate. Students will learn the foundations of Technology & Engineering 8; safety, measurement, sketching, and CAD (Computer Aided Design), in preparation for those **project-based activities** students will be working on during the semester. The project-based activities will give students the opportunity to apply these concepts while using a variety of software applications and machines/tools to find solutions to real-world problems. These activities include *Alternative Energy Vehicles*, *Electronic Game Design*, *Egg Rockets*, designing your own *Dream Home*, and *Formula1 cars*. The content covered in this course reinforces the Virginia Standards of Learning (SOL) in math, science, language arts, and social studies. **This course requires a minimal student's materials fee as listed in FCPS Notice 5922**



**FAMILY AND CONSUMER SCIENCES 8 (824432) 18 weeks (semester) Grade: 8**

This semester course uses higher order thinking skills and simulated life experiences that enable the student to meet challenges in clothing and food management, career awareness, fitness and wellness, personal development, and relationships with others. Career exploration activities assist students with high school course selection.

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**Wellness for Life**

This Family and Consumer Sciences course allows students to explore the importance of wellness as a lifestyle. Class time is divided between the classroom, sewing lab, cooking lab, garden lab, and fitness lab. Students will use higher order thinking skills and real life experiences to develop positive attitudes towards health and wellness.

**Subject to staffing and budgetary concerns.**

**This course requires a student materials fee as listed in FCPS Notice 5922.**

**MUSIC PARTICIPATION LAB 1 (921132) 18 weeks (semester) Grade: 7, 8**

**Prerequisite:** None

This course provides students an opportunity to examine many kinds of music. Students will be actively involved in music through singing, listening, playing instruments, moving, and improvising. Other experiences may include vocal and instrumental ensembles, musical dramatizations, contemporary music, computer music, guitar, piano, and/or recorder.

**This course requires a student materials fee as listed in FCPS Notice 5922.**



Media Communications is a real-world, product-driven semester elective for 7<sup>th</sup> and 8<sup>th</sup> grade students. Students are actively involved in creating the school newspaper, The Carson Chronicle. Activities include interviewing, writing/editing articles, taking/editing pictures, and creating the layout of the paper. In addition, students are involved in the daily production of RC-TV, Carson's televised morning announcement show. Not only are they first to serve as "crew" of the show but will produce the resources used, including script, opening, middle, and closing slide shows, etc. Real world skills like working cooperatively in groups, managing multiple projects, meeting deadlines, and thinking creatively are woven within the course's foundation.

## ENGLISH SPEAKERS OF OTHER LANGUAGES (ESOL)

The middle school ESOL program comprises a range of courses to meet the cultural, linguistic, and academic needs of middle school Levels 1, 2, 3, 4, and 5 students. The language objectives of the program are based on the 7<sup>th</sup> and 8<sup>th</sup> grade English Language Arts standards. The primary goal of all middle school ESOL courses is language acquisition through content. Courses that are based on science and social studies use that content as the vehicle for language learning. The curriculum parallels the major concepts of middle school content courses. The intent is to help students develop social and academic language proficiency, and to provide them with foundational academic learning that will support their achievement of the Virginia Standards of Learning (SOL).

The curriculum in the literature/language courses, and the science/social studies-based courses for all proficiency levels relies on integrated instruction. It promotes high achievement for ESOL students by providing appropriate comprehensible academic instruction in a participatory environment. The focus of the ESOL program is on inclusive instruction with a goal of transitioning students to regular education classes as soon as they have the necessary linguistic foundation. Team taught academic classes are offered in Math 7, Social Studies, and Science 7.

Access for ELLs (WIDA) testing will be administered during the year. Results of this assessment, along with teacher input, determine course placement.

### ENGLISH SPEAKERS OF OTHER LANGUAGES (ESOL) COURSES

**BEGINNING ESOL ENGLISH (571061) 36 weeks (year) WIDA ELP Level 1 & 2  
Grade: 7, 8**

This is one of two English classes in which WIDA ELP Level 1 & 2 students may be enrolled. This class is designed to support the development of academic language and skills through alignment with the grade level Language Arts standards. It maintains a focus on vocabulary development, literacy skills and the writing process. This course may be repeated.

**Students are required to take the Standards of Learning End of Course Test.**



**BEGINNING ESOL ENGLISH (571062) 36 weeks (year) WIDA ELP 1 & 2 English**  
**Grade: 7, 8**

This is the second of two English classes in which WIDA ELP Levels 1 & 2 students may be enrolled. This class is designed to support the development of academic language and skills through alignment with the grade level Language Arts standards. It maintains a focus on vocabulary development, literacy skills and the writing process. This course may be repeated.

**Students are required to take the Standards of Learning End of Course Test.**

**ESOL US HISTORY 7 (571217) 36 weeks (year) WIDA ELP LEVEL 1 & 2**  
**Grade: 7**

This is the Social Studies class in which grade 7 WIDA ELP Levels 1 & 2 students are enrolled. This class is designed to support the development of academic language and skills through alignment with the grade level Social Studies Standards. It supports the development of vocabulary and academic discourse of Social Studies.

**Students are required to take the Standards of Learning End of Course Test.**

**ESOL CIVICS & ECONOMICS 8 (571218) 36 weeks (year) WIDA ELP Level 1 & 2**  
**Grade: 8**

This is the Social Studies class in which grade 8 WIDA ELP Level 1 & 2 students are enrolled. This class is designed to support the development of academic language and skills through alignment with the grade 8 Civics and Economics standards. It supports the development of vocabulary and academic discourse of Social Studies.

**Students are required to take the Standards of Learning End of Course Test.**

**ESOL FOCUS SCIENCE (571400) 36 weeks (year) WIDA ELP LEVEL 1 & 2**  
**Grade: 7, 8**

This course is the science course for WIDA ELP Level 1 & 2 students. It is designed to develop the academic language of science through scaffolded grade level labs. Students explore the scientific process along with key vocabulary and concepts through Life and Physical Science. This course may be repeated.

**Students are required to take the Standards of Learning End of Course Test.**

**ESOL FAST MATH (571300) 36 weeks (year) WIDA ELP Level 1 & 2**  
**Grade: 7, 8**

This is the course for WIDA ELP Level 1 & 2 students who have significant gaps of two or more years below grade level in mathematics skills and concepts. WIDA ELP Level 3 & 4 students may audit this class. Fast Math is an articulated mathematics curriculum from the grade 7 mathematics standards, designed and developed around a framework

of skill progression to accommodate multiple entry points that recognize students' different strengths and support differentiated instruction within the class.

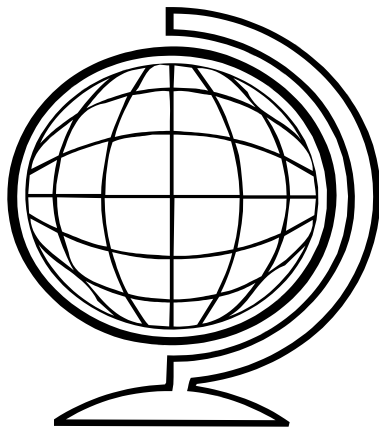
**Students are required to take the Standards of Learning End of Course Test.**

**DEVELOPING ESOL ENGLISH (572061) 36 weeks (year) WIDA ELP LEVEL 2 & 3  
Grade: 7, 8 Credit: 1**

This is the English class in which WIDA ELP Levels 2 & 3 may be enrolled. This class is designed to support the development of academic language skills through alignment with the grade level Language Arts standards. It maintains a focus on vocabulary development, reading comprehension and the writing process. When appropriate, Level 3 ESOL students should be enrolled in grade level English. Level 2 & 3 students are often scheduled for Read 180 in order to improve their reading fluency and comprehension (please see course description under Support Programs). This course may be repeated.

**Students are required to take the Standards of Learning End of Course Test.**

**ESOL ACADEMIC LANGUAGE (573061) 36 weeks (year)  
WIDA ELP LEVEL 3 & 4 Grade: 7, 8 Credit: 1**



The class is designed to continue the development of academic language across the curriculum. WIDA ELP Level 3 and 4 students may be enrolled in both this course and a grade level English class. Students read a variety of genres and use technology as they work with the writing process to extend and refine their English language skills. This course may be repeated.

## **ADVANCED ACADEMIC PROGRAMS (CENTER)**

Fairfax County Public Schools seek to provide an educational program that recognizes the unique value, needs, and talents of each student. Instructional programs for the Advanced Academic Program (AAP) provides students with differentiated instruction designed to encourage maximum development of potential and greater understanding of individual capabilities. The programs offer a variety of educational opportunities and a continuum of services, kindergarten through grade twelve. Learning experiences are developed to meet the unique needs of the gifted and are qualitatively different from those in the regular program.

The Advanced Academic Program for grades seven and eight offers students a highly challenging instructional program. Curriculum differentiation in the depth, breadth, and pace of instruction is matched to particular students and content areas. Students have opportunities to work with academic peers as well as opportunities to participate with the entire student body in activities such as student government, physical education, band and strings, and in various electives at the middle school level.

The purpose of an Advanced Academic Center Program is to provide instruction to students who would require significantly individualized instruction in their local schools beyond that which is normally provided.

In addition to the AAP Center classes, the Honors curriculum is fully implemented for both 7<sup>th</sup> and 8<sup>th</sup> grade students. Rachel Carson Middle School offers Honors courses in English, Social Studies, Science, and Math 7 (Algebra I Honors and Geometry Honors course eligibility is determined separately). AAP Center programs require eligibility and a Fairfax County Public School screening process by committee for acceptance. Honors courses are designed to offer students who demonstrate advanced abilities in specific subject areas a chance to experience an extended program of studies at greater depth and level of complexity.



### **ADVANCED ACADEMIC PROGRAM (CENTER - RCMS)**

Rachel Carson Middle School embraces the Fairfax County Public School Advanced Academic Program educational program philosophy. The Advanced Academic Center Program for grades 7-8 offers a challenging educational experience that enables the highly gifted students to develop intellectually to their fullest potential.

Advanced Academic Center Program classes will be offered at each grade level where Center students are grouped together for English, Science and Social Studies. The mathematics program will include courses such as Mathematics 7, Mathematics 7 Honors, Mathematics 8, Algebra I, Algebra I Honors, and Geometry Honors or higher

level courses as appropriate. Students will be placed in math classes according to their mathematical academic developmental needs. Enrollment in Algebra I Honors in seventh grade is based on a placement test which is usually given in sixth grade in May or June. Admission to Thomas Jefferson High School for Science and Technology (TJ) requires completion of Algebra I prior to grade 9. For those going on to either AP or IB high schools, or TJ, world language is recommended.

### **ADVANCED ACADEMIC PROGRAM (HONORS)**

Honors classes, aligned with national standards for advanced academic education, are open to all students who seek academic rigor. Fairfax County offers open enrollment in Honors classes and parents may enroll their child in Honors science, math, social studies and/or English classes. Students who have demonstrated high achievement, interest, and/or potential in one or more academic areas may be ready to take Honors classes. Enrollment in Honors classes takes place in the spring during the course selection process. At that time, parents/guardians may choose which science, math, English and/or social studies Honors classes will best meet the needs of their child.

The goal of Honors classes is to provide a consistent county-developed middle school curriculum that extends the Fairfax County Program of Studies (POS) in depth and complexity and meets the needs of a diverse group of learners. The curriculum is based on the Parallel Model, a model published by the National Association for Gifted Children and designed to develop high potential and challenge advanced learners. The framework of the Parallel Model Curriculum encourages students to think conceptually; to make connections across time, place and subject; to perform as a practitioner or scholar in a discipline; and to self-assess and reflect on their learning and the learning process. Lessons provide “ascending levels of intellectual demand.” As a student becomes more advanced, task demand escalates to ensure that the student is appropriately challenged and continues to progress toward expertise.

The curriculum and instruction in Honors classes extends and enriches the FCPS Program of Studies through research-based practices designed to engage and challenge advanced learners, e.g., problem-based learning, research, and investigations. Honors classes provide opportunities to build on individual academic strengths, develop critical and creative thinking skills, and prepare students for advanced coursework in high school.

Rachel Carson Middle School participates in the Fairfax County Public Schools Open Honors Enrollment process. We encourage parents to evaluate their student’s academic strengths and SOL achievement as well as teacher recommendation for appropriate placement.



## SPECIAL EDUCATION PROGRAMS

### Overview

The program for students with special education needs is based on the philosophy that individuals with disabilities have the right to a free, appropriate public education designed to meet their unique needs and learning styles. Although guided by the Virginia Standards of Learning and the Fairfax County Program of Studies, instruction is adapted and modified based on individual needs as outlined in the current level of functioning on each student's IEP. Instruction is provided in the least restrictive environment by appropriate personnel based on the student's needs as reviewed at least yearly at the IEP. Programs offered include services for students with learning disabilities, emotional disabilities, other health impairments, intellectually disabled, autism, speech and language impairment, hearing, and vision impairments.

### ELECTIVE COURSE SELECTIONS

#### **BASIC SKILLS (781980) 36 weeks (year) Grade: 7, 8**

This elective course is designed to provide support to a student in core curricular areas and to provide direct instruction in specific learning strategies, study skills, time management, organization and coping skills. This course follows a FCPS curriculum and is a year long course. Time is also allotted to address individual areas of need as identified in a student's Individual Educational Plan (IEP). While students may receive assistance on core curricular assignments, the course is not designed to serve as a study hall. The course may be taught as an elective both years, as appropriate.

#### **WORK AWARENESS AND TRANSITION (907060) 36 weeks (year) Grade: 7, 8**

This year-long course is designed to explore possible careers to help students plan for high school courses. Students learn work-related skills and behaviors such as attitude towards work and appropriate interpersonal/co-worker relationships.

#### **PERSONAL DEVELOPMENT (781540) 36 weeks (year) Grade: 7, 8**

This special education course is designed for students who need additional social/emotional support in order to progress in the general education curriculum because their social/emotional needs affect their school performance. Course topics include: understanding yourself, goal-setting, communication, building relationships, dealing with emotions, stress management, wellness, problem-solving, decision-making, self-advocacy, study habits, organization, time management and career and transition. This course is appropriate for students who have documented social/emotional needs on their individualized education program (IEP).

## **SUPPORT PROGRAMS**

In order to aid students in achieving proficiency on the required Standards of Learning (SOL) tests, additional remediation semester courses are available to students with parent approval. These courses are designed to provide direct instruction in order to augment knowledge and skills in certain indicated subject areas.

### **FOCUSED SUPPORT IN MIDDLE SCHOOL – GRADES 7 & 8**

#### **ACTION LITERACY 7/8**

Language Power is a one semester additional English course designed to provide direct instruction in reading comprehension, writing process, and vocabulary. The course content has been specifically designed to support the attainment of the foundational skills and knowledge necessary to be successful in seventh grade English.

#### **ALGEBRA READINESS INCENTIVE (ARI)**

This course is designed to augment student abilities in Algebra. Placement and eligibility for 8<sup>th</sup> graders is determined through assessment.

#### **PREP FOR SUCCESS**

This course will feature activities designed to advance students' skills in organization, studying, and test-taking. In addition, activities will feature attention to collaborative and communication skills, while employing technology tools on an ongoing basis.

#### **READ 180**

READ 180 is a full year, general education reading intervention course designed to meet the needs of students whose reading achievement is well below the proficient level. The course addresses individual needs through direct teacher instruction, high-interest reading material, and adaptive instructional software. Because it is an intervention course, READ 180 is capped at 15 students. It can be accessed by both seventh and eighth graders from ESOL or general and special education populations. Depending on their proficiency level, some students might be in the course for two years.

#### **RESPONSIVE WRITING**

Responsive Writing is a one semester English Writing SOL support class for 8<sup>th</sup> grade students. This small intervention class will focus on implementing the writing process and applying the Six Traits of Writing. Built around best practices in writing such as conferring, using mentor text, and supporting real-world writing, this class offers students strategies that enable them to write effectively.

## PLANNING AHEAD

Middle School is not too early to start thinking about your future choices in school and beyond. At Rachel Carson Middle School, we are fortunate to have academic career planning with counselors, teachers, and volunteer parents who will assist students in exploring future choices in schools as well as career possibilities. We have provided in this section requirements for graduation for all Fairfax County students. We have also added information on the sequencing of math courses in Fairfax County.

We hope that this information will assist you in planning for a successful middle school experience and encourage you to think beyond these two years.



## MATHEMATICS ACADEMIC SEQUENCE OF COURSES K-12

ELEMENTARY SCHOOL Grades K -6	MIDDLE SCHOOL		HIGH SCHOOL				
	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	
<p>Curriculum defined by:</p> <ul style="list-style-type: none"> <li>Program of Studies (POS) of Fairfax County Public Schools</li> <li>Standards of Learning (SOL) of Commonwealth of Virginia</li> </ul> <p>Content includes:</p> <ul style="list-style-type: none"> <li>Numerical Relationships</li> <li>Operations</li> <li>Measurement</li> <li>Geometry</li> <li>Data Analysis, Statistics and Probability</li> <li>Patterns, Functions, and Algebra</li> </ul> <p>Advanced Math Curriculum</p>	<b>**Algebra 1 Honors</b> <b>Geometry Honors</b>		<b>Algebra 2 Honors</b> <i>or</i> <b>Algebra 2</b>	<b>*Precalculus Honors</b> <i>or</i> <b>*Precalculus</b>	<b>AP Calculus BC</b> <i>or</i> <b>AP Calculus AB</b>	<b>Multivariable Calculus</b> <i>or</i> <b>AP Elective</b>	
			<b>Algebra 2 Honors</b> <i>or</i> <b>Algebra 2</b>	<b>*Precalculus Honors</b> <i>or</i> <b>IB Standard Level Mathematics I</b> <i>or</i> <b>*Precalculus</b>	<b>IB Higher Level Mathematics I</b> <i>or</i> <b>IB Standard Level Mathematics I</b>	<b>IB Higher Level Mathematics II</b> <i>or</i> <b>IB Standard Level Mathematics II</b>	
			<b>Mathematics 7 Honors</b> <i>or</i> <b>Mathematics 7</b>	<b>Algebra 1 Honors</b> <i>or</i> <b>Algebra 1</b>	<b>Geometry Honors</b> <i>or</i> <b>Geometry</b>	<b>Algebra 2 Honors</b> <i>or</i> <b>Algebra 2</b>	<b>*Precalculus Honors</b> <i>or</i> <b>*Precalculus</b>
			<b>Geometry Honors</b> <i>or</i> <b>Geometry</b>	<b>Algebra 2 Honors</b> <i>or</i> <b>Algebra 2</b>	<b>*Precalculus Honors</b> <i>or</i> <b>IB Standard Level Mathematics I</b>	<b>IB Higher Level Mathematics I</b> <i>or</i> <b>IB Standard Level Mathematics II</b>	
		<b>Mathematics 7</b>	<b>Mathematics 8</b>	<b>Algebra 1</b> <i>or</i> <b>Algebra 1 Honors</b>	<b>Geometry</b> <i>or</i> <b>Geometry Honors</b>	<b>Algebra 2</b> <i>or</i> <b>Algebra 2 Honors</b>	<b>*Precalculus</b> <i>or</i> <b>*Precalculus Honors</b> <i>or</i> <b>IB Mathematical Studies SL</b>

\*\*Students enrolling in Algebra 1 Honors in 7<sup>th</sup> grade must meet placement criteria.

\*Precalculus includes all the topics of trigonometry

- Multivariable Calculus is a one semester course followed by Matrix Algebra
- Mathematics Electives include: Trigonometry, Probability and Statistics and or Discrete Mathematics – Semester Courses. AP Statistics, AP Computer Science, IB Computer Science.

## MATHEMATICS ACADEMIC SEQUENCE OF COURSES 9-12

HIGH SCHOOL (AP)				HIGH SCHOOL (IB)			
Grade 9	Grade 10	Grade 11	Grade 12	Grade 9	Grade 10	Grade 11	Grade 12
Algebra 2 Honors <i>or</i> Algebra 2	*Precalculus Honors <i>or</i> *Precalculus	AP Calculus BC <i>or</i> AP Calculus AB	Multivariable Calculus <i>or</i> AP Elective	Algebra 2 Honors <i>or</i> Algebra 2	*Precalculus Honors <i>or</i> *Precalculus	IB Higher Level Mathematics I <i>or</i> IB Standard Level Mathematics I	IB Higher Level Mathematics II <i>or</i> IB Standard Level Mathematics II
Geometry Honors <i>or</i> Geometry	Algebra 2 Honors <i>or</i> Algebra 2	*Precalculus Honors <i>or</i> *Precalculus	AP Calculus BC <i>or</i> AP Calculus AB	Geometry Honors <i>or</i> Geometry	Algebra 2 Honors <i>or</i> Algebra 2	*Precalculus Honors <i>or</i> IB Standard Level Mathematics I	IB Higher Level Mathematics I <i>or</i> IB Standard Level Mathematics II
Algebra 1 <i>or</i> Algebra 1	Geometry <i>or</i> Geometry Honors	Algebra 2 <i>or</i> Algebra 2 Honors	*Precalculus <i>or</i> *Precalculus Honors	Algebra 1 <i>or</i> Algebra 1 Honors	Geometry <i>or</i> Geometry Honors	Algebra 2 <i>or</i> Algebra 2 Honors	IB Mathematical Studies SL

\*Precalculus includes all the topics of trigonometry

- Multivariable Calculus is a one semester course followed by Matrix Algebra
- Mathematics Electives include: Trigonometry, Probability and Statistics and or Discrete Mathematics – Semester Courses. AP Statistics, AP Computer Science, IB Computer Science.

# FCPS Quick Graduation Guide for Mathematics for Students Entering High School for the First Time in Fall 2011

**For the Standard Diploma:** A student must take three (3) mathematics credits including at least two different course selections from among Algebra 1, Geometry, Algebra 2, or other mathematics courses above the level of Algebra 2.

**Courses above the level of Algebra 2:**

Trigonometry, Probability and Statistics, Discrete Mathematics, Precalculus with Trigonometry, Precalculus with Trigonometry Honors, AP Computer Science A, AP Statistics, AP Calculus AB, AP Calculus BC, IB Math HL, IB Math SL, IB Math Studies, IB Computer Science, Multivariable Calculus, Matrix Algebra, Differential Equations, Numerical Analysis

**Acceptable Sequences:**

1st Scenario: Algebra 1, Geometry, Algebra 2  
2nd Scenario: Algebra 1, Geometry, Computer Science\*

Students need one (1) verified SOL credit in mathematics for the Standard Diploma.

\*To receive a mathematics graduation credit a student must also complete a career concentration+

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**For an Advanced Studies Diploma:** A student must take four (4) mathematics courses with at least three of the four courses among Algebra 1, Geometry, Algebra 2, or other mathematics courses above the level of Algebra 2.

**Courses above the level of Algebra 2:**

Trigonometry, Probability and Statistics, Discrete Mathematics, Precalculus with Trigonometry, Precalculus with Trigonometry Honors, AP Computer Science A, AP Statistics, AP Calculus AB, AP Calculus BC, IB Math HL, IB Math SL, IB Math Studies, IB Computer Science, Multivariable Calculus, Matrix Algebra, Differential Equations, Numerical Analysis

**Some Acceptable Sequences:**

1st Scenario: Algebra 1, Geometry, Algebra 2, AP or IB Computer Science  
2nd Scenario: Algebra 1, Geometry, Algebra 2, Precalculus with Trigonometry  
3rd Scenario: Algebra 1, Geometry, Algebra 2, AP Statistics  
4th Scenario: Algebra 1, Geometry, Algebra 2, Computer Science\*

**Unacceptable Sequence for Advanced Studies Diploma:**

Algebra 1 Part 1\*\*, Algebra 1, Geometry, Computer Science

Students need two (2) verified SOL credits in mathematics for the Advanced Studies Diploma.

+ A Career Concentration is a coherent sequence of courses completed by a student in a specific career area

\*\*With the exception of students pursuing a modified diploma, students will earn an elective credit for taking Algebra 1 Part 1 and/or Geometry Part 1 not a mathematics credit towards graduation.

Continued on Next Page⇒

**For the Standard Technical Diploma:** A student must take three (3) mathematics credits including at least three different course selections from among: Algebra 1, Geometry, Algebra 2 or other mathematics courses above the level of Algebra 2.

**Courses above the level of Algebra 2:**

Trigonometry, Probability and Statistics, Discrete Mathematics, Precalculus with Trigonometry, Precalculus with Trigonometry Honors, AP Computer Science A, AP Statistics, AP Calculus AB, AP Calculus BC, IB Math HL, IB Math SL, IB Math Studies, IB Computer Science, Multivariable Calculus, Matrix Algebra, Differential Equations, Numerical Analysis

**Acceptable Sequences:**

1st Scenario: Algebra 1, Geometry, Algebra 2

**Unacceptable Sequence for Standard Technical Diploma:**

Algebra 1, Geometry, Computer Science

Students need one (1) verified SOL credit in mathematics for the Standard Diploma.

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**For an Advanced Technical Diploma:** A student must take four (4) mathematics courses with at least three of the four courses among Algebra 1, Geometry, Algebra 2, or other mathematics courses above the level of Algebra 2.

**Courses above the level of Algebra 2:**

Trigonometry, Probability and Statistics, Discrete Mathematics, Precalculus with Trigonometry, Precalculus with Trigonometry Honors, AP Computer Science A, AP Statistics, AP Calculus AB, AP Calculus BC, IB Math HL, IB Math SL, IB Math Studies, IB Computer Science, Multivariable Calculus, Matrix Algebra, Differential Equations, Numerical Analysis

**Some Acceptable Sequences:**

1st Scenario: Algebra 1, Geometry, Algebra 2, AP or IB Computer Science

2nd Scenario: Algebra 1, Geometry, Algebra 2, Precalculus with Trigonometry

3rd Scenario: Algebra 1, Geometry, Algebra 2, AP Statistics

4th Scenario: Algebra 1, Geometry, Algebra 2, Computer Science

**Unacceptable Sequence for Advanced Studies Diploma:**

Algebra 1 Part 1, Algebra 1, Geometry, Computer Science

Students need two (2) verified SOL credits in mathematics for the Advanced Studies Diploma.

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**For the Modified Standard Diploma:** A student must take three (3) courses that include content from among applications of algebra, geometry, personal finance, and statistics. Students will take the Algebra 1, Geometry, and/or Algebra 2 SOL test(s) when they have completed the appropriate SOL content, but they do not have to pass the test(s) to satisfy the requirement for the Modified Standard Diploma. Students must meet the numeracy requirements on the eighth grade math SOL. Students may substitute a higher level high school SOL test for the eighth grade numeracy requirement.

**Some Acceptable Sequences:**

1st Scenario: Algebra 1 Part 1, Algebra 1, Geometry Part 1

2nd Scenario: Algebra 1 Part 1, Algebra 1, Personal and Financial Math

For more information go to: **Fairfax County Public Schools**

[http://www.doe.virginia.gov/instruction/graduation/approved\\_courses.pdf](http://www.doe.virginia.gov/instruction/graduation/approved_courses.pdf)

## **PARENT INFORMATION ABOUT HIGH SCHOOL ADVANCED ACADEMIC PROGRAMS**

Fairfax County Public Schools Advanced Academic Programs provide challenging learning experiences that are designed to meet the unique learning profile of a broad range of advanced learners. Through a continuum of opportunities, students engage in complex subject matter, preparing them for more challenging and rigorous classes as they advance in grade level. Advanced Academic courses at the middle school consist of honors courses and the Level IV center program. Students who have demonstrated high achievement, interest, and/or potential in one or more academic areas may enroll in honors courses. Students eligible for full time Level IV center placement have the option to take full honors at their local middle school.

Advanced Academic courses in high school are open to all students who seek academic rigor. Students have the opportunity to enroll in honors courses as underclassmen and continue in Advanced Placement (AP), International Baccalaureate (IB), and dual enrollment courses. Students may earn college credits based on the results of their examinations (AP or IB) or course grade (dual enrollment). Student transfer applications may be submitted for an AP or IB program if the base school does not offer the desired program of study. For more information on the transfer process, please visit the web site at: <http://www.fcps.edu/is/aap/index.shtml>.

AP and IB courses are advanced-level courses with external exams. Students who take AP and IB courses are required to complete the examinations.

The Advanced Academic program responds to the requirement of the Virginia Board of Education that each local school division plan and implement an instructional program for gifted and talented students at all levels K-12. Courses designated as honors, Level IV, IB or AP fulfill this requirement. Differentiated curricula and teaching strategies which stress critical thinking skills, creativity, and problem solving are integrated into the content of all advanced academic course offerings. The four-year sequence of courses in each of the academic disciplines, which progress from honors to AP, and IB, provides a continuous and balanced advanced academic program.

### **International Baccalaureate Middle Years Program**

The International Baccalaureate Middle Years Program (IBMYP) is designed for students ages 11-16 (grades 6-10). The program helps students develop the knowledge, understanding, attitudes, and skills necessary to participate actively and responsibly in a changing world. The curriculum is supported by the fundamental concepts of intercultural awareness, holistic learning, and communication. The IBMYP program is available at the following middle and high schools: Glasgow, Holmes, Hughes, Poe, Whitman, Annandale, Mt. Vernon, South Lakes, and Stuart.

### **Advanced Placement in High School**

Centreville, Chantilly, Fairfax, Falls Church, Hayfield, Herndon, Lake Braddock, Langley, Madison, McLean, Oakton, South County, West Potomac, West Springfield, Westfield, and Woodson High Schools offer the Advanced Placement (AP) program. Individual AP courses are also offered at other high schools. All students enrolled in an AP course are required to complete the end-of-course AP exam. Students may receive college credit and/or placement based upon their exam grades. The AP program is offered in English, social studies, mathematics, science, world languages, and fine arts. AP courses are offered as open enrollment to all students committed to rigorous, academic work. Students taking at least 3 AP exams with at least a grade of 3 on each are recognized by the College Board as AP Scholars. Further information about the AP program may be obtained by contacting the school counselor or AP coordinator at the participating school.

### **International Baccalaureate in High School**

Annandale, Edison, Lee, Marshall, Mount Vernon, Robinson, South Lakes, and Stuart High Schools offer the International Baccalaureate (IB) Diploma and the World Program. To qualify for the IB Diploma, students must select at least one subject from each of six IB subject groups including English, world languages, mathematics, science, social studies, and an elective. Students take at least 3 and not more than 4 of these subjects at higher level (HL), the others at standard level (SL). All students enrolled in an

IB course are required to complete the end-of-course IB exams. IB diploma candidates must complete 150 hours of extracurricular activities and community service, take the Theory of Knowledge course, and write a 4000 word essay on a topic of their choice. Students in IB schools may also take IB courses in areas of academic strength and interest. IB diploma course students take one or more IB courses and the associated exam(s) and receive recognition for each IB exam with a score of “4” or better.

The IB program is offered in English, social studies, mathematics, science, world languages, fine arts, and other electives. IB courses are offered as open enrollment to all students committed to rigorous, academic work. Further information about the IB program may be obtained by contacting the school counselor or IB coordinator at the participating school. Annandale, South Lakes, Mount Vernon, and Stuart High Schools implement the IB Middle Years Program in 9<sup>th</sup> and 10<sup>th</sup> grade. Students may choose to work toward the MYP certificate which requires the completion of a personal project at the end of 10<sup>th</sup> grade and success on the MYP 10<sup>th</sup> grade assessments.

### **Thomas Jefferson High School For Science And Technology**

The Thomas Jefferson High School for Science and Technology is a unique Fairfax County public school offering a comprehensive college preparatory program emphasizing the sciences, mathematics, and technology. As the Governor’s School for Science and Technology in Northern Virginia, the school serves students who are selected in a competitive process and intend to pursue college preparation in the sciences, engineering, or related fields. Students may obtain information about application procedures and deadlines from the School Counseling Office of their local schools or by calling Thomas Jefferson High School for Science and Technology Office of Admissions at 571-423-3770 or at: <http://www.tjhsst.edu/aboutti/admissions/index.html>

### **Student Fees**

Courses that require a student fee for consumable materials have been designated in this catalog. The schedule of divisionwide student fees to be charged for any elective course can be found in Notice 5922 at [www.fcps.edu/Directives](http://www.fcps.edu/Directives). Students eligible for the federal Free and Reduced-Price meals program may have course and test fees waived. For more information, see your school counselor.



# STANDARD DIPLOMA

## 22 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9<sup>th</sup> grade for the first time. The following applies to 9<sup>th</sup> grade students who enter high school in 2011-2012 and beyond.

To graduate from high school, students shall meet the minimum requirements for the Standard Diploma as outlined below, including 22 standard credits, 6 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests, certifications, or the appeal process to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during the tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student's high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year, prior to the end of the first nine weeks.**

<b>Standard Diploma Course Requirements (8 VAC 20-131-50)</b>		
<b>Subject Area</b>	<b>Standard Credits</b>	<b>Verified Credits</b>
English	4	2
Mathematics <sup>1</sup>	3	1
Laboratory Science <sup>2,6</sup>	3	1
History and Social Sciences <sup>3,6</sup>	4	1
Health and Physical Education	2	
*World Language, Fine Arts or Career and Technical Ed <sup>7</sup>	2	
Economics & Personal Finance	1	
Electives <sup>4</sup>	3	
Student Selected Test <sup>5</sup>		1
<b>Total Credits</b>	<b>22</b>	<b>6</b>

\*Foreign Language is designated World Language in Fairfax County Public Schools.

<sup>1</sup> Courses completed to satisfy this requirement shall include at least two different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education shall approve additional courses to satisfy this requirement.

<sup>2</sup> Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines: earth sciences, biology, chemistry, or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

<sup>3</sup> **Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.**

<sup>4</sup> Courses to satisfy this requirement shall include at least two sequential electives as required by the Standards of Quality.

<sup>5</sup> A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

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

<sup>7</sup> Pursuant to Section 22.1-253.13:4, Code of Virginia, credits earned for this requirement shall include one credit in fine or performing arts or career and technical education.

# STANDARD TECHNICAL DIPLOMA

## 22 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to 9<sup>th</sup> grade students who enter high school in 2012-2013 and beyond.

To graduate from high school with a Standard Technical Diploma, students shall meet the minimum requirements as outlined below, including 22 standard credits, 6 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests, certifications, or the appeal process to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during the tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student’s high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year, prior to the end of the first nine weeks.**

<b>Standard Technical Diploma Course Requirements (8 VAC 20-131-50)</b>		
<b>Subject Area</b>	<b>Standard Credits</b>	<b>Verified Credits</b>
English	4	2
Mathematics <sup>1</sup>	3	1
Laboratory Science <sup>2,5</sup>	3	1
History and Social Sciences <sup>3,5</sup>	4	1
Health and Physical Education	2	
Fine Arts or *World Language	1	
Economics & Personal Finance	1	
Career and Technical Education <sup>4</sup>	4	
Student Selected Test <sup>6</sup>		1
<b>Total Credits</b>	<b>22</b>	<b>6</b>

<sup>1</sup> Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, or Algebra II or other mathematics courses above the level of Algebra II. The Board of Education shall approve courses to satisfy this requirement.

<sup>2</sup> Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics, or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

<sup>3</sup> Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

<sup>4</sup> Courses completed to satisfy this requirement must include a career concentration as approved by the Board. If a career concentration includes a specific assessment approved by the Board and the student is eligible to take the assessment, then the student must take this assessment.

<sup>5</sup> Students who complete a career and technical education program sequence and pass an examination or occupational competency assessment in a career and technical education field that confers certification or an occupational competency credential from a recognized industry or trade or professional association or acquires a professional license in a career and technical education field from the Commonwealth of Virginia may substitute the certification competency credential or license for (i) the student selected verified credit and (ii) either a science or history and social science verified credit when the certification license or credential confers more than one verified credit. The examination or occupational competency assessment must be approved by the Board as an additional test to verify student achievement.

<sup>6</sup> A student may utilize additional tests for earning verified credit in computer science, technology, career and technical education, economics or other areas as prescribed by the Board in 8 VAC 20-131-110.

## **ADVANCED STUDIES DIPLOMA**

### **26 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION**

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9th grade for the first time. The following applies to 9<sup>th</sup> grade students who enter high school in 2011-2012 and beyond.

To graduate from high school with an Advanced Studies Diploma, students shall meet the minimum requirements as outlined below which include 26 credits, 9 of which must be verified credits. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests or certifications to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student’s high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year prior to the end of the first nine weeks.**

<b>Advanced Studies Diploma Course Requirements (8 VAC 20-131-50)</b>		
<b>Subject Area</b>	<b>Standard Credits</b>	<b>Verified Credits</b>
English	4	2
Mathematics <sup>1</sup>	4	2
Laboratory Science <sup>2</sup>	4	2
History and Social Sciences <sup>3</sup>	4	2
*World Language <sup>4</sup>	3	
Health and Physical Education	2	
Fine Arts or Career and Technical Ed	1	
Economics & Personal Finance	1	
Electives	3	
Student Selected Test <sup>5</sup>		1
<b>Total Credits</b>	<b>26</b>	<b>9</b>

\*Foreign Language is designated World Language in Fairfax County Public Schools.

<sup>1</sup> Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education shall approve courses to satisfy this requirement.

<sup>2</sup> Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

<sup>3</sup> Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

<sup>4</sup> Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

<sup>5</sup> A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

## **ADVANCED TECHNICAL DIPLOMA**

### **26 CREDIT DIPLOMA REQUIREMENTS FOR GRADUATION**

The requirements for a student to earn a diploma shall be those in effect when the student enters the 9<sup>th</sup> grade for the first time. The following applies to 9<sup>th</sup> grade students who enter high school in 2012-2013 and beyond.

To graduate from high school with an Advanced Technical Diploma, students shall meet the minimum requirements as outlined below which include 26 credits, 9 of which must be verified credits. Any student who meets the requirements for both the Advanced Studies and the Advanced Technical Diploma may choose between these two diplomas. A **standard** credit is earned when a student passes a course. A **verified** credit is earned when a student passes a course and the associated end-of-course SOL test. In some cases, students may utilize substitute tests or certifications to earn verified credits. State guidelines prescribe the number of verified credits required for graduation for students entering a Virginia public high school for the first time during tenth grade or after. Consult your school counselor for specific information.

Students receive credit toward graduation for high school courses taken and passed in middle school. These courses count toward credits in the required sequences as well as toward the total number of credits required for graduation and calculation of the grade point average (GPA). **Middle school parents may request that grades for any high school credit-bearing course taken in the middle school be removed from the student’s high school transcript, and therefore the student will not earn high school credit for the course. In addition, the student will not be eligible for a verified credit in any course which has been removed from the transcript. The request to remove a course from the transcript must be made in writing to the middle or high school the student will attend the following year prior to the end of the first nine weeks.**

<b>Advanced Technical Diploma Course Requirements (8 VAC 20-131-110)</b>		
<b>Subject Area</b>	<b>Standard Credits</b>	<b>Verified Credits</b>
English	4	2
Mathematics <sup>1</sup>	4	2
Laboratory Science <sup>2</sup>	4	2
History and Social Sciences <sup>3</sup>	4	2
*World Language <sup>4</sup>	3	
Health and Physical Education	2	
Economics & Personal Finance	1	
Fine Arts or Career and Technical	1	
Career and Technical Education <sup>5</sup>	3	
Student Selected Test <sup>6</sup>		1
<b>Total Credits</b>	<b>26</b>	<b>9</b>

\*Foreign Language is designated World Language in Fairfax County Public Schools.

<sup>1</sup> Courses completed to satisfy this requirement shall include at least three different course selections from among: Algebra I, Geometry, Algebra II, or other mathematics courses above the level of Algebra II. The Board of Education shall approve courses to satisfy the requirement.

<sup>2</sup> Courses completed to satisfy this requirement shall include course selections from at least three different science disciplines from among: earth sciences, biology, chemistry, or physics or completion of the sequence of science courses required for the International Baccalaureate Diploma. The Board shall approve courses to satisfy this requirement.

<sup>3</sup> Courses completed to satisfy this requirement shall include U.S. and Virginia History, U.S. and Virginia Government, and World History/Geography I and World History/Geography II. AP World History satisfies the requirement for World History/Geography II.

<sup>4</sup> Courses completed to satisfy this requirement shall include three years of one language or two years of two languages.

<sup>5</sup> Courses completed to satisfy this requirement must include a career concentration as approved by the Board. If a career concentration includes a specific assessment approved by the Board and the student is eligible to take the assessment, then the student must take this assessment.

<sup>6</sup> A student may utilize additional tests for earning verified credit in computer science, technology, career or technical education, economics, or other areas as prescribed by the Board in 8 VAC 20-131-110.

## **MODIFIED STANDARD DIPLOMA**

### **20 CREDIT DIPLOMA REQUIREMENT FOR GRADUATION**

The requirements for a student to earn a diploma shall be those in effect when the student enters the ninth grade for the first time. The following applies to 9<sup>th</sup> grade students who entered high school in 2000-2001 and beyond.

The Modified Standard Diploma is intended for certain students who have a disability and are unlikely to meet the credit requirements for a Standard Diploma. Eligibility and participation in the Modified Standard Diploma program shall be determined by the student's Individual Education Program (IEP) team including the student, when appropriate, at any point after the student's eighth grade year. There are no verified credit requirements for the Modified Standard Diploma. Students pursuing the Modified Standard Diploma are required to meet literacy and numeracy requirements on the 8<sup>th</sup> grade English reading and mathematics Standards of Learning (SOL) tests. Students may substitute a higher level high school SOL test for the 8<sup>th</sup> grade SOL tests for the literacy and numeracy requirements.

A student who has chosen to pursue a Modified Standard Diploma shall also be allowed to pursue the Standard Diploma, Advanced Studies Diploma, or Standard Technical Diploma or Advanced Technical Diploma (based on year of entry into 9<sup>th</sup> grade) at any time throughout the high school career. The student may not be excluded from courses and tests required to earn a Standard, Advanced Studies, Standard Technical, or Advanced Technical Diploma.

<b>Modified Standard Diploma Course Requirements (8 VAC 20-131-50)</b>	
<b>Subject Area</b>	<b>Standard Credits</b>
English	4
Mathematics <sup>1</sup>	3
Science <sup>2</sup>	2
History and Social Sciences <sup>3</sup>	2
Health and Physical Education	2
Fine Arts or Career and Technical Ed.	1
Electives <sup>4</sup>	6
<b>Total Credits</b>	<b>20</b>

<sup>1</sup> Courses completed to satisfy this requirement shall include content from among applications of algebra, geometry, personal finance, and probability and statistics in courses that have been approved by the Board of Education.

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

<sup>3</sup> Courses completed to satisfy this requirement shall include one unit of credit in U.S. and Virginia History and one unit of credit in U.S. and Virginia Government in courses approved by the Board.

<sup>4</sup> Courses to satisfy this requirement shall include at least two sequential electives in the same manner required for the Standard Diploma.



## **Declaration of Nondiscrimination**

**No student, employee, or applicant for employment in the Fairfax County Public Schools shall, on the basis of race, color, sex, religion, national origin, marital status, disability, or age (under certain conditions), be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. Compliance is coordinated by the directors of the following: Office of Design and Construction Services (571-423-2280) regarding access to facilities; Office of Equity and Compliance (571-423-3050 or dial 711 for access to Telecommunications Relay Services (TRS)), regarding equal employment opportunity, discrimination, and sexual harassment issues; Due Process and Eligibility (703-317-3000), Department of Special Services, regarding programs and activities for students with disabilities. Correspondence may be addressed to the above offices and sent to 8115 Gatehouse Road, Falls Church, Virginia 22042.**

# FAIRFAX COUNTY PUBLIC SCHOOLS

## Standard Calendar for School Year 2012-13

September 4, 2012	School Begins
October 8	Columbus Day Holiday
November 2	First Grading Period Ends*+
November 5 - 6	Student Holidays
November 21	Students Released 2 Hours Early
November 22 - 23	Thanksgiving Break
December 24 - January 1, 2013	Winter Break
January 21	Martin Luther King, Jr.'s Birthday Holiday
January 25	Second Grading Period Ends*+
January 28 - January 29	Student Holidays
February 18	George Washington's Birthday - Presidents' Day Holiday#
March 25 - 29	Spring Break
April 12	Third Grading Period Ends*+
April 15	Student Holiday#
May 27	Memorial Day Holiday
June 13	Graduation On or After This Date*
June 18	Last Day of School*+ #N

- \* Schools are open.
- + Report cards are provided to parents at the end of each grading period and at the end of the school year.
- # Date subject to change if more than three school days are lost because of inclement weather.
- N Early release on the last official day of school.

# Get Involved!

## AFTER SCHOOL CLUBS AND ACTIVITIES

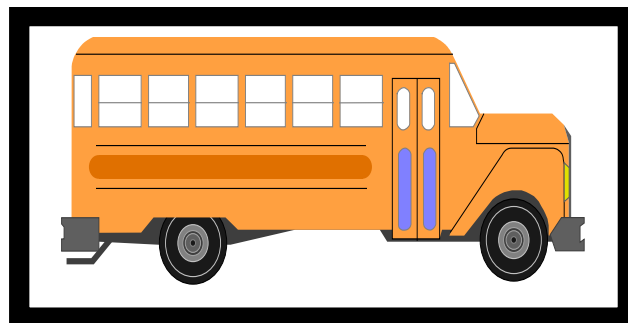
Shortly after the school year begins, after-school clubs and activities will begin meeting. Any child staying after school must have parent permission and must pre-arrange their stay with a club sponsor or teacher.

The list of clubs is subject to change each year based on current student and sponsor interest. Information about clubs will be made available to the students through Blackboard, the morning announcements, and also on the Cafeteria bulletin boards. The following is a sample of last year's activities.

## AFTER SCHOOL CLUBS AND ACTIVITIES 2011-2012

(Contingent on budget constraints)

- Academics
- Anime
- Arts & Crafts
- Astronomy
- Basketball
- Best Buddies
- Carson Chronicle
- Chess
- College Partnership
- Cookie Jar Mystery
- Dance Team
- Debate
- Fitness
- Food & Fitness
- Garden Club
- Girl Power
- Going Green
- Jazz Ensemble
- Literary Magazine
- Math Counts
- Model UN
- Origami
- Peer Tutoring
- Photography
- Ping Pong
- SCA
- Science Bowl
- Science Olympiad
- Soccer
- Socks Appeal
- Spelling Bee
- Step Team
- TARC
- Technology Student Association
- We the People
- Wii
- Yearbook



## Late Buses

# *Time Management Schedule*

<i>Time</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>	<i>Sunday</i>
<i>7:00 am</i>							
<i>8:00 am</i>							
<i>9:00 am</i>							
<i>10:00 am</i>							
<i>11:00 am</i>							
<i>12:00 pm</i>							
<i>1:00 pm</i>							
<i>2:00 pm</i>							
<i>3:00 pm</i>							
<i>4:00 pm</i>							
<i>5:00 pm</i>							
<i>6:00 pm</i>							
<i>7:00 pm</i>							
<i>8:00 pm</i>							
<i>9:00 pm</i>							
<i>10:00 pm</i>							
<i>11:00 pm</i>							

# NOTES