## (Fif) <br> Flint Hill School

Middle School Program Guide 2017-2018


Table of Contents
Mission, Vision and Core Values ..... 2
General Program Specifications ..... 3
Grade 5 ..... 6
Grade 6 ..... 10
Grade 7 ..... 14
Grade 8 ..... 22
Athletic Program ..... 30
Theater. ..... 31
Student Activities ..... 32
Student Support ..... 33
Advisory Program. ..... 35
The Learning Center ..... 35

# Mission, Vision and Core Values 

## Our Mission

A Flint Hill education focuses on the learner. Within a context of strong relationships, we create developmental experiences that embrace the best practices of traditional and contemporary education. Through continuous growth, we actively and thoughtfully implement the ideas and resources that help each student investigate, create and communicate collaboratively and effectively in a rapidly changing, interconnected world.

## Our Vision for Every Student

Take meaningful risks. Be yourself. Make a difference.

## Our Core Values

- Respect
- Responsibility
- Honesty
- Compassion


## Middle School Social Contract

During the first few weeks of every school year, students participate in a process of creating and refining the essential agreements for our Division. This Social Contract is then signed by all students and adults in the Middle School. For the 2016-2017 school year, our Middle School Social Contract was:

- Learn from mistakes
- Be your best confident self
- Treat others the way you would like to be treated


## General Program Specifications

## Grade 5 Requirements

Language Arts
Social Studies
Math
Science
Spanish (unless there is a language waiver)
Innovation Lab 5
Music
Visual Art
Drama
Physical Education
Wellness

Full Year - meets 4 of 6 days
Full Year - meets 4 of 6 days
Full Year - meets 4 of 6 days
Full Year - meets 4 of 6 days
Full Year - meets 2 of 6 days
Full Year - meets 3 of 6 days
Full Year - meets 3 of 6 days
Semester - meets 2 of 6 days
Semester - meets 2 of 6 days
Full Year - meets 4 of 6 days
Full Year - meets 1 of 6 days

- Additional electives will be available each fall, winter, and spring during the academic day. Options will vary, but may include: Certamen, French, Leadership, Creative Writing, Art, Spanish, Music and Drama.


## Grade 6 Requirements

Language Arts
Social Studies
Math
Physical Science
Spanish (unless there is a language waiver)
Innovation Lab 6
Music
Visual Art
Drama
Physical Education
Wellness

Full Year - meets 4 of 6 days
Full Year - meets 4 of 6 days
Full Year - meets 4 of 6 days
Full Year - meets 4 of 6 days
Full Year - meets 2 of 6 days
Full Year - meets 3 of 6 days
Full Year - meets 3 of 6 days
Semester - meets 2 of 6 days
Semester - meets 2 of 6 days
Full Year - meets 4 of 6 days
Full Year - meets 1 of 6 days

- Additional electives will be available each fall, winter, and spring during the academic day. Options will vary, but may include: Certamen, French, Leadership, Creative Writing, Art, Spanish, Music and Drama.


## Grade 7 Requirements

English: English 7 or English 7 Honors
Social Studies: Themes in United States History
Math: Foundations in Pre-Algebra, Pre-Algebra, Pre-Algebra Honors, Algebra I Honors

- Placement depends on each student's appropriate level of ability.

Science: Earth and Space Science
Language: French, Latin, or Spanish

- One language is required; two courses are possible if a student's schedule allows.
- Multiple levels are available. Appropriate placement depends on each student's relative level of ability.

Fine Arts: Visual Arts, Theater Arts, Music

- Students must choose one; two courses are possible if a student's schedule allows

Electives: Computer Science (Coding), Makers, Robotics, MathCounts, Creative Writing / Journalism, Certamen, Learning Center, a second language course, a second Fine Arts course, or Study Hall

Athletics: One sport per season

- Practices are held after classes and until 3:30 p.m. each day, except B-days; away games may run a bit longer.


## Grade 8 Requirements

## English: English 8 or English 8 Honors

## Social Studies: World Cultures

Math: Foundations in Algebra, Algebra I, Algebra I Honors, Geometry Honors

- Placement depends on each student's appropriate level of ability.

Science: Life and Environmental Science
Language: French, Latin, or Spanish

- One language is required; two courses are possible if a student's schedule allows
- Multiple levels are available. Appropriate placement depends on each student's relative level of ability.

Fine Arts: Visual Arts, Theater Arts, Music

- Students must choose one; two courses are possible if a student's schedule allows

Electives: Computer Science (Coding), Makers, Robotics, MathCounts, Creative Writing / Journalism, Certamen, Learning Center, a second language course, a second Fine Arts course, or Study Hall

Athletics: One sport per season

- Practices are held after classes until 3:30 p.m. each day, except B-days; away games may run a bit longer.

Inspiration: All students must present an Inspiration Speech by the end of Grade 8.
Service: All students must complete 10 hours of service by the end of Grade 8 .

## Grade 5

## Language Arts 5

Through structured mini-lessons and individual conferences, students build strength as readers and writers in a variety of genres, including narrative, poetry and expository texts. Students practice their reading, writing, speaking and critical thinking skills, while also honing their understanding and use of English conventions such as grammar, mechanics and vocabulary development. Students build reading skills through wide independent reading, close reading of shared class texts and discussions and activities related to rich texts. The syllabus encourages students to think critically and make connections across a wide range of texts and disciplines.

## Social Studies 5

This course introduces students to the beginnings of the human story. Using the lens of a social scientist, students explore the great early civilizations to identify the cultural universals and discover the secrets of ancient cultures that continue to influence the modern world. Through hands-on activities, students learn about early humans and the rise of civilization, ancient Egypt and the Middle East, and ancient India, focusing on the development of systems of government, social structure, art, and technology. Students are encouraged to make connections with their own lives and learn to examine choices made by early people related to their unique challenges while mastering social studies standards.

## Mathematics 5

The beginning of the year in Mathematics 5 is devoted to reviewing Grade 4 computational skills across all operations, with a goal towards fluency and accuracy. Through the use of manipulatives, guided discoveries, and group discussions, students explore properties of numbers, operations with whole numbers, and the structure of place value, continuing to build their conceptual sense of number. Students strengthen their understanding of multiplication and division, by developing a variety of multiplication and division strategies. They learn the relationships between fractions, decimals and percents and develop strategies for adding and subtracting fractions and decimals. They further develop their understanding of two-dimensional shapes, find the measure of angles of polygons, determine the volume of three-dimensional shapes and work with area and perimeter. They describe major features in a set of data, represent in a line plot or bar graph and use medians or fractional parts of the data. They draw conclusions about how groups compare based on summarizing the data, conducting experiments and considering the notion of fairness in the context of probability. They investigate situations in which two quantities change in relation to each other. They describe data about functional relationships, develop an overall sense of change from a graph and understand the relationships between the changes and totals. They compare two linear functions with different rates of change.

## Mathematics 5 - Accelerated

This course follows the Mathematics 5 topics, with deeper content and several extension topics that feature more student-centered pacing. Students strengthen their understanding of the computational strategies they use for multiplication, and use representations and story contexts to
connect these strategies to the meaning of multiplication. Students continue to learn ways to solve division problems fluently and extend their knowledge of the base-10 number system, working with numbers in the hundred thousands and beyond. Students learn the relationships among fractions, decimals and percents, and develop strategies for adding and subtracting fractions and decimals. Students further develop their understanding of the attributes of two-dimensional shapes, find the measure of angles of polygons, determine the volume of three-dimensional shapes and work with area and perimeter. They also deepen their understanding of the relationship between volume and the linear dimensions of length, width and height. Students describe major features of a set of data, represented in a line plot or bar graph, and quantify the description by using medians or fractional parts of the data. Students draw conclusions about how two groups compare based on summarizing the data for each group. They conduct their own data experiment. Students also look at the probability of various events. They conduct experiments and consider the notion of fairness in the context of probability. Students investigate situations in which two quantities change in relation to each other. They describe data about functional relationships, develop an overall sense of change from a graph and understand how the changes and totals are related. They also compare two linear functions with different rates of change. Students are expected to make connections to previous skills and other content areas and extend and apply their understanding of topics to new scenarios. This course would make significant use of investigation and discovery-based learning.

## Science 5

In this course, topics from life, earth and the physical sciences are introduced to develop scientific reasoning. Students learn about ecosystems, the movement of matter and energy, and changes in ecosystems over time. They understand that the Earth is composed of four interacting systems, learn to describe important interactions between and among those systems, and investigate the impact of human activity on these systems. Matter is introduced in terms of particles, and students examine its properties and the changes matter undergoes. Students also acquire an overarching understanding of gravity and the five patterns caused by gravity. This course emphasizes hands-on activities, science literacy, math integration and cooperative learning. The focus is on understanding the scientific concepts and applying them to engineering challenges. Students are taught to analyze data and use inquiry skills that are essential for investigating the natural world.

## Spanish 5

Students learn thematic vocabulary and conversational patterns to promote speaking and basic writing skills on everyday familiar topics. They also learn about traditions and cultural practices of countries where Spanish is spoken. Interactive teaching strategies are used to reinforce language patterns and promote communication. Students demonstrate their learning with final projects on topics related to personal information, the classroom, home and family.

## Innovation Lab 5

In this foundational class, students learn the basics of computer programming, engineering, making and design thinking, which are the building blocks of future study in Innovation courses at Flint Hill School. In addition, students learn to use the resources available to them to make connections with their personal, social and academic realms, all while being ethical and
responsible users and producers of information within a 1 -to-1 environment. This course is graded on a Pass/Fail basis.

## Art 5

In this semester-long course, students take new developmental steps in appreciating the joy of self-expression and also in becoming visually literate. Projects are designed to increase the sophistication of problem solving to include multi-level concept and media synthesis and to begin articulating their choices with an expanding vocabulary. Students also examine connections with artists in other cultures and/or times in order to recognize the constants in art and to appreciate the developments, as well. Specific projects introduced are basket weaving, mural contour drawing, design (including color theory), drawing (self-portrait, still life, and landscape), collage, ceramics, painting, calligraphy, printing, and low-relief sculpture (repousse).

## Band 5

This year-long ensemble course is designed to provide young musicians with their first experiences playing a band musical instrument. The course is designed to provide a structured, musical environment in which students learn the rudiments of playing a musical instrument. By the end of the year, students are capable of producing an instrument- appropriate sound, and possess ensemble skills and age appropriate technique. Students are well on their way to a life-long appreciation for music by the end of this course. The Grades 5 and 6 Band performs at the Winter Concert and the Spring Concert.

## Chorus 5

Students from grades 5 and 6 learn all aspects of choral performance in preparation for the annual winter and spring performances. In support of this, the choir spends a significant percentage of its time on vocal exercise and sound creation. The basic elements of sight-singing, music theory, and complex part-singing are introduced throughout the year.

In the spring, students learn a major choral work in detail, focusing not only on the musical elements, but the extra-musical elements, as well. If and when opportunities arise to take part in community productions, members of this group are encouraged to audition. No previous singing experience is required.

## Drama 5

This semester-long course introduces students to the basic vocabulary of theater and the fundamental tools and techniques involved in preparing a performance. Through exercises, improvisation, rehearsal, and performance, students learn to use their bodies, voices, and imaginations to make artistic choices, communicate ideas, think critically, and work collaboratively.

## Orchestra 5

This course offers students four instrument choices in their exploration of string instrumental music: violin, viola, cello, and bass. At the beginning of the school year, the instructor helps students select an appropriate instrument. An instrumental selection day is set up at the beginning of each school year to allow students to try out these different instruments. Once the
instrument is chosen and classes begin, students are taught the rudiments and technique of their chosen instruments. In order to prepare them for more advanced ensemble work, students are taught group ensemble skills and learn how to play together more effectively. They learn the skills needed for demonstrating basic technique on their chosen instrument, note reading, and basic rhythmic counting. The Grades 5 and 6 Orchestra presents two required concerts during the year, during which they perform several selections that demonstrate what they have learned.

## Percussion Ensemble 5

The objective of this course is to introduce students from grades 5 and 6 to the fundamentals of percussion and rhythm. Each student is introduced to basic instruments of the percussion family, such as snare drum, bass drum, and cymbals, and are taught the concepts and techniques necessary to perform on those instruments. Students are introduced to experiences that emphasize learning by doing, modeling, discovering, and listening. Specifically, students learn appropriate playing positions, grip, hand-eye coordination, and the identification of musical notation. Students are evaluated on preparedness, weekly parent signed practice sheets and classroom and public performances.

## Physical Education 5

Students experience in-depth instruction in a combination of team, individual sports, and recreational activities. Each unit applies a specific set of skills including hand-eye or foot-eye coordination, striking an object, dodging, fleeing, moving into open space, body control or other movement skills, as well as sportsmanship and fitness. Students learn more advanced tactics, positional play, and rules of the games, and develop defensive and offensive strategies of each sport.

## Wellness 5

Wellness is the integration of the positive aspects of physical, social, and emotional development throughout life. Life skills are the decisions and actions that individuals take because they promote wellness. The Wellness and Life Skills program contains two core elements. The first element is the teaching of developmentally-appropriate health education. The second element is to provide students with the opportunity to develop critical thinking and problem solving skills so that they can then make choices that promote wellness.

In this course, students build upon some of the issues touched upon in Grade 4, such as relational aggression and learning about empathy, through group dialogue and role-playing activities. Students also learn about identifying and expressing emotions - from the perspective of self and other - and the identify and discuss the qualities of genuine friendship and healthy human relationships. Students also spend some time examining the dangers of tobacco use.

## Grade 6

## Language Arts 6

This program nurtures creativity and expression while focusing on the student's ability to think and communicate thoughtfully and fluently. Through a workshop model of instruction, students work to learn and improve in all elements of writing and reading. As writers, students review and build grammar, usage and mechanics skills as well as vocabulary development. As readers, students enhance their comprehension skills through wide independent reading, close study of selected texts and a range of nonfiction resources. They learn to conduct research in primary and secondary ways, write for an authentic audience and make informed decisions as communicators. Collaborative learning activities are applied through the use of technology, art and drama in an integrated manner.

## Social Studies 6

This course expands upon the concepts and skills that students were introduced to in 5 th grade. Students will continue to hone their skills as social scientists through the exploration of the ancient civilizations of China, Greece, and Rome. They learn to identify the cultural universals and discover the secrets of ancient cultures that continue to influence the modern world. Through hands-on activities, students learn about early civilization's government, social structure, art and technology. Students are encouraged to make connections with their own lives and learn to examine choices made by early people related to their unique challenges while mastering social studies standards.

## Mathematics 6

Students develop and apply a variety of strategies for solving problems including building models, recognizing and generalizing patterns, making tables, drawing diagrams and graphs, using equations and solving simpler problems. They apply all operations on fractions and decimals fluently and use the appropriate operation to solve problems. They learn to distinguish between fractions as numbers and ratios as comparisons, and to solve problems in various contexts using ratios, scaling, equivalent ratios, rates, percents and absolute value. They deepen their understanding of area and perimeter of polygons as well as surface area and volume of prisms. They begin to explore various aspects of algebra, including variables, expressions, inequalities and algebraic equations, and they interpret and evaluate expressions and solve linear equations. They pose questions, collect data, perform analysis of data distributions, including shape, measures of center (mean, median, mode) and variability (range, interquartile range mean absolute deviation).

## Mathematics 6 - Accelerated

This course follows the Mathematics 6 topics, with several extension topics, deeper content and several extension topics that feature more student-centered pacing. Students make estimates, use benchmarks, check for reasonableness of answers and learn to recognize when to use an estimate and when an exact solution is necessary. In doing so, they develop and apply a variety of strategies for solving problems including building models, recognizing and generalizing patterns, making lists and tables, drawing diagrams and graphs, using equations and solving simpler problems. Students learn to apply all four arithmetic operations on fractions and decimals
fluently and recognize when addition, subtraction, multiplication or division is the appropriate operation to solve a problem. Students learn to distinguish between fractions as numbers and ratios as comparisons, and solve problems in various contexts using ratios, scaling, equivalent ratios, rates, percents, absolute value and unit rates. Students learn to pose questions, collect data, analyze and interpret data distributions. Students also deepen their understanding of area and perimeter of various polygons and surface area and volume of rectangular prisms, including the use of formulas. Students also begin to explore various aspects of algebra, including variables, expressions, inequalities and algebraic equations, and they interpret and evaluate expressions and solve linear equations in a variety of ways. They also perform analysis of data distributions, including shape, measures of center (mean, median, mode) and variability (range, interquartile range, mean absolute deviation). Students are expected to make connections to previous skills and other content area and extend and apply understanding of topics to new scenarios. This course would make significant use of investigation and discovery-based learning.

## Science 6 - Physical Science

This course builds on the science literacy, math integration and cooperative learning emphasized in Grade 5 to allow students to explain phenomena central to the physical sciences. The course revolves around three main themes: the structure and properties of matter and chemical reactions, how objects move and the characteristic properties and behaviors of waves when the waves interact with matter. The Engineering Process is implemented as scientific concepts students learn are applied in hands-on projects, such as the designing and building of roller coasters, wind powered cars, water rockets and musical instruments to gain a deeper understanding of the material. This course emphasizes analysis and problem solving.

## Spanish 6

Students continue to expand their vocabulary base and build a strong foundation in basic linguistic structures that include expressing likes and dislikes and asking for and providing information. Students develop oral and written skills while working with language in thematic contexts that include an exchange letter to describe oneself, descriptions of friends for a mini-yearbook of people in the class, and life at school. They also learn about traditions and cultural practices of countries where Spanish is spoken. A variety of interactive teaching strategies reinforce language patterns and promote communication.

## Innovation Lab 6

Building on the skill progression from STEM 5, students will further their foundation in digital citizenship and innovation. As they engage in interdisciplinary problem solving and short- and long-term projects of increasing complexity and depth, students develop skills in critical thinking, creativity, collaboration, research, and communication. Students are encouraged to tinker, experiment, and create using the power of digital design and fabrication, electronics, physical computing, engineering, and creative coding. This course is graded on a Pass/Fail basis.

## Art 6

In this semester course, students are challenged to explore the use of art as a vehicle of communication. Various media are used in familiar and new ways to solve project assignments. With an expanding understanding of two-dimensional and three-dimensional design concepts,
students analyze how their intentional choices influence the content and effect of their artwork. Comparing their choices with artists from other time periods and places invites a sense of relevance and connection. Specific projects include contour and gesture drawing (self-portrait, still life, and landscape), painting, sculpture, relief printing, design, ceramics, ink painting, and fiber art.

## Band 6

This year-long ensemble class expands upon and develop the skills acquired in the 5th grade.. Students begin studies in tone development, technical facility, rhythm, and musicality; these skills allow the band to begin studying meaningful and age-appropriate band repertoire. At the conclusion of the the course, students are capable of playing major scales through four sharps and flats, have at least an octave-and-one-half register, have confidence in performing in a wide variety of meters and rhythmic schemes, and have the technical proficiency to join the Advanced Band. The Grades 5 and 6 Band performs at the Winter Concert and Spring Concert. In addition, 6th grade students have opportunities to perform with the Advanced Band, based on audition and ability.

## Chorus 6

The goal at this level is to enhance some of the skills introduced in Grade 5 and to develop them more fully in each student. Students continue to work on the basic elements of sight-singing, music theory, and complex part-singing throughout the year. Students finish all the basic intervocalic relationships and start to explore modes. In the spring, students learn a major choral work in detail, focusing not only on the musical elements but the extra-musical elements as well. If and when opportunities arise to take part in community production, members of this group are encouraged to audition.

## Drama 6

In this semester-long course, students are encouraged to view drama, and all the arts, as windows through which we learn about people, cultures, and history. Students come to understand and appreciate the ways in which drama illuminates the universal human condition and conveys the values and traditions of specific cultures. All units have components of analysis, discussion, playwriting, rehearsal, and performance. Students write, direct, and perform short one-act plays. In conjunction with the Social Studies program, students explore classical Greek theater, its impact on contemporary theater. and relevance to today's world.

## Orchestra 6

This course teaches students more complex rhythms, note reading, and a wider range of techniques to guide them in the orchestra experience as students continue from grade 5 to 6 .. Additional time is spent helping students develop a more mature sound, through right arm bowing techniques and left hand intonation work. The course begins to use scales and exercises that expand students' knowledge of their instruments. In addition, the orchestra focuses on developing individual instrument skills. The Grades 5 and 6 Orchestra performs in two required concerts during the year.

## Percussion Ensemble 6

Students continue to develop solid fundamentals of hand coordination and dexterity begun in the ensemble during 5th grade. They not only learn new rhythms, but also how to dissect and sub-divide these rhythms. Students are introduced to melodic percussion: orchestra bells, marimba, xylophone, chimes, and timpani. Each student is introduced to a broader range of instruments and music theory. Specifically, students are introduced to the melodic instruments of the percussion family and increase their rhythmic and technical vocabulary to accomplish rolls, scales, and rudiments. Students are evaluated on preparedness, weekly parent-signed practice sheets, and classroom and public performances.

## Physical Education 6

At this level, sport-specific skills are reinforced and refined through the use of small group and partner work, lead-up games, and repetitive drills in modified as well as regulation game play. Positional and tactical play are emphasized while still focusing on the development of individual skills. Primary focus is on developing skills, tactics, and confidence to promote a smooth transition into the Middle School Athletic Program in Grades 7 and 8.

## Wellness 6

Wellness is the integration of the positive aspects of physical, social, and emotional development throughout life. Life skills are the decisions and actions that individuals take because they promote wellness. The Wellness and Life Skills program contains two core elements. The first element is the teaching of developmentally-appropriate health education. The second element is to provide students with the opportunity to develop critical thinking and problem solving skills so that they can then make choices that promote wellness.

At this level, students continue to explore relational aggression, how it affects oneself and others, and strategies for preventing or stopping such negative behavior. They also learn more about self-concept, and the factors that influence it, and they examine additional strategies for effective interpersonal communication. Students consider how to recognize their own emotions and how to express their feelings in healthy ways, as well as how to cope with stress and other emotions. They also learn and practice refusal skills for saying no to drugs and alcohol. Finally, students explore the social, emotional, and physical changes associated with puberty.

## Grade 7

## English 7

The goal of this course is to nurture a love for the English language while developing in each student an identity as a reader and a writer through the exploration of many genres. Students are encouraged and expected to make assertions on their own and reinforce those claims with textual support. Students also learn to make connections between and among various literary works. Through structured mini-lessons and individual conferences, students build strength as writers in a range of genres including free verse poetry, memoir, short story, and the expository essay. This course explores fluency in a variety of expressive modes with an integrated study of vocabulary and grammar. As readers, students participate in roundtable discussions about various features of literature, share independently-selected texts through group discussion, and write frequently about their books.

## English 7 Honors

This critical thinking course is designed for students with a particular passion or talent for English. The course is typically fast-paced with high expectations. The goal is to develop, in each student, an identity as a reader and a writer, through the exploration of many genres. Through structured mini-lessons and individual conferences, students build strength as writers in a range of genres including free verse poetry, memoir, short story, and the expository essay. Students are encouraged and expected to make assertions on their own and support those claims with textual support. As readers, students participate in roundtable discussion about various features of literature, share independently selected texts through group discussion, and write frequently about their books. Students also learn to make connections between and among various literary works. Students explore fluency in a variety of expressive modes with an integrated study of vocabulary and grammar.

## Introduction to Creative Writing and Journalism

Have you ever wondered how to tell a story or write a poem that will entertain or move another person? Have you considered how a reporter crafts a compelling news story? The aim of this semester-length course is to expose students to different modes of creative and journalistic writing, and introduce the basic techniques needed to write effective short stories, poems, news features and opinions articles. Students read examples of all these forms, discuss the challenges of each form, then try their hands at a variety of pieces. Students read commentary about writing by renowned creative writers and journalists, and discuss what it means to be a professional writer. Students produce a portfolio of selected and revised writings as the culminating project for the course. This course is graded on a Pass/Fail basis.

## Themes in United States History

This course begins with the debate over the framing of the new Constitution (just after the Revolutionary War) and continues up to the present day. Students examine the development of the United States from its overthrow of the British monarchy to its emergence as a global superpower at the turn of the century, through the struggles of the Civil Rights movement and with the Soviet Union during the Cold War. The course focuses particularly upon key essential questions, such as: What is Democracy? What is justice? What is the role of government? What
is the role of the U.S. in the world? What are individual rights vs. 'the collective' rights? Current events are incorporated as an essential element in understanding all eras and time periods in history, including the present day.

## Foundations in Pre-Algebra

This course reviews material from previous math classes and prepares students for the rigors of future math classes. New topics that students explore include: proportions, ratios and rational numbers. This course is designed to create a connection among mathematical ideas and to reinforce foundational concepts and number sense.

## Pre-Algebra

This course prepares students for the rigors of Algebra I. Students explore topics such as proportions, ratios, rational numbers, linear relationships, and data interpretation. This course is designed to create a connection among mathematical ideas. Problem solving and critical thinking are key components of the course.

## Pre-Algebra Honors

This course encompasses the material in Pre-Algebra at a faster pace and goes deeper to more intense levels of problem-solving and mathematical explorations. This course also covers extension topics such as solving multi-step equations, complex fractions, combinations and permutations. This course is designed to reinforce, extend and enrich students' reasoning skills as they explore more abstract and advanced topics.

## Algebra I Honors

The level of understanding and depth expected in Algebra I Honors is beyond the scope of Algebra I. More topics are covered, content is more rigorous, and students are expected to conduct more independent discovery and investigative work. Additional topics are integrated into the Algebra I curriculum in order to deepen students understanding. Some of the topics include: inverse variation, compound inequalities, systems of equations with three or more unknowns, multiplying polynomials (past monomials and binomials) and introduction to solving quadratics. Students enrolling in Algebra I Honors are expected to have a strong foundation in pre-algebra skills and number sense as there is less time spent reviewing these critical skills.

## MathCounts and Enrichment

MathCounts is a national enrichment club and competition program promotes Middle School mathematics achievement through a fun and challenging math program. Mathcounts inspires excellence, confidence and curiosity, as well as critical thinking and problem solving skills. Students work beyond MathCounts and look at various contests, enrichment content and activities. This course is graded on a Pass/Fail basis.

## Science 7 - Earth and Space Science

The year begins with a focus on the properties of matter which are used as the foundation for explaining the structure of the Earth and its internal layers. Students then explore changes on Earth, both at the surface level (the rock cycle, weathering, erosion, and deposition) and below (plate tectonics and accompanying earthquakes and volcanoes). The earlier study of physical
properties is revisited during a unit on weather and climate. The year ends with students learning about the relationship between Earth, the sun, and the moon before moving to the rest of the solar system and other stars and galaxies in our universe.

## French 1 - Part 1

In this introductory course, students cover several theme-based units that enable them to communicate about themselves and to exchange information on a variety of topics. These units provide an interactive and systematic approach to acquiring grammatical structures, appropriate vocabulary, and cultural information about the French-speaking world. The emphasis is to build comprehension from audio, video, and print sources, and spoken and written communication skills relating to classroom topics and interactions. All activities are designed to encourage students to use the language creatively and independently. Topics include friends and family; school and daily routines; sports and leisure activities; home and mealtimes; clothes and possessions.

## French 1 - Part 2

This course is fundamentally a review and completion of the work begun in French 1 - Part I. The interactive nature of the course encourages students to communicate in French by conversing with each other, expressing themselves both orally and in writing, and reading and understanding French in a variety of print and online sources. The primary goals are to build a strong extensive vocabulary as well as mastering basic grammar and syntax for the present and past tenses. An additional goal is to teach students how to communicate in a foreign language without focusing on word-for-word translation. To accomplish this goal, the target language is used in the classroom for most interactions. Thematic topics familiar to the student include daily interactions relating to school, family, sports, and leisure time activities.

## Latin 1 - Part 1

This course is the first part of a two-year course, equivalent to the traditional first year of Latin. The groundwork is laid for all future grammatical study and students begin to acquire a solid foundational vocabulary. A strong emphasis is placed on making connections and comparisons between both grammatical structures and individual words in English and Latin. In addition, students continue their study of Classical mythology and Roman history and culture. All students take the National Latin Exam in the spring as a means of measuring their progress against diverse programs across the country.

## Latin 1 - Part 2

This course is a continuation of Latin $1-$ Part 1. Students complete the traditional first year of Latin. Students deepen their understanding of the grammatical underpinnings of the Latin language by studying increasingly complex vocabulary and syntax, and begin translating longer passages of Latin. In addition, they continue their study of mythology, history, and culture. Students successfully completing this course will be prepared to enter any high school Latin II course. All Latin I students take the National Latin Exam in the spring as a means of measuring their progress against national standards and diverse programs across the country.

## Latin I - Part 2 Honors

The Latin I Honors students cover an expansion of the vocabulary and grammar curriculum of the regular course. In addition, they are expected to read more extensively, recognize grammar constructions in context, master a larger corpus of vocabulary, do more English to Latin drills and writing, and participate in state and national competitions, including JCL conventions and certamen. The course includes a more in-depth study of Roman history, civilization and classical mythology along with an intensive study of grammar, syntax and vocabulary. Translation and reading comprehension skills are developed over the course of the year with sentences of gradually increasing complexity and adapted stories. The study of derivation and word origin through the prescribed vocabulary list and enrichment vocabulary is an important focus of this class as well. All Latin I Honors students take the National Latin Exam and the Classical Association of Virginia Latin Tournament in the spring as a means of measuring their progress against national standards and diverse programs across the country.

## Introduction to Spanish

This course is for students who have had little or no previous exposure to the language. Students cover several theme-based units that enable them to communicate about themselves and to exchange information on a variety of topics. Throughout the course of the year, students learn basic vocabulary, grammar, and language patterns to build communication skills. Brief writing assignments encourage students to use the language independently, while related cultural information provides insight on practices and perspectives of Hispanic communities. Topics generally relate to daily routines and the school day, families, food, and leisure activities. While oral communication dominates classroom interactions, reading and media comprehension, written expression, and cultural information complement the coursework. Students who successfully complete this course may be recommended for Spanish 1 - Part 2 in Middle School (if completed in Grade 7), or Spanish I in Upper School (if completed in Grade 8).

## Spanish 1 - Part 1

This course is for students who have had one or more years of exposure to the language and have knowledge of basic vocabulary, including the alphabet and numbers. Several theme-based units enable students to expand existing vocabulary and grammar skills, and to develop cultural awareness as they work on comprehension, writing, and speaking in the target language. Students participate actively to assimilate new vocabulary and language patterns and then adapt them to communicate about themselves and to exchange information on a variety of topics.
Review and learning of the following topics is also included: greetings and classroom communication; time and calendar; family; leisure activities; familiar foods; the school day and related activities; and clothing.

## Spanish 1 - Part 2

This course is a continuation of the language and culture of the Spanish-speaking world. It is an Upper School-level course for Middle School students. This course emphasizes the four language skills of listening, speaking, reading, and writing in a "communicative approach" to language learning. Students communicate in Spanish by conversing with each other, expressing themselves in writing, and reading and understanding a variety of audio, video, and print materials. Students practice more complex grammatical structures such as commands, the
present and preterite tenses of regular, irregular and reflexive verbs, and object pronouns in conjunction with thematic units familiar to students that include routine and chores; sports; travel and vacation. Additionally, students focus on interpretive skills by listening and deducing without focusing on word-for-word translation.

## Spanish 1 - Part 2 Honors

This is an accelerated course designed for students who have excelled in previous Spanish language studies. These students have also shown the motivation and interest to delve deeper into the material and expand their knowledge of Spanish-speaking cultures. Students communicate in Spanish by conversing with each other, expressing themselves in written and spoken presentations, and by interpreting a variety of audio, video, and print materials. This course covers complex grammatical structures such as the commands, the preterite tense, and reflexive verbs in conjunction with thematic units. Additionally, students learn how to better listen and deduce in a foreign language without focusing on word-for-word translation. Students who successfully complete this course may be recommended for Spanish II Honors in the Upper School.

## Advanced Band

This year-long course is a combined ensemble of students in Grades 7 and 8 who choose to engage in instrumental music with the highest of standards. Students continue to develop their sound and their rhythmic and technical abilities, and also study standard age-appropriate wind repertoire that pushes students to newer and higher musical heights. This is the only Middle School band that travels, and the ensemble performs at the Virginia Band and Orchestra Director's Association District XII Assessment, as well as in other opportunities that arise. In addition, the band performs at the winter and spring concerts.

## Advanced Chorus

This course is open to students in Grades 7 and 8 . Students learn to sing with a free and open tone, read music, and practice good concert deportment. The course emphasizes skills in music theory, sight-reading, and advanced technical proficiency. Music performance provides students with a unique opportunity to express themselves. The course focuses not only on proper singing techniques such as posture and breathing, but also includes the study of the musical styles and periods that are being practiced. Daily classes include extensive warm-ups and voice development exercises. Students have numerous opportunities to perform both in and outside of school. Members of this ensemble have the unique opportunity to take part in district ensemble assessments, and solo competitions. Weekly practice sheets are a requirement, as are performance opportunities that are scheduled throughout the year. Evaluation is based on a rubric system to provide individualized feedback to each student.

## Advanced Orchestra

This course is open to experienced string players in Grades 7 and 8. Instruments include: violin, viola, cello, and bass. Students are introduced to more difficult levels of music through daily ensemble rehearsals and are expected to perform a variety of string ensemble repertoire with expression and technical accuracy. This course emphasizes mastering skills in sight-reading and basic technical proficiency. Weekly practice outside of class is a requirement, as are
performances that are scheduled throughout the year. Students in Advanced Orchestra participate in district level ensemble assessments when possible. Evaluation is based on a rubric system to provide individualized feedback to each student.

## Advanced Percussion

This course is open to experienced percussion students in grades 7 and 8 . Students must demonstrate proficiency on snare drum, bass drum, cymbals, mallets, drum set, and miscellaneous percussion instruments. Students learn to master the rudiments of all percussion instruments and to perform solo and ensemble repertoire with expression and technical accuracy. This course emphasizes skills in music theory, sight-reading, and advanced technical proficiency. Weekly practice sheets are a requirement for this class. Performance opportunities are a requirement of the class and are scheduled throughout the year. Evaluation is based on a rubric system to provide individualized feedback to each student. The primary objective is to provide a stimulating musical environment to cultivate interest in the world of percussion.

## Theater Arts

This year-long course builds on the fundamentals of drama and allows students to pursue their interest in theater at an advanced level. Students have an opportunity to investigate scene study, theater around the world and improvisation. Students conceive and develop ideas that lead to compelling and authentic written and dramatic narratives. In addition, they bolster acting and directing skills in both improvised and scripted scenes. This course is truly designed to provide students with a diverse and lasting experience in theater. This course combines students from Grades 7 and 8 and represents a two-year curriculum in theater arts. Students may take the course in either grade as a stand-alone course; many students entering in Grade 7 take Theater Arts again in Grade 8 to experience the full two-year course progression.

## Visual Arts

This is a studio-based course in which participants complete a series of long-term projects focusing on the development of skills, ideas, and experimental thinking. Through units on design, printmaking, drawing, painting, and ceramics, students are introduced to technical, historical, and aesthetic aspects of art. Students and the instructor investigate work, respond to questions and issues that arise from it, and consider the directions the artist might take. Balance between planning and experimentation is addressed in each project. Throughout the year, students complete daily sketchbook entries and use their sketchbooks as personal diaries. Students participate in numerous group critiques and learn how to assess their own and others' work. Evaluation and individualized feedback are shared with each student throughout the working process. This course combines students from Grades 7 and 8 and represents a two-year curriculum in visual arts. Students may take the course in either grade as a stand-alone course; many students entering in Grade 7 take Visual Arts again in Grade 8 to experience the full two-year course progression.

## Introduction to Programming Concepts

This semester-long course offers hands-on experiences to introduce students to coding. Students will learn visual programming languages (Blockly) using programs, which may include Scratch,

Tynker, Tickle, MIT App Inventor and others. Students will have opportunities to apply their programming skills to drones, smart phones and other programmable devices in order to experience real-world applications. The goal of this course is to generate student enthusiasm and confidence in coding and to enable students to learn fundamental coding concepts such as looping, conditionals, and variables. Additionally, students will learn how to apply design thinking concepts to create programs and they will deepen their problem solving, creativity and collaboration skills. Students do not need any specific course-related prerequisites in order to begin programming. This course is graded on a pass/fail basis.

## Object-Oriented Programming

This semester-long course offers hands-on experiences to further students programming abilities and knowledge. Students will learn object oriented programming languages, which may include Swift, Python, Java and others. Students will apply their programming skills by creating apps, games, etc.. The goal of this course is to generate student enthusiasm and confidence in coding and to enable students to expand on their knowledge of fundamental coding concepts. Additionally, students will learn how to apply design thinking concepts to create programs and they will deepen their problem solving, creativity and collaboration skills through a variety of project-based units. The course covers the foundational skills required to transition into the Upper School Computer Science and Robotics programs, including variables, syntax tools, conditional statements, loops, and flow charting to deconstruct problems and plan out logical solutions. Recommended prerequisites: Introduction to Programming Concepts (Middle School). This course is graded on a pass/fail basis.

## Makers

This semester-long course is a self-directed exploration into the world of creative problem solving and engineering. Students work towards proficiency in additive 3D modeling, subtractive 3D modeling, computer programming, electrical engineering and technical writing. Utilizing design thinking, fast prototyping, collaboration, problem solving, multiple tech tools and careful observation and recording, students complete increasingly difficult challenges that are presented in a rich, storytelling environment. While this is a one semester course, it can be taken multiple times without repetition. This course is graded on a pass/fail basis.

## Introduction to Robotics

In this second semester course, students apply programming skills to create functional robots. Instruction resembles real world programming training: teachers act as mentors and guides, providing students with ample opportunity to test and learn, to collaborate and share, and to create. Instructional time is given in short "chunks," where direct instruction and modeling are interwoven with hands-on learning. Because of the independent nature of the course, students have the option to participate in the course for two or four periods out of the six day cycle. Through the design thinking process, they will collaborate to solve problems in a systematic way to create computing programs. The course covers the foundational skills including variables, syntax tools, conditional statements, loops, and flow charting to deconstruct problems and plan out logical solutions. This course is graded on a pass/fail basis.

## Competition Robotics

In this first semester course, students apply programming skills to create functional robots. We use the Lego MINDSTORMS EV3 platform for research, construction, and programming. Students in this class will enter the First Lego League (FLL) competition as a team. Instruction resembles real world programming training: teachers act as mentors and guides, providing students with ample opportunity to test and learn, to collaborate and share, and to create. Instructional time and modeling are interwoven with hands-on learning. Students are encouraged to collaborate and to work together to solve problems and to use the design thinking process as a systematic way to create computing programs. The course covers the foundational skills required to transition into the Upper School Robotics program, including: variables; syntax tools; conditional statements; loops; and flow charting to deconstruct problems and plan out logical solutions. This course is graded on a pass/fail basis. (Fall Semester . 50 credits)

## Robotics Applications

In this second semester course, students will develop an understanding of robotics' role in the real world through design challenges. The challenges will require planning, construction, and programming experience with the Lego Mindstorms EV3 hardware and software. Students will identify issues in their community that would benefit from the use of robots. They will design, build, and program robots that will provide a solution for the identified issue, thus allowing the students to learn more about how robots benefit the real world. Competition Robotics is a prerequisite for this class. This course is graded on a pass/fail basis. (Spring Semester . 50 credits)

## Grade 8

## English 8

This course focuses on the transitions needed to prepare for Upper School English. To those ends, close attention is given to each student's reading and writing skills. Students learn active and critically-engaged reading of literature, with a focus on decoding and making meaning out of figurative language. They learn composition and revision skills through a variety of essays and other writing assignments. The goal is for each student taking the course to gain courage and confidence in all aspects of English studies.

## English 8 Honors

This critical thinking course is designed for students for whom English is a particular passion or talent. This class is fast-paced with appropriately high expectations. The goal of the course is to develop, in each student, an identity as a reader and a writer, through the exploration of many genres. Students are encouraged and expected to make assertions on their own and support those claims with textual support. Students also learn to make connections between and among various literary works. The course explores fluency in a variety of expressive modes, with an integrated study of vocabulary and grammar.

## Introduction to Creative Writing and Journalism

Have you ever wondered how to tell a story or write a poem that will entertain or move another person? Have you considered how a reporter crafts a compelling news story? The aim of this semester-length course is to expose students to different modes of creative and journalistic writing, and introduce the basic techniques needed to write effective short stories, poems, news features and opinions articles. Students read examples of all these forms, discuss the challenges of each form, then try their hands at a variety of pieces. Students read commentary about writing by renowned creative writers and journalists, and discuss what it means to be a professional writer. Students produce a portfolio of selected and revised writings as the culminating project for the course. This course is graded on a pass/fail basis.

## World Cultures and Geography

This course offers students a global perspective by examining seven cultural regions of the world. In each unit, students explore and analyze the geography, history, religion/ philosophies, values systems, cultural factors, political and economic structures, religion, and the concepts of beauty and art. By the end of the course, students are able to compare these cultural factors with a global perspective. The goal of the course is to prepare students for the ever-growing interdependence of the world in which they will live and work and to help prepare them for their responsibilities as participating citizens of the global society in the 21 st century.

## Foundations in Algebra I

This course extends student knowledge and understanding of the real number system and its properties through the study of variables, expressions, equations, inequalities, and other early Algebra I topics. This course is designed to create a connection among mathematical ideas and to reinforce foundational concepts so that students are prepared for the Algebra I the following year.

## Algebra I

This course is an in depth examination of concepts using a functions approach. Many topics from the Pre-Algebra course are reviewed while examining new topics such as linear functions, inequalities, exponents and exponential functions, quadratic equations and functions, polynomials and factoring, rational expressions and radicals. 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 arithmetic, geometry, and statistics. Graphing calculators are used to explore graphical, numerical, and symbolic relationships.

## Algebra I Honors

The level of understanding and depth expected in Algebra I Honors is beyond the scope of Algebra I. More topics are covered, content is more rigorous, and students are expected to conduct more independent discovery and investigative work. Additional topics are integrated into the Algebra I curriculum in order to deepen students understanding. Some of the topics include: inverse variation, compound inequalities, systems of equations with three or more unknowns, multiplying polynomials (past monomials and binomials) and introduction to solving quadratics. Students enrolling in Algebra I Honors are expected to have a strong foundation in pre-algebra skills and number sense as there is less time spent reviewing these critical skills.

## Geometry Honors

This course develops the deductive thinking skills necessary for mathematical proofs through the study of the postulates and theorems of Euclidean geometry. Logic and analysis, including methods of deductive proof, are stressed in this course. Major topics include: relationships in geometric figures in a plane and in space, congruence, similarities, properties of triangles and polygons, proving parallelograms, parallel and perpendicular lines, planes, circles, area and volume of plane figures and solids, and transformations. Algebraic methods are reviewed and used throughout the course. Algebra 1 Honors is a prerequisite to this course.

## MathCounts and Enrichment

MathCounts is a national enrichment club and competition program promotes Middle School mathematics achievement through a fun and challenging math program. Mathcounts inspires excellence, confidence and curiosity, as well as critical thinking and problem solving skills. Students work beyond MathCounts and look at various contests, enrichment content and activities. This course is graded on a pass/fail basis.

## Science 8 - Life and Environmental Science

This lab-driven course begins by focusing on the structure and function of life. Students build on previously learned information about cells and do hands-on work to study how cells produce energy and how materials move through cells. The spotlight then moves to how cells work together to form organ systems and the way those systems interact in a successful organism; the
forensic dissection of a necturus is a centerpiece in this unit. For the second semester, students move into the world of genetics and learn how traits are passed from parents to offspring, with special attention given to real-world scenarios including coat color in dogs and blood type in humans. Finally, the year concludes with studying how living organisms survive in their environments, how they are dependent on their environmental interactions with other living and nonliving factors, and how those factors impact their success on Earth.

## French 1 - Part 1

In this introductory course, students cover several theme-based units that enable them to communicate about themselves and to exchange information on a variety of topics. These units provide an interactive and systematic approach to acquiring grammatical structures, appropriate vocabulary, and cultural information about the French-speaking world. The emphasis is to build comprehension from audio, video, and print sources, and spoken and written communication skills relating to classroom topics and interactions. All activities are designed to encourage students to use the language creatively and independently. Topics include friends and family; school and daily routines; sports and leisure activities; home and mealtimes; clothes and possessions.

## French 1 - Part 2

This course is fundamentally a review and completion of the work begun in French 1 - Part I. The interactive nature of the course encourages students to communicate in French by conversing with each other, expressing themselves both orally and in writing, and reading and understanding French in a variety of print and online sources. The primary goals are to build a strong extensive vocabulary as well as mastering basic grammar and syntax for the present and past tenses. An additional goal is to teach students how to communicate in a foreign language without focusing on word-for-word translation. To accomplish this goal, the target language is used in the classroom for most interactions. Thematic topics familiar to the student include daily interactions relating to school, family, sports, and leisure time activities. On the completion of the Level I Part 2 courses, students are recommended for Level II or Level II Honors courses in the Upper School.

## Latin 1 - Part 1

This course is the first part of a two-year course, equivalent to the traditional first year of Latin. The groundwork is laid for all future grammatical study and students begin to acquire a solid foundational vocabulary. A strong emphasis is placed on making connections and comparisons between both grammatical structures and individual words in English and Latin. In addition, students continue their study of Classical mythology and Roman history and culture. All students take the National Latin Exam in the spring as a means of measuring their progress against diverse programs across the country.

## Latin 1 - Part 2

This course is a continuation of Latin $1-$ Part 1. Students complete the traditional first year of Latin. Students deepen their understanding of the grammatical underpinnings of the Latin language by studying increasingly complex vocabulary and syntax, and begin translating longer passages of Latin. In addition, they continue their study of mythology, history, and culture.

Students successfully completing this course will be prepared to enter any high school Latin II course. All Latin I students take the National Latin Exam in the spring as a means of measuring their progress against national standards and diverse programs across the country.

## Latin I - Part 2 Honors

The Latin I Honors students cover an expansion of the vocabulary and grammar curriculum of the regular course. In addition, they are expected to read more extensively, recognize grammar constructions in context, master a larger corpus of vocabulary, do more English to Latin drills and writing, and participate in state and national competitions, including JCL conventions and certamen. The course includes a more in-depth study of Roman history, civilization and classical mythology along with an intensive study of grammar, syntax and vocabulary. Translation and reading comprehension skills are developed over the course of the year with sentences of gradually increasing complexity and adapted stories. The study of derivation and word origin through the prescribed vocabulary list and enrichment vocabulary is an important focus of this class as well. All Latin I Honors students take the National Latin Exam and the Classical Association of Virginia Latin Tournament in the spring as a means of measuring their progress against national standards and diverse programs across the country.

## Introduction to Spanish

This course is for students who have had little or no previous exposure to the language. Students cover several theme-based units that enable them to communicate about themselves and to exchange information on a variety of topics. Throughout the course of the year, students learn basic vocabulary, grammar, and language patterns to build communication skills. Brief writing assignments encourage students to use the language independently, while related cultural information provides insight on practices and perspectives of Hispanic communities. Topics generally relate to daily routines and the school day, families, sports, and leisure activities. While oral communication dominates classroom interactions, reading and media comprehension, written expression, and cultural information complement the coursework. Students who successfully complete this course may be recommended for Spanish 1 - Part 2 in Middle School (if completed in Grade 7), or Spanish I in Upper School (if completed in Grade 8).

## Spanish 1 - Part 1

This course is for students who have had one or more years of exposure to the language and have knowledge of basic vocabulary, including the alphabet and numbers. Several theme-based units enable students to expand existing vocabulary and grammar skills, and to develop cultural awareness as they work on comprehension, writing, and speaking in the target language. Students participate actively to assimilate new vocabulary and language patterns and then adapt them to communicate about themselves and to exchange information on a variety of topics. Review and learning of the following topics is also included: greetings and classroom communication; time and calendar; animals; familiar foods; the school day and related activities; and clothing.

## Spanish 1 - Part 2

This course is a continuation of the language and culture of the Spanish-speaking world. It is an Upper School-level course for Middle School students. This course emphasizes the four
language skills of listening, speaking, reading, and writing in a "communicative approach" to language learning. Students communicate in Spanish by conversing with each other, expressing themselves in writing, and reading and understanding a variety of audio, video, and print materials. Students practice more complex grammatical structures such as commands, the present and preterite tenses of regular, irregular and reflexive verbs, and object pronouns in conjunction with thematic units familiar to students that include routine and chores; sports; travel and vacation. Additionally, students focus on interpretive skills by listening and deducing without focusing on word-for-word translation. On the completion of the Level I Part 2 courses, students are recommended for Level II or Level II Honors courses in the Upper School.

## Spanish 1 - Part 2 Honors

This is an accelerated course designed for students who have excelled in previous Spanish language studies. These students have also shown the motivation and interest to delve deeper into the material and expand their knowledge of Spanish-speaking cultures. Students communicate in Spanish by conversing with each other, expressing themselves in written and spoken presentations, and by interpreting a variety of audio, video, and print materials. This course covers complex grammatical structures such as the commands, the preterite tense, and reflexive verbs in conjunction with thematic units. Additionally, students learn how to better listen and deduce in a foreign language without focusing on word-for-word translation. Students who successfully complete this course may be recommended for Spanish II Honors in the Upper School.

## Advanced Band

This year-long course is a combined ensemble of students in Grades 7 and 8 who choose to engage in instrumental music with the highest of standards. Students continue to develop their sound and their rhythmic and technical abilities, and also study standard age-appropriate wind repertoire that pushes students to newer and higher musical heights. This is the only Middle School band that travels, and the ensemble performs at the Virginia Band and Orchestra Director's Association District XII Assessment. In addition, the band performs at the winter and spring concerts.

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This course is open to students in Grades 7 and 8 . Students learn to sing with a free and open tone, read music, and practice good concert deportment. The course emphasizes skills in music theory, sight-reading, and advanced technical proficiency. Music performance provides students with a unique opportunity to express themselves. The course focuses not only on proper singing techniques such as posture and breathing, but also includes the study of the musical styles and periods that are being practiced. Daily classes include extensive warm-ups and voice development exercises. Students have numerous opportunities to perform both in and outside of school. Members of this ensemble have the unique opportunity to take part in local festivals and solo competitions. Weekly practice sheets are a requirement, as are performance opportunities that are scheduled throughout the year. Evaluation is based on a rubric system to provide individualized feedback to each student.

## Advanced Orchestra

This course is open to experienced string players in Grade 7 and 8. Instruments include: violin, viola, cello, and bass. Students are introduced to more difficult levels of music through daily ensemble rehearsals and are expected to perform a variety of string ensemble repertoire with expression and technical accuracy. This course emphasizes mastering skills in sight-reading and basic technical proficiency. Weekly practice outside of class is a requirement, as are performances that are scheduled throughout the year. Evaluation is based on a rubric system to provide individualized feedback to each student.

## Advanced Percussion

This course is open to experienced percussion students in grades 7 or 8 . Students must demonstrate proficiency on snare drum, bass drum, cymbals, mallets, drum set, and miscellaneous percussion instruments. Students learn to master the rudiments of all percussion instruments and to perform solo and ensemble repertoire with expression and technical accuracy. This course emphasizes skills in music theory, sight-reading, and advanced technical proficiency. Weekly practice sheets are a requirement for this class. Performance opportunities are a requirement of the class and are scheduled throughout the year. Evaluation is based on a rubric system to provide individualized feedback to each student. The primary objective is to provide a stimulating musical environment to cultivate interest in the world of percussion.

## Theater Arts

This year-long course builds on the fundamentals of drama and allows students to pursue their interest in theater at an advanced level. Students have an opportunity to investigate scene study, theater around the world and improvisation. Students conceive and develop ideas that lead to compelling and authentic written and dramatic narratives. In addition, they bolster acting and directing skills in both improvised and scripted scenes. This course is truly designed to provide students with a diverse and lasting experience in theater. This course combines students from Grades 7 and 8 and represents a two-year curriculum in theater arts. Students may take the course in either grade as a stand-alone course; many students entering in Grade 7 take Theater Arts again in Grade 8 to experience the full two-year course progression.

## Visual Arts

This is a studio-based course in which participants complete a series of long-term projects focusing on the development of skills, ideas, and experimental thinking. Through units on design, printmaking, drawing, painting, and ceramics, students are introduced to technical, historical, and aesthetic aspects of art. Students and the instructor investigate work, respond to questions and issues that arise from it, and consider the directions the artist might take. Balance between planning and experimentation is addressed in each project. Throughout the year, students complete daily sketchbook entries and use their sketchbooks as personal diaries. Students participate in numerous group critiques and learn how to assess their own and others' work. Evaluation and individualized feedback are shared with each student throughout the working process. This course combines students from Grades 7 and 8 and represents a two-year curriculum in visual arts. Students may take the course in either grade as a stand-alone course; many students entering in Grade 7 take Visual Arts again in Grade 8 to experience the full
two-year course progression.

## Introduction to Programming Concepts

This semester-long course offers hands-on experiences to introduce students to coding. Students will learn visual programming languages (Blockly) using programs, which may include Scratch, Tynker, Tickle, MIT App Inventor and others. Students will have opportunities to apply their programming skills to drones, smart phones and other programmable devices in order to experience real-world applications. The goal of this course is to generate student enthusiasm and confidence in coding and to enable students to learn fundamental coding concepts such as looping, conditionals, and variables. Additionally, students will learn how to apply design thinking concepts to create programs and they will deepen their problem solving, creativity and collaboration skills. Students do not need any specific course-related prerequisites in order to begin programming. This course is graded on a pass/fail basis.

## Object-Oriented Programming

This semester-long course offers hands-on experiences to further students programming abilities and knowledge. Students will learn object oriented programming languages, which may include Swift, Python, Java and others. Students will apply their programming skills by creating apps, games, etc.. The goal of this course is to generate student enthusiasm and confidence in coding and to enable students to expand on their knowledge of fundamental coding concepts. Additionally, students will learn how to apply design thinking concepts to create programs and they will deepen their problem solving, creativity and collaboration skills through a variety of project-based units. The course covers the foundational skills required to transition into the Upper School Computer Science and Robotics programs, including variables, syntax tools, conditional statements, loops, and flow charting to deconstruct problems and plan out logical solutions. Recommended prerequisites: Introduction to Programming Concepts (Middle School). This course is graded on a pass/fail basis.

## Makers

This semester-long course is a self-directed exploration into the world of creative problem solving and engineering. Students work towards proficiency in additive 3D modeling, subtractive 3D modeling, computer programming, electrical engineering and technical writing. Utilizing design thinking, fast prototyping, collaboration, problem solving, multiple tech tools and careful observation and recording, students complete increasingly difficult challenges that are presented in a rich, storytelling environment. This course is graded on a pass/fail basis.

## Introduction to Robotics

In this second semester course, students apply programming skills to create functional robots. Instruction resembles real world programming training: teachers act as mentors and guides, providing students with ample opportunity to test and learn, to collaborate and share, and to create. Instructional time is given in short "chunks," where direct instruction and modeling are interwoven with hands-on learning. Because of the independent nature of the course, students
have the option to participate in the course for two or four periods out of the six day cycle. Through the design thinking process, they will collaborate to solve problems in a systematic way to create computing programs. The course covers the foundational skills including variables, syntax tools, conditional statements, loops, and flow charting to deconstruct problems and plan out logical solutions. This course is graded on a pass/fail basis.

## Competition Robotics

In this first semester course, students apply programming skills to create functional robots. We use the Lego MINDSTORMS EV3 platform for research, construction, and programming. Students in this class will enter the First Lego League (FLL) competition as a team. Instruction resembles real world programming training: teachers act as mentors and guides, providing students with ample opportunity to test and learn, to collaborate and share, and to create. Instructional time and modeling are interwoven with hands-on learning. Students are encouraged to collaborate and to work together to solve problems and to use the design thinking process as a systematic way to create computing programs. The course covers the foundational skills required to transition into the Upper School Robotics program, including: variables; syntax tools; conditional statements; loops; and flow charting to deconstruct problems and plan out logical solutions. This course is graded on a pass/fail basis. (Fall Semester . 50 credits)

## Robotics Applications

In this second semester course, students will develop an understanding of robotics' role in the real world through design challenges. The challenges will require planning, construction, and programming experience with the Lego Mindstorms EV3 hardware and software. Students will identify issues in their community that would benefit from the use of robots. They will design, build, and program robots that will provide a solution for the identified issue, thus allowing the students to learn more about how robots benefit the real world. Competition Robotics is a prerequisite for this class. This course is graded on a pass/fail basis. (Spring Semester . 50 credits)

## Inspiration

As a Flint Hill tradition of more than 20 years, each student in Grade 8 delivers an Inspiration speech to his/her peers in the Olson Theater, sharing a topic that inspires the student and creates passion in his/her life. The topic of an Inspiration can be a person (e.g. a family member, a famous person), an activity (e.g. cooking, painting, playing basketball), a significant experience (e.g. a challenge overcome), or even a character trait (e.g. determination). This process, facilitated by the student's advisor, allows for creativity, reflection on what is important to the individual, and a structured public speaking exercise. Family members and the person who is the subject of the Inspiration often attend, and the supportive atmosphere created by the audience is uplifting and another example of how we build a sense of community in the Middle School.

## Athletic Program

Students in Grades 7 and 8 are required to participate in one sport each season, and the Middle School Athletic Program provides a variety of options in each season:

|  | Boys | $\underline{\text { Girls }}$ |
| :--- | :--- | :--- |
| Fall | Cross Country <br> Football <br> Soccer | Cross Country <br> Field Hockey <br> Soccer <br> Tennis <br> Volleyball |
| Winter | Basketball <br> Conditioning <br> Outdoor Soccer <br> Swimming | Basketball <br> Conditioning <br> Dance <br> Outdoor Soccer <br> Swimming |
| Spring | Baseball <br> Lacrosse <br> Tennis <br> Track | Lacrosse <br> Softball <br> Track |

There are generally two teams for each sport: Blue and Green.

- Blue teams are composed of students who are more experienced in a particular sport.
- Green teams are composed of students who are still developing their skills and overall understanding of team concepts.

The are some exceptions to this general team structure:

- Cross Country does not break into teams according to ability. As a co-educational sport, boys and girls share the same coaches and often practice together, but compete in single-sex teams.
- Basketball adds a third-level team: White. In the case of basketball, the Green team is composed of students who are more experienced; the Blue team is a mix of experienced students and those still developing their skills and understanding; and the White team is composed of students who are still developing their skills and overall understanding of team concepts.


## Theater

The Middle School stages two main productions per year in the Olson Theater, on the East Campus. Students have the opportunity to perform comedy, tragedy, drama, and musical theater over the course of their Middle School careers and there is an emphasis on the processes of developing actor preparation skills and best rehearsal techniques. Grades 5 and 6 and Grades 7 and 8 each have annual, combined productions. Our all-school production of the Nutcracker involving children and faculty from all three divisions - is a much-anticipated tradition every year.

Over the past 10 years, Flint Hill has a staged a number of productions showcasing the talent of our students:

## Grades 5 and 6

"The Adventures of Nicholas Nickleby" (2016)
"Three by Three" (2015)
"30 Reasons Not to Be in a Play" (2014)
"The Canterbury Tales" (2013)
"Dreamcatchers" (2012)
"As You Like It" (2011)
"A Midsummer Night's Dream" (2011)
"Tapestry" (2010)
"Tom and Huck" (2009)
"Circus Olympus" (2008)
"A Midsummer Night's Dream" (2007)

## Grades 7 and 8

"Fiddler on the Roof" (2016)
"Whodunnit?" (2015)
"Once on This Island" (2014)
"Alice" (2013)
"Guys and Dolls" (2012)
"Macbeth" (2011)
"The Mouse that Roared" (2010)
"Much Ado About Nothing" (2009)
"Once in a Lifetime" (2008)
"Romeo and Juliet" (2007)

## Student Activities

## Husky House System

Our house system facilitates the building of connections and community across grade levels and give students opportunities for leadership and a higher level of engagement in their Middle School experience. Students and faculty are sorted into one of four houses (named for Iditarod sled dogs - Balto, Kaya, Yukon, Juno) to engage in monthly team- and spirit-building activities and challenges. House activities culminate in May with field games and competitions, modified from our traditional Color Games and developed by students.

## Student Council Association (SCA)

The primary leadership organization in the Middle School, the SCA is open to any interested student in Grades 5-8. The group provides students with a forum in which to:

- Organize and sponsor student life activities
- Represent the interests of the Middle School students
- Promote class and school unity
- Develop opportunities for leadership in its students
- Promote the ideal of service within the greater Flint Hill School community


## After-School Clubs - Grades 5 and 6

Our club program runs 3:00-3:50 p.m. and offers additional opportunities for students. Options vary by season and most require an activity fee. The offerings may include:

- Chess
- Computer Science / STEM
- Cooking
- Dance Academy
- Economics
- Engineering
- Mythology
- Sports


## Student Support

## Advisory Program

In our Middle School, we recognize the unique challenges facing students in early adolescence and the importance of developing impactful, trusting relationships and a climate of physical, emotional and intellectual safety. Our Advisory Program fosters a sense of belonging and personal development for each student while building a community within the advisory group. Each student is matched with a caring adult who will guide and support each student's social, emotional, academic, and physical growth while serving as the connection between student, teachers, coaches, and parents. Our advisory structure and activities are rooted in the philosophy of Developmental Designs and all of our advisors undergo training to ensure consistent and effective implementation.

We spend the first 20 minutes of each day in advisories on group- and skill-building activities called the Circle of Power and Respect (CPR). The CPR structure is implemented consistently across the building and includes four components:

- Greeting - to learn names, practice courtesy, and acknowledge each other's presence
- Sharing - to get to know one another and practice the art of conversation
- Activity - to have fun, engage, cooperate, include all, develop self-control, and spark academic learning
- Daily News - to greet, inform, and teach skills through posted written information (typically our MS Morning Announcements) and student responses

The principles of Developmental Designs help to create an inclusive learning community and to help students build relationships, develop social skills, and engage with their learning. The approach is founded upon seven evidence-based principles that form the core of successful teaching and learning in the middle grades.

1. Knowing the physical, emotional, social, and intellectual needs of the students we teach is as important as knowing the content we teach.
2. People learn best by actively constructing their own understanding and meaning.
3. The greatest cognitive growth occurs when learning is leveraged by social interaction.
4. Goals are best achieved through the incremental mastery of tasks.
5. Social learning in a supportive community is as important to success as academic learning.
6. There is a set of personal/social skills that students need to learn and practice in order to be successful socially and academically: cooperation, assertion, responsibility, empathy, and self-control.
7. Trust among adults is a fundamental necessity for academic and social success.

## Wellness Seminars - Grades 7 and 8

## Substance Abuse Prevention

The Grade 7 Wellness and Life Skills program focuses on substance abuse prevention and is taught in two week-long seminars. The nationally-recognized Project ALERT Program is utilized which includes both factual content about abused substances and
strategies for making healthy choices and resisting negative social pressures. The goal of Project ALERT is to reduce the use of abused substances by keeping non-users from trying them and by preventing non-users and experimenters from becoming regular users. Videos with older teens modeling effective ways of saying "No" are shown as a lead-in to students engaging in role-plays to practice using refusal skills. Materials developed by Human Relations Media are also utilized to augment the Project ALERT materials.

## Human Sexuality

The Human Sexuality Seminar is taught to all Grade 8 students over one week. Topics include a brief review of the physiological changes of puberty and the sexual reproductive system, an overview of sexually-transmitted diseases, and an introduction to the topic of abstinence and pregnancy prevention. Additionally, multiple class periods are devoted to exploring family and individual values and relating them to healthy interpersonal relationships. All material is presented in a developmentally appropriate manner, and is respectful of the diversity and unique needs of each student in the classroom.

## Alcohol and Drug Awareness

The Alcohol and Drug Awareness seminar is taught to all Grade 8 students by a drug and alcohol educator. Topics for this week-long seminar include an overview of addiction, an explanation of the impact of drugs and alcohol on the body, effective peer intervention and strategies for non-use. Through discussion and activity, students learn self-advocacy and prevention strategies. All material is presented in a developmentally appropriate manner, and is respectful of the needs of each student in the classroom.

## The Learning Center

In the Middle School, the Learning Center supports students with documented learning differences in Grades 5-8. The program provides support to students in academics, organization, and time management and parallels the developmental growth that occurs during these crucial years. Communication with the Learning Specialists, teachers, Counselors, and parents is ongoing during the Middle School years to ensure success for all students who use the Learning Center.

In Grades 5 and 6, there is one Learning Specialist assigned who works in the academic classes alongside teachers to support students. At times, The Learning Specialist works with a small group of students in the Learning Center to reinforce the concepts in the lesson or to offer more practice. The Learning Specialist sends email updates to parents once per month.

In Grades 7 and 8, each student who receives direct support from the Learning Center is assigned to a Learning Specialist who serves as his/her academic coach. Students meet with their coaches on a regularly scheduled basis for one-to-one, 25 to 30 -minute sessions, which take place during elective periods. In their initial meetings, academic coaches help each student set goals, outline action steps, and create a plan for accountability. Coaching sessions keep students on track and allow them to quickly address obstacles that interfere with progress. While the focus of coaching is primarily academic, it weaves in other commitments the student may have such as athletics, fine arts, and service learning. Updates on goals and action steps are emailed to parents from the Learning Specialists once every quarter.

When not working directly with a Learning Specialist in a coaching session, students in Grades 7 and 8 who use the Learning Center attend a study session. Held in classrooms and staffed by a classroom teacher, students receive structure and academic support to help them complete the action steps they have identified.

